

October 2021

Private Equity Investment As A Divining Rod For Market Failure: Policy Responses To Harmful Physician Practice Acquisitions

Erin Fuse Brown, Loren Adler, Erin Duffy, Paul B. Ginsburg, Mark Hall,
and Samuel Valdez

USC-Brookings Schaeffer Initiative for Health Policy

This report is available online at:

<https://www.brookings.edu/essay/private-equity-investment-as-a-divining-rod-for-market-failure-policy-responses-to-harmful-physician-practice-acquisitions/>

USC Schaeffer
Leonard D. Schaeffer Center
for Health Policy & Economics

B | Economic Studies
at BROOKINGS

Editor's Note

This white paper is part of the USC-Brookings Schaeffer Initiative for Health Policy, which is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics. The Initiative aims to inform the national health care debate with rigorous, evidence-based analysis leading to practical recommendations using the collaborative strengths of USC and Brookings.

Acknowledgements and Disclosures

The authors thank Erin Trish for her intellectual contributions and Laura Alexander, David Demres, Matthew Fiedler, Bob Kocher, Richard Scheffler, and Misha Segal for helpful comments on a draft of this paper. We thank Joseph Allen, Kathleen Hannick, Mengqi Rebecca Hsu, Alex McDonald, Conrad Milhaupt, and Jake Summerlin for their research assistance and Alwyn Cassil for her editorial contributions. All errors are our own.

This work was supported by Arnold Ventures. The funder had no involvement in the collection, analysis and interpretation of data; in the writing of the analysis; or in the decision to publish. Erin Fuse Brown is a consultant to the National Academy for State Health Policy and an Advisory Board member for Catalyst for Payment Reform. Paul Ginsburg is a Public Trustee of the American Academy of Ophthalmology and an Advisory Board member of the National Institute for Health Care Management. Other than the aforementioned, the authors did not receive financial support from any firm or person for this paper and they are currently not an officer, director, or board member of any organization with an interest in this paper.

The Brookings Institution is financed through the support of a diverse array of foundations, corporations, governments, individuals, as well as an endowment. A list of donors can be found in our annual reports published online here. The findings, interpretations, and conclusions in this report are solely those of its author(s) and are not influenced by any donation.

Contents

- Executive Summary1**
- I. Background..... 3**
 - A. Recent Trends in Private Equity Investment in Health Care.....3
 - B. Motivations for Private Equity Investment6
 - C. Models of Private Equity Investment in Health Care.....6
 - D. Effects of Private Equity Investment in Health Care8
 - E. History: Physician Practice Management Companies 10
- II. Three Playbooks for Private Equity Investment in Physician Practices... 11**
 - A. Emergency Medicine and Hospital-Based Specialties that Can Surprise Bill.....11
 - B. Predominantly Fee-for-service Office-based and Outpatient Specialties 12
 - C. Value-based Payment Models..... 14
- III. Policy Approaches to Private Equity Investment in Physician Practices .16**
 - A. Closing Profit Opportunities That Are Harmful to Consumers 17
 - 1. Market Failures and Payment Loopholes..... 17
 - 2. Consolidation and Anticompetitive Behavior 18
 - 3. Referral Patterns and Overutilization22
 - B. Targeting Private Equity25
 - 1. Transparency in Private Equity Ownership.....25
 - 2. Tax Advantages25
 - 3. Corporate Practice of Medicine: Legal Prohibition and Ethical Guidance26
- Conclusion.....27**

Executive Summary

Institutional private equity investment in health care, particularly in physician practices and staffing companies, has increased markedly in recent years, raising concerns that an influx of profit-driven entities into the sector might raise the cost or reduce the quality of patient care. Exemplifying these concerns, private equity-backed physician staffing companies and air ambulance operators helped drive the problem of out-of-network surprise medical billing, leading to increases in both in-network and out-of-network payments and exposing consumers to unexpected financial burdens.^{1,2,3} Private equity investor groups subsequently poured millions of dollars into lobbying to block passage of a federal surprise medical billing law until Congress passed the No Surprises Act in late 2020.^{4,5}

Nevertheless, it is unclear whether private equity investment is *itself* a problem or whether, in the absence of private equity, other sources of capital—such as public equity, venture capital, health systems, and insurers—would similarly exploit existing market failures and legal loopholes in the health care system. For instance, Envision and TeamHealth—the two staffing companies commonly associated with surprise out-of-network billing—were both publicly traded companies for roughly half of the 2010s, and substantial empirical evidence suggests that health system acquisition of physician practices can speed consolidation and increase costs.^{6,7} The entry of private equity into the health care sector also may provide benefits, such as increasing the availability of capital (some of which may go toward investments to improve patient care), generating economies of scale and scope, or providing a means for physicians to cash out the value of their practice or offload business and administrative responsibilities. Policies should therefore balance these benefits with countervailing harms to consumers. There are also practical limits to policymakers’ ability to target private equity investment without also ensnaring other forms of private health care transactions. Finally, the net effect of private equity investment on consumer welfare may vary across different health care sectors, geographic markets, and physician specialties.

Given a recent surge in acquisitions and the relatively nascent evidence base, it will take time to understand the impact of private equity investment on physician practices. Despite this uncertainty, this analysis identifies plausible ways that private equity’s growing health care involvement may harm consumers and physicians relative to a counterfactual without private equity investment in the health care sector:

¹ Cooper, Zack, Fiona Scott Morton, and Nathan Shekita. “Surprise! Out-of-Network Billing for Emergency Care in the United States.” *Journal of Political Economy* 128, no. 9 (2020): 3626-77, <https://doi.org/10.1086/708819>.

² Adler, Loren, Kathleen Hannick, and Sobin Lee. “High Air Ambulance Charges Concentrated in Private Equity-Owned Carriers.” *Brookings*, October 13, 2020, <https://healthpolicy.usc.edu/brookings-schaeffer/high-air-ambulance-charges-concentrated-in-private-equity-owned-carriers/>.

³ Duffy, Erin L., Bich Ly, Loren Adler, and Erin Trish. “Policies to Address Surprise Billing Can Affect Health Insurance Premiums.” *The American Journal of Managed Care* 26, no. 9 (2020): 401-4, <https://doi.org/10.37765/ajmc.2020.88491>.

⁴ Fuse Brown, Erin C. “Stalled Federal Efforts to End Surprise Billing—The Role of Private Equity.” *New England Journal of Medicine* 382, no. 13 (2020): 1189-91, <https://doi.org/10.1056/NEJMp1916443>.

⁵ No Surprises Act, H.R. 3630, 116th Cong. (2019-2020).

⁶ O’Hanlon, Claire E., Christopher M. Whaley, and Deborah Freund. “Medical Practice Consolidation and Physician Shared Patient Network Size, Strength, And Stability.” *Medical Care* 57, no. 9 (2019): 680-687, <https://doi.org/10.1097/MLR.0000000000001168>.

⁷ Christianson, Jon B., Caroline S. Carlin, and Louise H. Warrick. “The Dynamics of Community Health Care Consolidation: Acquisition of Physician Practices.” *Milbank Quarterly* 92, no. 3 (2014): 542-567, <https://doi.org/10.1111/1468-0009.12077>.

- 1) Private equity may more aggressively exploit market failures and payment loopholes than other potential acquirers, which could result in higher health care spending and patient and taxpayer costs.
- 2) Private equity's growing investment in physician practices may be accelerating horizontal consolidation in certain specialties, which a large body of evidence suggests increases prices and/or reduces the quality of care on net.
- 3) Driven by tax and regulatory advantages, private equity might distort the organizational form of physician practices away from physician ownership. This plausibly could harm patient care and employed physicians (e.g., if anecdotal reports that private equity relies more heavily on employee noncompete and nondisclosure agreements are indicative of broader trends).

Importantly, similar critiques could be levied against growing health system or insurer ownership of physician practices. Regardless of whether private equity investment in physician practices is a problem distinct from broader health industry trends, private equity entry into a physician specialty market may signal legal loopholes and market dysfunctions ripe for policy intervention. Policy responses can target this market consolidation or exploitation of market dysfunction no matter by whom, although the entry of private equity may increase the urgency for policy changes if it indeed drives consolidation or exploits payment loopholes more quickly and extensively than would otherwise occur. But in some instances, policies targeted specifically to private equity investors may be warranted, especially if tax treatment encourages private equity ownership over other forms of ownership.

Our policy recommendations, therefore, fall into two categories: (1) policies aimed at underlying market dysfunctions not limited to private equity and (2) policies directed at private equity. The first three recommendations below fall in the first category, targeting the profit opportunities, consolidation, and dubious billing practices that private equity and other acquirers may exploit. The fourth recommendation suggests further exploration of transparency, tax reforms, and corporate practice of medicine standards specifically targeted at private equity.

Recommendation 1: Close payment loopholes that raise costs for consumers and taxpayers. Myriad payment policies create perverse incentives to deliver care, bill, or code patients in a specific way to increase revenues without commensurate patient benefits. Along with out-of-network surprise billing, other payment policies that create perverse incentives include Medicare Part B payment policy for physician-administered drugs and insurers' ability to aggressively code enrollee diagnosis codes to increase Medicare Advantage payments.

Recommendation 2: Enhance enforcement under antitrust and employment laws to address consolidation and anticompetitive contracting practices imposed on acquired physicians. To increase antitrust scrutiny of physician acquisitions that currently escape review, the Hart-Scott-Rodino Act reporting threshold should be reduced or eliminated for health care transactions, enabling pre-merger review of physician practice acquisitions and add-on acquisitions. States can also require pre-merger review of major transactions involving physician practices and regulate noncompete, nondisclosure, and non-disparagement agreements for employed physicians of acquired practices.

Recommendation 3: Increase fraud and abuse enforcement to penalize physician practices engaging in questionable billing and referral strategies and enable government payers to recoup ill-gotten profits. The pressure to rapidly increase the

profitability of acquired practices raises risks of overutilization, overbilling or upcoding, medically unnecessary care, and self-referrals for ancillary services. Stepped-up scrutiny and enforcement under existing federal fraud and abuse laws (including the False Claims Act, Anti-Kickback Statute, Stark Law, and state law counterparts) by government and private whistleblowers against investors and acquired physician practices could curb fraud and abuse risks. In addition, tightening rules around self-referral for ancillary services under these laws may be needed to counter overutilization.

Recommendation 4: Explore policies targeting private equity. To the extent private equity raises different or greater risks than other sources of capital in the health care sector, policies specific to private equity may help level the playing field for all types of investment. These include policies to increase transparency of private equity ownership of physician practices to policymakers and regulators; changes to federal tax policy to treat the private equity firm’s share of income from owned practices (arguably better thought of as payment for investment management services) as ordinary income rather than long-term capital gains; and exploration of extending state-level corporate practice of medicine laws, ethical guidelines, and professional licensing standards to address the revenue pressures and corporate controls that private equity investors may exert over acquired physician practices.

I. Background

A. Recent Trends in Private Equity Investment in Health Care

Private equity investment in health care has expanded considerably over the past three decades, accelerating in recent years.⁸ Private equity investment has penetrated a variety of health care provider markets, ranging from large facilities like hospitals to physician practices. Total private equity investment in the health care industry has increased 20-fold from \$5 billion annually in 2000 to \$100 billion in 2018 by one tabulation, and annual transactions grew from 78 to 855 over the same time.⁹ Private equity investment also has grown as a share of all health care mergers and acquisitions and likely has contributed to growing health care consolidation.¹⁰

In the 1990s and 2000s, private equity firms targeted hospitals and nursing homes, seeking to capitalize on the same market fragmentation that has driven broader consolidation of the health care industry.¹¹ The large and relatively stable cash flows of these initial targets made them attractive to private equity investors.¹² As the market consolidated further, many private equity-acquired hospitals, however, struggled to achieve desired profitability levels, spurring private equity firms to seek new targets with different revenue strategies. In the last decade, private equity investment has entered more niche and specialized markets, such as urgent care clinics, freestanding emergency departments, air ambulance operators, physician staffing companies, and specialty physician practices, in addition

⁸ Gondi, Suhas, and Zirui Song. “Potential Implications of Private Equity Investments in Health Care Delivery.” *Jama* 321, no. 11 (2019): 1047-48, <https://doi.org/10.1001/jama.2019.1077>.

⁹ Appelbaum, Eileen, and Rosemary Batt. “Private Equity Buyouts in Healthcare: Who Wins, Who Loses?” Institute for New Economic Thinking Working Paper Series 118, March, 2020. <https://doi.org/10.36687/inetwp118>.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² Robbins, Catherine J., Todd Rudsenske, and James S. Vaughan. “Private Equity Investment in Health Care Services.” *Health Affairs* 27, no. 5 (2008): 1389-98, <https://doi.org/10.1377/hlthaff.27.5.1389>.

to a recent growing focus on primary care. Consistent with larger trends of physician practice acquisitions by health systems and health insurance companies, by one estimate, the pace of physician practice deals by private equity firms grew from 59 deals representing 843 physicians in 2013 to 136 deals representing 1,882 physicians in 2016.¹³

According to our analysis of Irving Levin Associates data, physician practice acquisitions by private equity and other non-health system acquirers in the 2010s initially focused on emergency and hospital-based specialties that could utilize surprise out-of-network billing, but more recently these investors have shifted primarily to office-based specialties. Table 1 shows the number of non-health-system physician practice acquisitions by specialty from 2010 through 2020.

¹³ Zhu, Jane M., Lynn M. Hua, and Daniel Polsky. "Private Equity Acquisitions of Physician Medical Groups Across Specialties 2013-2016." *JAMA* 323, no. 7 (2020): 663-65, <https://doi.org/doi:10.1001/jama.2019.21844>.

Table 1. Non-Health System Physician Practice Acquisitions, 2010-2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Hospital-Based												
Anesthesiology	5	5	11	10	16	23	35	15	12	10	10	152
Hospitalist	14	17	4	9	12	9	6	3	1			75
Radiology		2	1			3	5	14	19	10	5	59
Emergency Medicine	2	2	2	9	6	7	9	5	11	6		59
Neonatology	8	1	1	5	1	2	2	2	1	2		25
Office-Based												
Dermatology			1	3	6	13	31	53	59	30	25	221
Ophthalmology			3	3	1		3	18	41	68	47	184
Gastroenterology						4	4	7	9	17	10	51
Orthopedics		2	2			2	2	3	3	7	7	28
Pain Management				3	1	1	2	4	10	5		26
Other Office-Based		2		1	1	2	3		8	3	11	31
Value-Based Payment & Primary Care												
Primary Care	3	4	1	3	6	7	6	15	10	22	16	93
Women's Health/Fertility	2	4	3		1	3	3	8	9	7	12	52
Multi-Specialty	1	4	7	3	4	5	6	10	6	4	1	51
Pediatrics	3	3	11	1	1	3	5	4	3	2	5	41
Other												
Oral and Maxillofacial Surgery									5	11	7	23
Oncology		2		2				6	5	3	1	19
Cardiology		4	1		1	1	1	1		1	2	12
Neurology		3	1		1						1	6
Other Specialties	1	1	5	7	6	10	4	7	14	13	7	75
Total	39	56	54	59	64	95	127	175	226	221	167	1,283

Note: "Other office-based" specialties include otolaryngology, podiatry, and urology.

Source: Authors' analysis of Irving Levin Associates data

B. Motivations for Private Equity Investment

Private equity investment in health care is driven by financial incentives for both the private equity buyers and the health care sellers. On the private equity buyer side, though market segments of interest have changed as the health care system evolves, private equity investments are consistently focused in areas where profit opportunities exist. Observers have posited various explanations for why private equity investment in health care has intensified since the 1990s, including existing market fragmentation, the recession-resistant nature of health care, prevalent third-party payment, structural and operational inefficiencies, and an aging population with increasing demand for services, along with broader growth of capital devoted to private equity over time.^{14,15} Moreover, the more recent interest in physician practice investments may be driven by revenue opportunities amplified by certain payment loopholes, Medicare Advantage policies, and value-based payment models, among other factors.

On the seller side, physicians and other specialty providers gain access to capital from private equity investors that they could not access without incurring personal financial risk, giving providers leeway to purchase new equipment or upgrade health information technology, for example.¹⁶ Certain office-based specialties, such as ophthalmology and dermatology, are not attractive acquisition targets for hospitals or payers since few of their services are provided in hospitals. Another factor is that many young physicians, often with large education debts, lack the capital to buy into practices. Private equity acquisition can also offer physicians relief from the management responsibilities of practice ownership, allowing them to focus more on patient care. And physicians likely find appealing the sizeable, upfront payments (taxed at favorable capital gains rates) they receive from selling their practices.¹⁷ Some physicians have expressed concerns, however, with the loss of autonomy, pressure to increase volume and coding intensity, and greater reliance on nonphysician practitioners that come with selling to a private equity investor.^{18,19}

C. Models of Private Equity Investment in Health Care

The primary investment model that private equity firms employ in acquiring larger health care entities, such as hospitals, is the leveraged buyout (LBO). When a private equity firm buys a target under the LBO model, the firm pledges the target's assets as collateral for the debt to finance the purchase. Notably, the acquired entity—not the private equity firm or the sponsoring private equity fund—bears the responsibility of repaying the debt. In a typical private equity-financed acquisition of a health care entity, approximately 70% of the overall cost of the transaction is financed by debt, and the private equity fund provides the remaining 30% equity stake. That 30% equity stake is funded primarily by limited partner investors (e.g., endowments, pension funds, and wealthy individuals),

¹⁴ Gondi and Song, "Potential Implications of Private Equity Investments in Health Care Delivery," 1047-48.

¹⁵ McKinsey & Company, "McKinsey's Private Markets Annual Review, *McKinsey*, Apr. 21, 2021, <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review>.

¹⁶ Appelbaum and Batt. "Private equity buyouts in healthcare: Who wins, who loses?," 4-5.

¹⁷ Gondi and Song. "Potential implications of private equity investments in health care delivery," 1047.

¹⁸ Tan, Sally, Kira Seiger, Peter Renehan, and Arash Mostaghimi. "Trends in Private Equity Acquisition of Dermatology Practices in The United States." *JAMA Dermatology* 155, no. 9 (2019): 1013-21, <https://doi.org/10.1001/jamadermatol.2019.1634>.

¹⁹ Zhu, Jane M., and Daniel Polsky. "Private Equity and Physician Medical Practices-Navigating a Changing Ecosystem." *New England Journal of Medicine* 384, no. 11 (2021): 981-83, <https://doi.org/10.1056/NEJMp2032115>.

with the private equity firm contributing about 2% of the overall 30% equity stake through its general partner, which then manages the acquired business, typically made up of principals from the private equity firm.²⁰

For most health care transactions, private equity firms look to exit the investment (i.e., sell the acquired company) between three to five years from the initial acquisition date. Despite putting up only 2% of the overall equity stake, investment terms are typically structured so that private equity firms stand to keep 20% of the profit from the sale of the health care entity with the rest going to the limited partners.

Some observers contend that this model incentivizes an overly short-term focus because of the quick turnaround times and limited direct downside financial risk. However, it is not clear this should be the case given that the sales price after three to five years likely is tied to the expected future profitability of the acquired company and that a private equity firm's ability to attract future investors presumably hinges in large part on the level of overall return on investment delivered. A more salient critique is that a more aggressive profit-maximizing orientation might lead to an abandonment or shift away from lower-margin service lines, which in turn could harm patient access, although at present only anecdotal accounts of such actions exist.^{21,22}

Private equity investment in specialty markets, such as physician practices, typically follow a “platform and add-on” approach in which the private equity firm first purchases a sizable, established group practice (the “platform practice”) and then acquires additional small practices (the “add-ons”) to build market power, economies of scale and scope, capture a stream of referrals, and demand higher rates from commercial payers.^{23,24} Private equity firms may use the platform and add-on approach in the same geographic market or across several geographic regions to become one large company with a national presence in a particular specialty. Under the platform model, the private equity firm typically engages or creates a new management services organization to operate the business aspects of the practice. Physician practice owners sell their practices to private equity firms and give up the majority of equity in return for a sizeable upfront payment and generally relinquish day-to-day practice management.

Once the initial private equity investor has grown the company, it will typically sell to another investor, and there can be a third or fourth transaction along this pathway. The physicians who initially owned the practice usually have no say in selecting the subsequent buyers, and each buyer intends to increase profit through further consolidation, cost reduction, and increased revenue. There may be many opportunities for practice efficiency gains (e.g., IT systems, inventory maintenance) under the management of the first buyer. A subsequent, larger private equity buyer seeking to more than double their investment may need to reach greater levels of market power, make more drastic changes to

²⁰ Appelbaum and Batt, “Private equity buyouts in healthcare: Who wins, who loses?,” 6.

²¹ *Ibid.*, “”25.

²² Brickley, Peg, “New LifeCare Hospitals Files for Bankruptcy amid Deal Talks,” *Wall Street Journal*, May 7, 2019. <https://www.wsj.com/articles/new-lifecare-hospitals-files-for-bankruptcy-amid-dealtalks-11557233127>.

²³ Gondi and Song, “Potential implications of private equity investments in health care delivery,” 1047.

²⁴ Zhu and Polsky, “Private Equity and Physician Medical Practices—Navigating a Changing Ecosystem,” 981-82.

staffing and compensation, and increase productivity.²⁵ Buyers with less aggressive earnings targets may continue the operations of the original buyer and benefit from the established profit stream.

D. Effects of Private Equity Investment in Health Care

Although the growth of private equity investment in health care is well documented, there is less evidence regarding the investment impact on health care entities. Several recent studies have begun to measure these effects, primarily among hospitals and nursing homes, which were among the earliest private equity investment targets.

Bruch, Gondi, and Song (2020) compared financial and quality data from more than 200 hospitals acquired by private equity firms over a 12-year period against a control group of more than 500 hospitals not acquired by private equity firms.²⁶ Using a difference-in-differences approach, the study found that “[h]ospitals acquired by private equity were associated with larger increases in net income, charges (akin to a list price), charge to cost ratios, and case mix index as well as with improvement in some quality measures after acquisition relative to nonacquired controls.” Specifically, the private equity-acquired hospitals showed a mean increase of more than \$2.3 million in annual net income and an increase of more than \$400 in total charges per inpatient day. Although the study found that certain quality measures improved among private equity-owned hospitals in relation to the comparison group, this effect was reversed when the “oversized influence” of hospitals owned by Hospital Corporation of America, a private equity-back company, was removed from the sample.²⁷ Bruch, Gondi, and Song raised concerns that private equity’s “[f]ocus on generating cash flow and exiting the investment in a five-year window puts pressure on doctors to increase volumes of patients seen per day, to overprescribe diagnostic tests or perform unnecessary procedures, or to save on costs by using shoddier but less costly supplies and devices.”²⁸ Separately, Appelbaum and Batt (2020) found that private equity-owned hospitals carried higher debt levels and experienced challenges satisfying loan obligations.²⁹

A growing body of literature has attempted to assess the impact of private equity investment in nursing homes on various quality of care metrics. Despite moderate disagreement between the studies, some themes are emerging. A recent working paper by Gupta, Howell, Yannelis, and Gupta (2021) is the first to attempt to directly link the acquisition of nursing homes by private equity firms to patient outcomes.³⁰ The study uses a patient’s distance from different facilities as an instrument to control for patient selection into nursing homes and a differences-in-differences design with facility fixed effects to account for non-random targeting of facilities by private equity for acquisition. The analysis finds that receiving care at a private equity-owned facility increased 90-day mortality by 10%

²⁵ Konda, Sailesh, and Joseph Francis. “The evolution of private equity in dermatology.” *Clinics in Dermatology* 38, no. 3 (2020): 280-81.

²⁶ Bruch, Joseph D., Suhas Gondi, and Zirui Song. “Changes in Hospital Income, Use, and Quality Associated with Private Equity Acquisition.” *JAMA Internal Medicine* 180, no. 11 (2020): 1428-35, <https://doi.org/10.1001/jamainternmed.2020.3552>.

²⁷ *Ibid.*, 1433.

²⁸ Appelbaum and Batt, “Private equity buyouts in healthcare: Who wins, who loses?”

²⁹ *Ibid.*

³⁰ Gupta, Atul, Sabrina T. Howell, Constantine Yannelis, and Abhinav Gupta. “Does Private Equity Investment in Healthcare Benefit Patients? Evidence from Nursing Homes.” (NBER working paper 28474, Becker Friedman Institute for Economics, University of Chicago, 2021), <https://doi.org/10.3386/w28474>.

among Medicare patients between 2004 and 2016, with lower-risk and older patients seeing the most significant increases in mortality risk. The authors suggest this may be at least in part due to a decrease in staff hours for “front line” certified nursing assistants (CNAs) and licensed practical nurses (LPNs) post-acquisition, while staff hours for registered nurses (RNs) who tend to provide “medicalized aspects of care” increase post-acquisition. Measures of quality used by the federal Centers for Medicare & Medicaid Services (CMS) decline after acquisition, despite an increase in taxpayer spending of 11% per patient episode.

Another working paper by Gandhi, Song, and Upadrashta (2020) finds a similar shift in staff composition toward higher-skilled nurses in private equity-owned facilities.³¹ Using a difference-in-differences approach, they compare private equity-owned nursing homes to a set of control facilities in the period before and after the implementation of the CMS Five-Star Quality Rating system, which incentivized increases in RN staffing levels. They find that private equity-owned nursing homes increased RN staffing by 20.2% and decreased LPN staffing by 3.2% of the pre-policy means relative to control facilities. Huang and Bowblis (2019), somewhat in contrast to Gupta, et al. (2021), find no direct evidence of a decline in quality metrics for long-stay residents in private equity-owned nursing homes in Ohio relative to other for-profit nursing homes in the state.³² They do, however, conclude by raising the possibility of differential impacts of private equity ownership between long-stay and post-acute care and use a control set limited to only for-profit nursing homes, which plausibly behave more similarly to private equity-owned facilities than do nonprofit and government facilities. Taken together, this literature suggests reason for concern with regard to private equity investment in nursing homes, but some caution is warranted as the two recent, methodologically rigorous working papers have not yet undergone peer review.

Analysis of private equity investment on quality and financial outcomes of physician practices is limited, but two recent papers provide some insight. Cooper, Scott Morton, and Shekita (2020), using a particularly compelling methodology, found that when either of the two largest emergency physician staffing companies contracted to staff a hospital’s emergency department, it led to substantially higher in-network prices and charges, greater levels of upcoding, more imaging being ordered, a higher share of patients being admitted to the hospitals, and substantially higher rates of out-of-network billing.³³ The analysis did not focus on the effects of private equity as a whole, but the two staffing companies studied alternated between private equity and publicly traded ownership during the study period.

Most recently, Braun, Bond, Qian, Zhang, and Casalino (2021) found little evidence of more than modest effects of private equity acquisitions of dermatology practices, although the study does not capture the major wave of acquisitions beginning in 2017 (see [Table 1](#)). The analysis also does not distinguish between platform and add-on purchases—it seems likely that add-on acquisitions would have more substantial impacts on spending given that these smaller practices subsequently get to benefit from the larger company’s market power and anecdotal indications that add-on acquired

³¹ Gandhi, Ashvin, YoungJun Song, Prabhava Upadrashta. “Have private equity owned nursing homes fared worse under COVID-19?” (working paper, UCLA Anderson School of Management, Oct. 30, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3682892.

³² Huang, Sean Shenghsiu, and John R. Bowblis. “Private equity ownership and nursing home quality: an instrumental variables approach.” *International journal of health economics and management* 19, no. 3 (2019): 273-299.

³³ Cooper, et al., “Surprise! Out-of-network billing for emergency care in the United States,” 3626-3677.

practices face more substantial business operations changes than platform practices.³⁴ The analysis found some evidence that private equity acquisition increased the volume of patients treated per dermatologist, but little evidence of impacts on prices or higher rates of biopsies, lesion destruction, or Mohs surgery.

E. History: Physician Practice Management Companies

The historical experience of large corporate investment in and management of physician practices may hold lessons for the recent rise in private equity investment in physician practices. Physician practice management companies (PPMCs) burst on the scene in the 1990s, starting early in the decade, gaining steam mid-decade, peaking late decade, and then spectacularly crashing at the end of the decade.^{35,36,37,38} PPMC were typically publicly traded, but some private equity, or at least venture capital, was involved. The rapid spread of managed care organizations (MCOs) was the impetus, coupled with the realization that many physician practices were still akin to a cottage industry. From these conditions emerged the thinking that the time was ripe to consolidate and organize physician practices under much larger and more sophisticated management or ownership.

PPMCs formed under various models. Most commonly, a for-profit PPMC acquired physician practices, typically with at least partial exchange for a substantial equity stake in the PPMC, and then managed those practices. That model appealed because investors favored the rapid growth and because physicians appreciated how quickly the value of their equity shares increased, as well as having someone else assume responsibility for practice management.

The drawback, however, was that PPMC failed to bring much added value to actual physician practice. True economies of scale or scope were insufficient to overcome the inherent inefficiencies in managing many widely dispersed practices. PPMC also failed to structure physician compensation in ways that motivated clinicians to deliver a sufficient volume of services or focus on delivering the most profitable services. It was thought that aggregating a large number of physicians would give a PPMC bargaining leverage with MCOs, but PPMC grew mainly by geographic spread, and so their market shares tended to be thin in local markets. MCOs were unwilling to pay PPMC with little local presence higher prices to secure a spotty national provider network.

Without true organic income gains, PPMC's main appeal to investors was to show revenue growth through increased acquisitions. For a while, PPMC could grow simply by issuing more stock certificates for acquired physicians. Then, however, initial equity physicians realized that expansion

³⁴ Braun, Robert Tyler, Amelia M. Bond, Yuting Qian, Manyao Zhang, and Lawrence P. Casalino. "Private Equity In Dermatology: Effect On Price, Utilization, And Spending." *Health Affairs* 40, no. 5 (2021): 727-735, <https://doi.org/10.1377/hlthaff.2020.02062>.

³⁵ Burns, Lawton R. "Physician Practice Management Companies." *Health Care Management Review* 22, no. 4 (1997): 32-46,

https://journals.lww.com/hcmrjournal/Fulltext/1997/10000/Physician_Practice_Management_Companies.7.aspx.

³⁶ Frack, Bill and Nurry Hong, "Physician Practice Management — A New Chapter," *Beckers Hospital Review*, February 19, 2014, <https://www.beckershospitalreview.com/hospital-physician-relationships/physician-practice-management-a-new-chapter.html?tmpl=component&print=1&layout=default>.

³⁷ Reinhardt, Uwe E. "The Rise And Fall Of The Physician Practice Management Industry." *Health Affairs* 19, no. 1 (2000): 42-55, <https://doi.org/10.1377/hlthaff.19.1.42>.

³⁸ Souter, Patrick D. "Private Equity Investment in the Physician Practice: Has Its Time Finally Come or Will the Mistakes of the Past Be Repeated?" *Journal of Health and Life Sciences Law* 13, no. 3 (2020), <https://www.americanhealthlaw.org/content-library/journal-health-law/article/5a4d6c17-f1cb-4c1f-b233-24a6688ac674/Private-Equity-Investment-in-the-Physician-Practic>.

was diluting their shares, and newly acquired physicians began to demand higher purchase prices in response to the growing competition for their affiliation.

As Uwe Reinhardt (2000) explained in his retrospective on this episode, the whole enterprise was fueled by capitalization of future earnings stream, so a small dip in the current revenue trend line translated into a big dip in stock value.³⁹ Under PPMCs' acquisition model, when the share value dropped, new growth became even more difficult, causing a further reduction in stock value. Thus, this business model imploded in a fashion that some observers said resembled a pyramid scheme.⁴⁰ This implosion can also be seen in the rapid rise of physician practice acquisitions in the 1990s followed by a sudden drop-off in 2000, as illustrated in Appendix Table A1 (available electronically at brookings.edu).

To some extent, history may be repeating itself. There are indications that private equity-funded firms are touting investment in garden-variety physician practices using more or less the same pitch as PPMCs once did, only with a focus on value-based payment rather than on first-generation MCO reimbursements. Some skepticism is warranted, then, about whether practice management improvements can sustain double-digit earnings growth.

Another comparison with the past is that, in the 1990s, physicians often controlled PPMCs since the practitioners were partial owners. To the extent that current private equity firms and managers rather than physicians control private equity-acquired physician groups, physicians may be more reluctant to sell their practices, at least without a substantial acquisition bonus.

The take-away from this historical lesson is that widespread private equity investment is less likely to catch on for garden-variety physician practices. Instead, it is likely that private equity will continue to search out niches that offer especially attractive pricing opportunities due to peculiar quirks of a market segment.

We identify three of these niches in the next section and the revenue strategies, or “playbook,” pursued by private equity investors for each.

II. Three Playbooks for Private Equity Investment in Physician Practices

Private equity firms and their investors and lenders often look to invest in companies with the opportunity to more than double their initial investment within a three- to five-year timeframe, and they see that opportunity in certain physician specialties. In this section, we highlight three distinct strategies that private equity firms use in this sector of the health care market, with each raising different potential concerns about clinical practice, health care costs, and patient health outcomes.

A. Emergency Medicine and Hospital-Based Specialties that Can Surprise Bill

Private equity firms have invested heavily in emergency medicine staffing companies and the ancillary hospital-based specialties that have been able to leverage out-of-network balance billing as a profit strategy, including anesthesiology and radiology (See [Table 1](#)). Private equity firms grew revenue by consolidating the physician labor market in these specialties, but the more dominant revenue

³⁹ Reinhardt, “The Rise And Fall Of The Physician Practice Management Industry,” 46-50.

⁴⁰ *Ibid.*

strategy involved leveraging surprise billing and maximizing historically generous commercial insurer out-of-network payments. Because patients do not choose physicians for these services, these specialties uniquely benefit from a market failure of being able to maintain a steady flow of patients based on their hospital affiliation despite not contracting with commercial insurers. As out-of-network providers, they would seek payment for their full billed charges for treating a commercially insured patient by first billing the insurer and then billing the patient for the remaining balance between the insurer's allowed amount and the billed charges.⁴¹ Researchers have documented that EmCare and TeamHealth—both emergency medicine staffing firms with private equity investment—leveraged this out-of-network strategy in an analysis of medical claims from one large insurer.⁴² Moreover, TeamHealth CEO Leif Murphy plainly stated that balance billing was a “contracting leverage tool” in a 2019 letter to U.S. Senators.⁴³

Specialties that can leverage out-of-network surprise billing as a profit strategy have higher charges⁴⁴ and often choose to be out of network.^{45,46} Patients are potentially liable for a surprise out-of-network bill in one in five emergency scenarios⁴⁷ and elective surgeries,⁴⁸ as well as one in 10 inpatient hospital stays.⁴⁹ The direct costs of these high out-of-network surprise bills increase patients' out-of-pocket spending burden and do not count toward their out-of-pocket maximums. Specialists in a position to surprise bill patients also garner greater leverage in price negotiations with insurers when they are in-network, thus raising overall insurer spending and inflating premiums for all consumers.⁵⁰

B. Predominantly Fee-for-service Office-based and Outpatient Specialties

Private equity firms have invested heavily in office-based and outpatient specialties that have predominantly fee-for-service payment structures, particularly dermatology⁵¹ and ophthalmology.⁵² Unlike the emergency and ancillary hospital-based specialists, these physicians are typically in-network with insurers and can increase revenue by attracting a larger volume of patients, performing

⁴¹ Biener, Adam I., Benjamin L. Chartock, Christopher Garmon, and Erin Trish. “Emergency Physicians Recover A Higher Share Of Charges From Out-Of-Network Care Than From In-Network Care.” *Health Affairs* 40, no. 4 (2021): 622-628.

⁴² Cooper, et al., “Surprise! Out-of-network billing for emergency care in the United States,” 3634-35.

⁴³ Leif Murphy to Congress, March 13, 2019, <https://www.documentcloud.org/documents/6568825-TeamHealth-Letter.html>.

⁴⁴ Adler, Loren, Sobin Lee, Kathleen Hannick, and Erin Duffy. “Provider charges relative to Medicare Rates, 2012–2017.” *Brookings*, December 5, 2019, <https://www.brookings.edu/blog/usc-brookings-schaeffer-on-health-policy/2019/12/05/provider-charges-relative-to-medicare-rates-2012-2017/>.

⁴⁵ Sun, Eric C., Michelle M. Mello, Jasmin Moshfegh, and Lawrence Baker. “Assessment of Out-of-Network Billing for Privately Insured Patients Receiving Care in In-Network Hospitals.” *JAMA Internal Medicine* 179, no. 11 (2019): 1543-1550, <https://doi.org/10.1001/jamainternmed.2019.3451>.

⁴⁶ Kennedy, Kevin, William Johnson, and Jean Fuglesten Biniek, “Surprise out-of-network medical bills during in-network hospital admissions varied by state and medical specialty,” *Health Care Cost Institute*, March 28, 2019, <https://www.healthcostinstitute.org/blog/entry/oon-physician-bills-at-in-network-hospitals>.

⁴⁷ Cooper, Zack, and Fiona Scott Morton. “Out-of-Network Emergency-Physician Bills—an Unwelcome Surprise.” *New England Journal of Medicine* 375, no. 20 (2016): 1915-1918, <https://doi.org/10.1056/NEJMp1608571>.

⁴⁸ Chhabra, Karan R., Kyle H. Sheetz, Ushapoorna Nuliyalu, Mihir Dekhne, Andrew M. Ryan, and Justin Dimick. “Out-of-Network Bills for Privately Insured Patients Undergoing Elective Surgery with In-Network Primary Surgeons and Facilities.” *JAMA* 323, no. 6 (2020): 538-547, <https://doi.org/10.1001/jama.2019.21463>.

⁴⁹ Garmon, Christopher, and Benjamin Chartock. “One in Five Inpatient Emergency Department Cases May Lead to Surprise Bills.” *Health Affairs* 36, no. 1 (2017): 177-181, <https://doi.org/10.1377/hlthaff.2016.0970>.

⁵⁰ Duffy, et al. “Policies to Address Surprise Billing Can Affect Health Insurance Premiums.” *American Journal of Managed Care* 26, no. 9 (2020): 401-404, <https://doi.org/10.37765/ajmc.2020.88491>.

⁵¹ Tan, et al., “Trends in Private Equity Acquisition of Dermatology Practices in The United States,” 1013-1021

⁵² Chen, et al. “Private Equity in Ophthalmology and Optometry: Analysis of Acquisitions from 2012 through 2019 in the United States.” *Ophthalmology* 127, no. 4 (2020): 445-455, <https://doi.org/10.1016/j.ophtha.2020.01.007>.

more procedures, and/or shifting to higher-margin procedures. In dermatology, 17 private equity-backed “platform practices” acquired 184 add-on practices with an estimated 381 clinics between 2012 and 2018.⁵³ From 2012 to 2019, private equity firms bought 29 platform practices and acquired 228 practices in ophthalmology and optometry, encompassing 1,466 clinic locations and 2,146 ophthalmologists and optometrists.⁵⁴ Dermatology and ophthalmology practices are particularly attractive private equity investment targets because they have a steady procedural revenue stream with commercial and Medicare reimbursements and often have added cash revenue streams, such as cosmetic dermatology or retail eyewear. With an aging population, demand for dermatology and ophthalmology services is expected to grow. While each specialty has different characteristics, there is a common playbook that many private equity firms use to achieve profitability growth in this payment context and practice setting.^{55, 56, 57}

These office-based specialties have largely been on the sidelines of the hospital-centric vertical consolidation movement since they rarely treat patients in the inpatient setting, leaving ample opportunity to consolidate these fragmented physician markets.⁵⁸ Greater market share generally also enables the practice to negotiate higher payments with commercial payers, which is likely most important for add-on acquisitions in the same market as the platform practice.⁵⁹ Consolidation could also permit the private equity firm to reduce practices’ costs, such as streamlined billing, inventory, and other practice management aspects.

Physician practices in dermatology and ophthalmology often also involve a continuum of fee-for-service wraparound services that generate revenue alongside physician professional services. These wraparound services vary by specialty and practice but may include pathology services, physician-administered prescription drugs, imaging services, anesthesia services, and surgery centers. When private equity firms purchase a platform practice, typically they are not only buying the physicians’ professional services, they also acquire the full set of wraparound services. The wraparound services tend to be separate limited liability companies (LLCs) from the professional service component of the practice but jointly owned by practice physicians (often each LLC has different combinations of owners).

Expanding these wraparound services is a common part of the private equity revenue strategy. A larger practice also may have enough patients to support more highly specialized proceduralists, such as Mohs surgeons or retina subspecialists, keeping referrals for these highly reimbursed procedures in-house. Physician practices integrating wraparound services can benefit patients and

⁵³ Tan, et al., “A. Trends in Private Equity Acquisition of Dermatology Practices in the United States,” 1016.

⁵⁴ Chen, et al., “Private Equity in Ophthalmology and Optometry: Analysis of Acquisitions from 2012 through 2019 in the United States,” 445-55.

⁵⁵ Brown Gibbons Lang & Company, *Skin in the Game: Growing Private Capital Investment in Dermatology Practices*, August 2014, https://www.bglco.com/files/bgl_healthcare_and_life_sciences_special_report_dermatology_practices.pdf.

⁵⁶ Sheth, Veeral, Dilsher Dhoot, and Seenu M. Hariprasad. “Private Equity’s Game Plan and Why it Should Matter to Us.” *Ophthalmic Surgery, Lasers and Imaging Retina* 51, no. 8 (2020): 424-427, <https://doi.org/10.3928/23258160-20200804-01>.

⁵⁷ Patel, Shriji, Sylvia Groth, and Paul Sternberg. “The Emergence of Private Equity in Ophthalmology.” *JAMA Ophthalmology* 137, no. 6 (2019): 601-602, <https://doi.org/10.1001/jamaophthalmol.2019.0964>.

⁵⁸ Nikpay, Sayeh S., Michael R. Richards, and David Penson. “Hospital-Physician Consolidation Accelerated in the Past Decade in Cardiology, Oncology.” *Health Affairs* 37, no. 7 (2018): 1123-1127, <https://doi.org/10.1377/hlthaff.2017.1520>.

⁵⁹ Capps, Cory, David Dranove, and Christopher Ody. “Physician Practice Consolidation Driven by Small Acquisitions, So Antitrust Agencies Have Few Tools to Intervene.” *Health Affairs* 36, no. 9 (2017): 1556-1563, <https://doi.org/10.1377/hlthaff.2017.0054>.

providers by enhancing continuity of care, but such arrangements may be susceptible to misuse. For example, in ophthalmology, there is an opportunity to take advantage of the perverse incentives inherent in Medicare Part B drug payment. Medicare reimbursement includes an add-on payment tied to a percentage of the average sales price of the drug administered, so there may be opportunities to increase profits by shifting to more expensive drugs to treat wet macular degeneration.^{60,61}

Some observers of private equity investment in these specialties raise concerns that quality of care and patients' best interests may be overshadowed by profit objectives.^{62,63,64} With a predominately fee-for-service and cash add-on revenue stream (with the exception of some bundled payment arrangements), the financial incentives are to perform more services and higher-intensity services, raising concerns about overuse or misuse of treatments. On the other hand, another profit-maximizing strategy often pursued by private equity is to hire physician assistants, nurse practitioners, and other nonphysician providers to augment (and in some cases substitute for) physicians, which evidence generally suggests results in more cost-effective patient care (although some observers worry that in some more profit-driven practices nonphysician providers may be pushed beyond their competence with limited supervision).⁶⁵

While dermatology and ophthalmology are the two office-based fee-for-service model specialties with the most private equity investment to date, other specialties are increasingly targeted with a similar playbook. There is a growing trend of investment in gastroenterology⁶⁶ and orthopedics,⁶⁷ which are heavily procedural specialties with wraparound services and strong commercial insurance and Medicare revenue streams. Women's health and fertility centers⁶⁸ have a similar model, but with a greater share of revenue from cash payment and commercial insurers.

C. Value-based Payment Models

⁶⁰ National Institutes of Health. "News Release: Avastin as effective as Eylea for treating central retinal vein occlusion." May 9, 2017 accessed June 15, 2021, <https://www.nih.gov/news-events/news-releases/avastin-effective-eylea-treating-central-retinal-vein-occlusion>.

⁶¹ Patel, Kavita and Caitlin Brandt. "A Controversial New Demonstration In Medicare: Potential Implications for Physician-Administered Drugs" *Health Affairs Blog*, May 3, 2016, accessed June 15, 2021, <https://www.healthaffairs.org/doi/10.1377/hblog20160503.054677/full/>.

⁶² Resneck, Jack S. "Dermatology Practice Consolidation Fueled by Private Equity Investment: Potential Consequences For The Specialty and Patients." *JAMA Dermatology* 154, no. 1 (2018): 13-14, <https://doi.org/10.1001/jamadermatol.2017.5558>.

⁶³ Sailesh Konda, Joseph Francis, Kiran Motaparathi, and Jane M. Grant-Kels. "Future Considerations for Clinical Dermatology in the Setting Of 21st Century American Policy Reform: Corporatization and The Rise of Private Equity in Dermatology." *Journal of the American Academy of Dermatology* 81, no. 1 (2019): 287-296, <https://doi.org/10.1016/j.jaad.2018.09.052>.

⁶⁴ Patel, et al., "The Emergence of Private Equity in Ophthalmology," 601-602.

⁶⁵ Hafner, Katie, and Griffin Palmer, "Skin Cancers Rise, Along With Questionable Treatments," *New York Times*, November 20, 2017, <https://www.nytimes.com/2017/11/20/health/dermatology-skin-cancer.html>.

⁶⁶ Kickirillo, Vincent, Savanna Dinkel, and Landon Miner, "Gastroenterology: An escalating trend in private equity healthcare transactions," *Becker's ASC Review*, September 4, 2019, <https://www.beckersasc.com/asc-transactions-and-valuation-issues/gastroenterology-an-emerging-trend-in-private-equity-healthcare-transactions.html>.

⁶⁷ Herschman, Gary, and Hector Torres. "Private Equity Partnerships in Orthopedic Groups: Current State and Key Considerations." *Journal of Orthopaedic Experience & Innovation* (2020): 17721, <https://journaloei.scholasticahq.com/article/17721-private-equity-partnerships-in-orthopedic-groups-current-state-and-key-considerations>.

⁶⁸ Bruch, Joseph D., Alexander Borsa, Zirui Song, Sarah S. Richardson. "Expansion of Private Equity Involvement in Women's Health Care." *JAMA Internal Medicine* 180, no. 11 (2020): 1542-46, <https://doi.org/10.1001/jamainternmed.2020.3567>.

As CMS and commercial insurers look more and more to value-based payment and other risk-based models, private equity firms have entered the physician practice market with a new playbook. Primary care provides an example of this trend, particularly for groups focused on serving the Medicare Advantage market.^{69,70} A large primary care practice can be profitable in this payment environment if it operates efficiently, manages patients with chronic conditions well, and is able to report adequate quality metrics and extensively code patients' comorbidities to drive higher risk-adjusted payments. One strategy private equity firms have pursued is to invest in and expand practices predominantly serving patients enrolled in Medicare Advantage health plans that use capitated payments.⁷¹ A second strategy is to form joint ventures with provider groups or insurers in this market.⁷² Another strategy is to vertically integrate the private equity-owned primary care platform practice and a Medicare Advantage plan. Vertical integration aligns incentives to extensively code—or even exaggerate—patients' diagnoses and comorbidities, which directly increases federal payments to the plans.⁷³ Indeed, Geruso and Layton (2020) found that coding intensity increases with vertical integration.⁷⁴

Private equity investment with a value-based payment strategy is not limited to primary care. Hybrid fee-for-service and value-based models may allow an efficiently run orthopedic or ophthalmology practice with a predominantly fee-for-service legacy to profitably participate in a Medicare shared savings program accountable care organization (ACO) for some services. Obstetrics and gynecology practices have long engaged in bundled payments for maternity care with both commercial and Medicaid managed care plans.

Under value-based payment models, the financial incentive can be to stint on care and in turn there is a risk that patients would be denied needed care. This is a longstanding issue in managed care that is typically countered with benchmarks for quality of care, patient outcomes, and access to care metrics. There is also an incentive to reduce costs by substituting less expensive providers for physicians.

⁶⁹ Powers, Brian W., William H. Shrank, and Amol S. Navathe. "Private Equity and Health Care Delivery: Value-Based Payment as a Guardrail?" *JAMA* 326, no. 10 (2021): 907-908. doi:10.1001/jama.2021.13197.

⁷⁰ MedPAC, *Report to Congress, Medicare and the Health Care Delivery System*, chap. 3, *Congressional request: Private equity and Medicare*, (June 2021), http://www.medpac.gov/docs/default-source/default-document-library/jun21_medpac_report_to_congress_sec.pdf?sfvrsn=0.

⁷¹ An example of this model is Oak Street Health, a practice that exclusively serves traditional Medicare and Medicare Advantage patients, Oak Street Health (website), accessed September 12, 2021, <https://www.oakstreethealth.com/>. Oak Street Health's model is presented in Powers, Shrank, and Navathe. "Private Equity and Health Care Delivery: Value-Based Payment as a Guardrail?" 907-908.

⁷² One example is agilon health, a company formed in 2016 by private equity firm Clayton, Dubilier & Rice, which has built a national platform engaged in value-based contracting for primary care (publicly traded as of Spring 2021). Humana and agilon health have a partnership in which agilon provides primary care for Humana's Medicare Advantage enrollees, and agilon is also participating in the CMS direct contracting payment model. agilon health, "agilon health, with Nine Independent Physician Practice Partners, Applied to Participate in New CMS Direct Contracting Payment Model," March 11, 2020, <https://www.agilonhealth.com/agilon-health-apply-to-participate-in-new-cms-payment-model/>. Humana's Medicare Advantage plans are also engaged in a similar arrangement with Partners in Primary Care, a platform of primary care practices owned by the private equity firm Welsh, Carson, Anderson & Stowe. See Shelby Livingston, "Humana, private equity firm to launch senior primary-care centers," *Modern Healthcare*, February 3, 2020, <https://www.modernhealthcare.com/insurance/humana-private-equity-firm-launch-senior-primary-care-centers>.

⁷³ Shulte, Fred. "Humana Inc. Overcharged Medicare Nearly \$200 Million, Federal Audit Finds." *NPR*. April 20, 2021. <https://www.npr.org/sections/health-shots/2021/04/20/988817003/humana-inc-overcharged-medicare-nearly-200-million-federal-audit-finds>

⁷⁴ Geruso, Michael, and Timothy Layton. "Upcoding: Evidence from Medicare on Squishy Risk Adjustment." *Journal of Political Economy* 128, no. 3 (2020): 984-1026, <https://doi.org/10.1086/704756>.

III. Policy Approaches to Private Equity Investment in Physician Practices

The first two sections of this paper described private equity's growing foray into physician practice acquisitions, common playbooks used for different medical specialties, the limited evidence about the effects this trend may be having on the cost and quality of health care, and why the first big wave of physician practice management acquisitions in 1990s fizzled out.

In aggregate, our summary and analysis suggest that private equity may capitalize on perverse incentives or market failures and drive horizontal consolidation, particularly in certain office-based specialties that have not attracted substantial interest from hospital or other acquirers. However, if private equity firms were prohibited from acquiring physician practices, it is unclear whether and to what extent other types of organizations, such as public equity, health systems, insurers, or other private companies, might take its place and foster similar outcomes. Understanding this counterfactual will be essential to judging the net effects of private equity investment. Additionally, while private equity may add value in some areas, its net effects likely differ across health care sectors or physician specialties.

One set of policy responses, therefore, might view private equity as a sort of divining rod that seeks various perverse incentives and market failures. On the other hand, if something specific to private equity is causing problems (without producing offsetting benefits)—even if simply accelerating trends that may have otherwise occurred eventually—there may be justification for policies targeted specifically to private equity. However, some targeted policies may prove difficult to enforce without ensnaring other types of private companies that manage physician practices.

This section first develops a policy toolkit to address myriad perverse incentives and market failures off which private equity (and others) profit. Such policy solutions should produce significant benefits to consumers regardless of their effect specifically on private equity and likely reduce the attractiveness of physician practices as a private equity acquisition target. Moreover, where private equity remains involved, these policies would reduce some of the likely harms to consumers and thus may improve the net effects of private equity's involvement in physician practice management. Many of these policies would be worth pursuing in the absence of private equity, but its presence boosts the urgency of such initiatives.

For example, when researchers identified how private equity-backed emergency physician staffing companies were using out-of-network billing strategies, the policy solution was to fix the market failure being exploited and prohibit surprise out-of-network medical billing. And while we anticipate that the No Surprises Act will reduce private equity's market share in emergency medicine and anesthesiology over time, the law's primary effects will be to protect consumers from surprise bills and modestly reduce health care costs (if implemented properly).

Similarly, to the extent profit strategies rely on growing market power through consolidation (which is known to increase prices and/or lower quality in health care markets), policy responses could focus on antitrust enforcement, merger review, and prohibitions on anticompetitive physician contracting practices. If the profit strategy is to capture and direct referrals, maximize billing (e.g., upcoding and overutilization), and/or game risk adjustment, then the policies may focus on fraud and abuse enforcement, billing regulation, and improving coding intensity adjustments in Medicare Advantage.

Next, this section of the paper considers policies targeted more directly at private equity. While the evidence today is nascent, if private equity-backed companies behave differently and exploit market failures to a greater degree than other health care acquirers (e.g., public equity, health systems, other physician practices, and insurers), it may be worth exploring whether state corporate practice of medicine laws can be applied or strengthened with respect to private equity investors. Another set of policies would aim at leveling the playing field between private equity and other forms of capital, including ending special treatment for private equity in the tax law.

A. Closing Profit Opportunities That Are Harmful to Consumers

We first focus on fixing the flaws that private equity appears most likely to exploit, which would likely produce net welfare benefits for society. Our recommendations target three key issues: (1) market failures and payment loopholes; (2) consolidation and anticompetitive behavior; and (3) referral patterns, overutilization, and upcoding.

1. Market Failures and Payment Loopholes

Private equity has shown a penchant for taking advantage of various market failures and payment loopholes, often embedded in Medicare policy. This approach is not unique to private equity, but here we focus on the subset most likely to be capitalized on by the recent surge in private equity acquisitions of physician practices.

Most notoriously, Cooper, Scott Morton, and Shekita (2020) produced compelling evidence that the two largest emergency physician staffing companies—both currently owned by private equity—utilized leverage related to surprise billing to increase payments from commercial insurers, which in turn results in higher premiums and health care costs.⁷⁵ In December 2020, the U.S. Congress passed the No Surprises Act, which prohibits surprise out-of-network billing in almost all circumstances beginning January 1, 2022 and should modestly reduce premiums and cost-sharing.⁷⁶ The law eliminates the surprise billing strategy that has been profitable for private equity firms and other emergency and ancillary physician groups, so we may observe private equity firms pivoting away from this sector. Nevertheless, the law is imperfect. The law’s biggest shortcomings include its neglect of ground ambulance services, where American Medical Response, a company owned by the private equity firm KKR, plays a substantial role, as well as the likely limited effectiveness of the law’s protections at controlling costs for the private equity-dominated air ambulance market. In both instances, we recommend that minimum payments to out-of-network ambulance providers be tied to a multiple of Medicare rates and that consumer protections be strengthened for these services.^{77,78}

Other market failures and perverse payment incentives exploited by private equity, however, remain unaddressed. For example, Medicare’s payment for physician-administered drugs under Part B is tied to a percentage of the drug’s average sales price, which creates incentives for physicians to prescribe the more expensive drug among competing options. Investment capital targeted some

⁷⁵ Duffy, et al., “Policies to Address Surprise Billing Can Affect Health Insurance Premiums,” 401-404.

⁷⁶ Congressional Budget Office, *Cost Estimate for H.R. 2328, the Reauthorizing and Extending America’s Community Health Act*, September 18, 2019, <https://www.cbo.gov/system/files/2019-09/hr2328.pdf>.

⁷⁷ Fielder, Matthew, Loren Adler, and Benedic Ippolito, “Recommendations for implementing the No Surprises Act,” *Brookings*, March 16, 2021, <https://www.brookings.edu/blog/usc-brookings-schaeffer-on-health-policy/2021/03/16/recommendations-for-implementing-the-no-surprises-act/>.

⁷⁸ Fuse Brown, Erin C., Loren Adler, Karan R. Chhabra, Barak D. Richman, and Erin Trish, “The Unfinished Business Of Air Ambulance Bills,” *Health Affairs Blog*, March 26, 2021, <https://doi.org/10.1377/hblog20210323.911379>.

physician specialties that profit from the Part B payment incentive, including oncology,⁷⁹ where hospital acquisition is particularly common and private equity acquisition has been growing recently, and ophthalmology, where private equity acquisitions have skyrocketed in recent years. The ophthalmology drugs to treat wet macular degeneration provide the canonical example of the perverse incentives created by Medicare's Part B payment policy, where Avastin is significantly cheaper than the other options and has been shown to be as effective for most patients, yet prescribing patterns vary widely across physicians and across the country.^{80,81}

Another example relevant to primary care practices focused on serving Medicare Advantage enrollees is the ability to increase federal benchmark payments to Medicare Advantage plans by aggressively coding patient diagnoses. This practice can make Medicare Advantage enrollees appear sicker than comparable enrollees in traditional Medicare, and primary care groups using this strategy can then share in the ensuing profits with Medicare Advantage health plans.⁸² Similar issues could arise with some Medicare ACO programs, in which the physician group can profit more directly from aggressive coding or similarly share in profits with the entity managing the ACO.

Like with the recent legislation to address surprise billing, closing these payment loopholes would likely reduce private equity's role in physician practice management by removing some of the low-hanging profit opportunities that provide little, if any, value to patients. Doing so would also reduce health care costs more broadly, with savings for patients and taxpayers. The Medicare Payment Advisory Commission (MedPAC) and others (including some of us) have proposed specific policy solutions to address these payment loopholes.^{83,84,85}

2. Consolidation and Anticompetitive Behavior

a. Antitrust Enforcement

One concern is that private equity investment in physician practices, particularly using the platform add-on model, contributes to horizontal market consolidation of these physician

⁷⁹ Jung, Jeha, Roger J, Feldman, and Yamini Kalidindi. "The Impact of Integration Outpatient Chemotherapy Use and Spending in Medicare." *Health Economics* 28, no. 4 (2019): 517-528.

<https://doi.org/10.1002/hec.3860><https://onlinelibrary.wiley.com/doi/epdf/10.1002/hec.3860>.

⁸⁰ National Institutes of Health, "Avastin as effective as Eylea for treating central retinal vein occlusion," May 9, 2017, <https://www.nih.gov/news-events/news-releases/avastin-effective-eylea-treating-central-retinal-vein-occlusion>.

⁸¹ Patel and Brandt, "A Controversial New Demonstration In Medicare: Potential Implications For Physician-Administered Drugs."

⁸² Sharp, JP, Leslie McKinney, Scott Heiser, and Rahul Rajkumar, "Realizing The Vision Of Advanced Primary Care: Confronting Financial Barriers To Expanding The Model Nationwide," *Health Affairs Blog*, March 30, 2020, <https://doi.org/10.1377/hblog20200325.524312>.

⁸³ MedPAC, *Report to the Congress, Medicare Payment Policy*, March, 2021, http://www.medpac.gov/docs/default-source/reports/mar21_medpac_report_to_the_congress_sec.pdf?sfvrsn=0.

⁸⁴ Aaron, Henry J., Loren Adler, Joseph Antos, Matthew Fiedler, Paul Ginsburg, Alice Rivlin, James Capretta, and Benedic Ippolito, "Joint recommendations of Brookings and AEI scholars to reduce health care costs," *Brookings*, March 1, 2019, <https://www.brookings.edu/opinions/joint-recommendations-of-brookings-and-aei-scholars-to-reduce-health-care-costs/>.

⁸⁵ Lieberman, Steven M., Loren Adler, Erin Trish, Joseph Antos, John Bertko, and Paul Ginsburg, "A proposal to enhance competition and reform bidding in the Medicare Advantage Program," *Brookings*, May 10, 2018, <https://www.brookings.edu/research/a-proposal-to-enhance-competition-and-reform-bidding-in-the-medicare-advantage-program/>.

specialties.^{86,87,88} Moreover, because the value of these transactions typically falls below the mandatory reporting threshold under the Hart-Scott-Rodino Act, which is \$92 million in 2021, these acquisitions tend to go unreviewed by antitrust authorities, leading to so-called “stealth consolidation.”^{89,90} The literature shows that horizontal consolidation of physician practices leads to higher prices without corresponding improvements to the quality of care.^{91,92,93,94} Emerging evidence also suggests horizontal physician consolidation is associated with worse patient outcomes in Medicare, where prices are set administratively.^{95,96}

To the extent that private equity investment in physician practices decreases competition and increases market power through the platform add-on model, one solution would be to increase antitrust scrutiny of these below-the-radar acquisitions. At the federal level, the Hart-Scott-Rodino Act reporting threshold could be reduced or eliminated for health care acquisitions, allowing for pre-merger review of physician acquisitions, particularly in cumulative effect with subsequent add-ons. This removal of the exemption for smaller transactions would apply to all physician practice and smaller health care transactions (including facilities), not just those pursued by private equity firms.⁹⁷ Further, the Federal Trade Commission could, under Section 6(b) of the Federal Trade Commission Act, use its subpoena authority to investigate certain markets to study health care transactions that fall below the federal reporting threshold, including private equity investments.^{98,99} Others have called

⁸⁶ Scheffler, Richard M., Laura M. Alexander, James Godwin, “Soaring Private Equity Investment in the Healthcare Sector: Consolidation Accelerated, Competition Undermined, and Patients at Risk,” *American Antitrust Institute and Nicholas C. Petrakis Center at UC Berkeley*, May 18, 2021, <https://publichealth.berkeley.edu/wp-content/uploads/2021/05/Private-Equity-I-Healthcare-Report-FINAL.pdf>.

⁸⁷ Resneck, “Dermatology Practice Consolidation Fueled by Private Equity Investment: Potential Consequences For The Specialty and Patients,” 13-14.

⁸⁸ Zhu and Polsky, “Private Equity and Physician Medical Practices-Navigating a Changing Ecosystem,” 981-83.

⁸⁹ Thomas G. Wollman, “How to Get Away With Merger: Stealth Consolidation and its Real Effects on US Healthcare.” (working paper, National Bureau of Economic Research, Cambridge, Massachusetts, 2020), https://www.nber.org/system/files/working_papers/w27274/w27274.pdf.

⁹⁰ Capps, et al., “Physician Practice Consolidation Driven by Small Acquisitions, So Antitrust Agencies Have Few Tools to Intervene,” 1556-63.

⁹¹ Baker, Laurence C., M. Kate Bundorf, Anne B. Royalty, and Zachary Levin. “Physician Practice Competition and Prices Paid by Private Insurers for Office Visits.” *JAMA* 312, no. 16 (2014): 1653-62, <https://doi.org/10.1001/jama.2014.10921>.

⁹² Austin, Daniel R., and Laurence C. Baker. “Less Physician Practice Competition Is Associated With Higher Prices Paid For Common Procedures.” *Health Affairs* 34, no. 10 (2015): 1753-60, <https://doi.org/10.1377/hlthaff.2015.0412>.

⁹³ Sun, Eric, and Laurence C. Baker. “Concentration In Orthopedic Markets Was Associated With A 7 Percent Increase In Physician Fees For Total Knee Replacements.” *Health Affairs* 34, no. 6 (2015): 916-21, <https://doi.org/10.1377/hlthaff.2014.1325>.

⁹⁴ Koch, Thomas, and Shawn W. Ulrick. “Price Effects of a Merger: Evidence From a Physicians’ Market.” *Economic Inquiry* 59, no. 2 (2021): 790-802, <https://doi.org/10.1111/ecin.12954>.

⁹⁵ Koch, Thomas, Brett Wendling, and Nathan E. Wilson. “Physician Market Structure, Patient Outcomes, and Spending: An Examination of Medicare Beneficiaries.” *Health Services Research* 53, no. 5 (2018): 3549-68, <https://doi.org/10.1111/1475-6773.12825>.

⁹⁶ Brunt, Christopher S., Joshua R. Hendrickson, and John R. Bowblis. “Primary care competition and quality of care: Empirical evidence from Medicare.” *Health Economics* 29, no. 9 (2020): 1048-61, <https://doi.org/10.1002/hec.4119>.

⁹⁷ Gaynor, Martin, “What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work.” *Brookings, The Hamilton Project*, https://www.hamiltonproject.org/assets/files/Gaynor_PP_FINAL.pdf.

⁹⁸ Federal Trade Comm’n, Statement of Comm’r Rohit Chopra Regarding Private Equity Roll-ups and the Hart-Scott Rodino Annual Report to Congress (July 8, 2020), https://www.ftc.gov/system/files/documents/public_statements/1577783/p110014hsrannualreportchoprastatement.pdf.

⁹⁹ Federal Trade Comm’n, Statement of Comm’r Christine S. Wilson, Joined by Comm’r Rohit Chopra Concerning Non-Reportable Hart-Scott Rodino Act Filing 6(b) Orders (Feb. 11, 2020), https://www.ftc.gov/system/files/documents/public_statements/1566385/statement_by_commissioners_wilson_and_chopra_re_hsr_6b.pdf.

for federal antitrust enforcement agencies to adapt merger guidance to incorporate developing economic evidence to address forms of consolidation not traditionally targeted under the horizontal merger guidelines, including incremental add-on acquisitions and mergers across geographic or product markets.^{100,101,102} These reforms could be part of overall legislation to strengthen antitrust authority and increase resources for economic study and enforcement, as advocated by antitrust experts and enforcement officials.^{103,104,105}

State attorneys general have parallel antitrust authority and could also take steps to review and challenge physician practice acquisitions. To further antitrust enforcement and state oversight of physician practice acquisitions, states could pass legislation requiring acquiring entities, including private equity firms, to notify the state attorney general of proposed transactions with dollar values less than the federal thresholds for review, approval, and consent agreements that apply continued oversight to the parties' marketplace conduct.¹⁰⁶ For example, Washington, Connecticut, and Massachusetts all require notification of certain physician practice transactions below the Hart-Scott-Rodino threshold.^{107,108,109} California proposed a bill in 2020 (S.B. 977) that would require health systems, private equity firms, and any other acquiring entity to notify and obtain the consent of the state attorney general before acquisition of a physician practice or other health care entity.¹¹⁰ In 2021, the Oregon legislature passed a law to require the state health authority to review and approve health care transactions (including transactions involving physician practices) below the Hart-Scott-Rodino Act threshold.¹¹¹ More than the federal government, states have signaled they are willing to provide antitrust and market-impact review of physician practice acquisitions by private equity investors.¹¹²

b. Employment Law

¹⁰⁰ Cicchiello, Aimee and Lovisa Gustafsson, "Federal Antitrust Tools Are Inadequate to Prevent Anticompetitive Health Care Consolidation," *To the Point*, May 13, 2021, <https://doi.org/10.26099/qdoh-f852>.

¹⁰¹ King, Jaime S., and Erin C. Fuse Brown. "The Anti-Competitive Potential of Cross-Market Mergers in Health Care." *St. Louis University Journal of Health Law & Policy* 11, no. 1 (2017): 43-68.

¹⁰² Brand, Keith, and Ted Rosenbaum. "A Review of the Economic Literature on Cross-Market Health Care Mergers." *Antitrust Law Journal* 82, no. 2 (2019): 533-49.

¹⁰³ Baker, Jonathan B., and Fiona Scott Morton, "Confronting Rising Market Power," *Economics for Inclusive Prosperity*, May 2019, <https://econfp.org/wp-content/uploads/2019/05/Confronting-Rising-Market-Power.pdf>.

¹⁰⁴ Gaynor, "What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work." 22-24.

¹⁰⁵ Federal Trade Comm'n, Remarks of Comm'r Rebecca Kelly Slaughter, Antitrust and Health Care Providers: Policies to Promote Competition and Protect Patients (May 14, 2019), <https://www.ftc.gov/public-statements/2019/05/remarks-commissioner-rebecca-kelly-slaughter-antitrust-health-care>.

¹⁰⁶ King, Jaime S., Samuel M. Chang, Alexandra D. Montague, Katherine L. Gudiksen, Amy Y. Gu, Daniel Arnold, and Thomas Greaney. "Preventing Anticompetitive Healthcare Consolidation: Lessons from Five States." *The Source for Healthcare Price and Competition*, June 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3627865.

¹⁰⁷ WASH. REV. CODE § 19.390.030.

¹⁰⁸ CONN. GEN. STAT. § 19a-486i.

¹⁰⁹ MASS. GEN. LAWS ch. 6D §13.

¹¹⁰ S.B. 977, 2019-2020 Reg. Sess., (Cal. 2020), https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB977.

¹¹¹ H.B. 2362, 2021 Reg. Sess., 81st Leg. (Or. 2021), <https://olis.oregonlegislature.gov/liz/2021R1/Measures/Analysis/HB2362> (requiring pre-transaction notice, review, and approval by the Oregon Health Authority for all transactions involving health care entities including physicians, where one party had average revenue of \$25 million or more and the other party had average revenue of \$10 million or more in the preceding three fiscal years).

¹¹² Montague, Alexandra, Katherine L. Gudiksen, and Jaime S. King. "State Action to Oversee Consolidation of Health Care Providers." Milbank Memorial Fund Issue Brief (Aug. 5, 2021), <https://www.milbank.org/publications/state-action-to-oversee-consolidation-of-health-care-providers/>.

Acquisition of physician practices also raises anticompetitive issues under state employment law. Private equity firms commonly include noncompete terms in their physician contracts that preclude group members from practicing in the areas where the firm operates for a prescribed length of time. Hausman and Lavetti (2021) found that enforcement of physician noncompete agreements by state courts leads to higher physician prices.¹¹³ These restrictive covenants are not unique to private equity firms, but because these firms often cover a much larger geographic area than conventional physician practices, the anticompetitive effects can be larger.

Even without private equity investment, physician noncompete clauses are legally controversial.^{114,115,116} A handful of states prohibit them outright based on public policy concerns related to interfering with patient treatment relationships and maintaining access to medical care. In other states, courts enforce these agreements if the terms are reasonable, recognizing that a medical group also has a legitimate interest in retaining its patients and recouping its investment. In determining reasonableness, however, many courts bring greater scrutiny to physician noncompete clauses than to similar agreements in general commercial settings, requiring that the geographic and time restrictions be narrowly tailored.¹¹⁷ Noting their anticompetitive effects, the Biden administration has directed the Federal Trade Commission to ban or limit noncompete agreements across all employment contexts, not just health care.¹¹⁸

Prohibiting physician noncompete clauses outright may stymie even appropriate investments in physician practices, because the investor would risk quickly losing its investment in a practice if many physicians left. To balance the desire to protect investors and acquired physicians, careful scrutiny of the scope and terms of noncompete clauses is preferable to an outright ban.¹¹⁹ This case-by-case judicial resolution, however, creates legal uncertainty over which noncompete terms are acceptable. Accordingly, a preferred approach could be to specify by regulation, both for private equity investment and other physician employment settings, safe harbors or outer boundaries for allowable noncompete terms.

A similar approach could be taken for nondisclosure or anti-disparagement agreements, sometimes called “gag clauses,” which are also controversial and troubling for public policy, especially if they might inhibit physicians from raising ethical or quality-of-care concerns about how a private

¹¹³ Hausman, Naomi, and Kurt Lavetti. “Physician Practice Organization and Negotiated Prices: Evidence from State Law Changes.” *American Economic Journal: Applied Economics* 13, no. 2 (2021): 258-96, <https://doi.org/10.1257/app.20180078>.

¹¹⁴ Malloy, S. and Elizabeth Wilborn. “Physician Restrictive Covenants: The Neglect of Incumbent Patient Interests.” *Wake Forest Law Review* 41 (2006): 189-236.

¹¹⁵ Clausen, Judy Ann. “Regulating Physician Restrictive Covenants to Improve Healthcare.” *Kentucky Law Journal* 108 (2021):111-52.

¹¹⁶ Loeser, Derek W. “The Legal, Ethical, and Practical Implications of Noncompetition Clauses: What Physicians Should Know Before They Sign.” *Journal of Law, Medicine & Ethics* 31, no. 2 (2003): 283-91, <https://doi.org/10.1111/j.1748-720X.2003.tb00089.x>.

¹¹⁷ *Ibid.*

¹¹⁸ White House, Executive Order on Promoting Competition in the American Economy, July 9, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/>.

¹¹⁹ Loeser, “The Legal, Ethical, and Practical Implications of Noncompetition Clauses: What Physicians Should Know Before They Sign.”

equity-backed practice operates.¹²⁰ Many states have prohibited agreements that bind what doctors can discuss with patients related to treatment.¹²¹ States might consider extending these legal protections to include statements medical personnel make about quality concerns, questionable profit strategies, and ethical or professional challenges from business practices they encounter in the workplace.¹²²

3. Referral Patterns and Overutilization

Private equity firms' emphasis on increasing the profits of acquired practices may increase risks for overutilization, overbilling or upcoding, and self-referrals for ancillary services.^{123,124} The same pressure to maximize profits may also lead to stinting on less profitable services (or patients) or increased use of nonphysicians without adequate supervision.¹²⁵ Threats to Medicare and other federal health program spending and patient well-being that stem from providers' financial incentives are generally addressed by federal fraud and abuse laws; namely, the False Claims Act (FCA), Anti-Kickback Statute (AKS), and Stark Law. Though this discussion focuses on federal law, most states have anti-fee-splitting and self-referral laws that could be applied in a similar manner. Stepped-up enforcement under these laws by government and private whistleblowers alike could redress some of the fraud and abuse risks posed by private equity investment in physician practices, but additional regulatory reform may be needed in other cases.

Liability under federal fraud and abuse laws can be extensive. Under the FCA, each improper claim for payment triggers up to a \$23,000 per-claim penalty and "treble damages," calculated as three-times the amount the government improperly paid in claims.^{126,127} With most physician practices submitting thousands of claims annually to Medicare, Medicaid, TRICARE, ACA-subsidized health plans, and other federal health care programs, the civil liability can be ruinous to the providers and can decimate the value of the private equity-backed company. Deep-pocketed private equity firms may be targeted by enforcement action and, if they directed or encouraged their portfolio practices to engage in unlawful conduct, may be unable to avoid liability or administrative exclusion from participating in Medicare or other federal programs.¹²⁸ Although each statute targets separate types of conduct, they are overlapping, and the submission of claims in violation of the AKS or Stark Law are considered false claims under the FCA.

¹²⁰ DeCamp, Matthew, and Lois Snyder Sulmasy. "Ethical and Professionalism Implications of Physician Employment and Health Care Business Practices: A Policy Paper From the American College of Physicians." *Annals of Internal Medicine* 174, no. 6 (2021): 844-51, <https://doi.org/10.7326/M20-7093>.

¹²¹ Brand, Gordon, GM Munoz, MG Nichols, MU Okata, JB Pitt, and S Seager. "The Two Faces of Gag Provisions: Patients and Physicians in a Bind." 17 *Yale Law and Policy Review* 17 L. & Pol'y Rev. 249 (1998): 249-82.).

¹²² Generally speaking, such agreements are legally enforceable in business settings, as long as they do not prohibit "whistleblowing" to regulatory agencies. When imposed on physicians by managed care organizations, however, these speech restrictions have prompted greater legal scrutiny for interfering with the doctor-patient relationship. But even if states were to make these nondisclosure provisions unenforceable, drawing lines between protected versus unprotected speech might be more difficult when occurring outside of a treatment relationship.

¹²³ Gondi and Song, "Potential implications of private equity investments in health care delivery," 1047-1048.

¹²⁴ Zhu and Polsky, "Private Equity and Physician Medical Practices—Navigating a Changing Ecosystem," 981-83.

¹²⁵ Resneck, "Dermatology Practice Consolidation Fueled by Private Equity Investment: Potential Consequences for the Specialty and Patients," 13-14.

¹²⁶ FCA penalties are adjusted for inflation. The 2021 FCA minimum penalty per-claim is \$11,803 and the maximum is \$23,607.

¹²⁷ Civil Monetary Penalty Inflation Adjustment, 86 Fed. Reg. 2005 (Jan. 11, 2021).

¹²⁸ 42 U.S.C.A. § 1320-7.

The FCA imposes civil and criminal liability for those who present false or fraudulent claims for payment by the federal government, including federal health care programs.¹²⁹ For private equity-owned physician practices, the FCA can be used to police nefarious billing practices, including upcoding and submitting claims for unnecessary care.

The AKS makes it a felony to pay or to receive any remuneration for referring a patient or recommending the purchase of any item or service paid for by federal health care programs.¹³⁰ In the private equity context, any compensation between the practice, management company and any physicians, including employment, equity interests, or earnouts, must be fair market value and not based on the volume or value of referrals to avoid violating the AKS. In addition, any marketing arrangements to promote or encourage referrals for the items or services furnished by the portfolio practice could also implicate the AKS.

Both the FCA and AKS require a showing of intent or knowledge, and private equity firms may argue that as mere investors, they lacked the requisite intent to violate either statute. Nevertheless, in one case, the private equity owner settled a FCA case for \$21 million to resolve FCA liability for claims improperly submitted by its portfolio company (a compounding pharmacy) where the private equity owner was advised of and contributed to improper marketing payments in violation of the AKS.¹³¹ Thus, when private equity firms assume active management control to increase the profitability of portfolio practices, the easier it will be for the government to assert that the private equity firm knowingly participated in or benefited from the improper conduct by its portfolio practices and hold the private equity firm liable.^{132, 133}

The Stark Law prohibits physicians making referrals and entities from billing for “designated health services” payable by Medicare to entities with whom the referring physician has a financial relationship unless the arrangement satisfies an exception.¹³⁴ Unlike the AKS, Stark is not intent-based but a strict liability statute. For private equity-owned physician practices, the Stark Law requires all financial arrangements (including physician ownership in the practice or management company, the management services agreement with the practice, and physician employment compensation) between the portfolio practice, management company, and the group’s physicians to satisfy a Stark exception. Otherwise, group physicians may not refer for ancillary services within the group—a key source of revenue for the private equity investors.

The portfolio practice must qualify as a “group practice” under Stark to engage in otherwise-prohibited revenue sharing and to make and bill for referrals for ancillary services within the practice. To qualify as a group practice, a practice must meet a series of requirements, including that each physician member must furnish substantially all of their patient services through the group practice; it must be a unified business with centralized decision-making, billing, and financial reporting; and

¹²⁹ 31 U.S.C. §§ 3729 to 3733.

¹³⁰ 42 U.S.C. § 1320a-7b.

¹³¹ United States ex rel. Medrano v. Diabetic Care RX, LLC, No. 15-cv-62617-BLOOM/Valle, 2019 WL 1054125 (S.D. Fla. March 6, 2019).

¹³² Owens, Alexander M., “Storm Clouds on the Horizon: Private Equity and the False Claims Act,” *Pietragallo Gordon Alfano Bosick & Raspanti, LLP*, October 24, 2019, <https://www.pietragallo.com/publications/storm-clouds-private-equity-and-the-false-claims-act/>.

¹³³ Ferry, John, and Jason Mehta, “False Claims Act Risk to Private Equity Healthcare Investors,” *The Health Lawyer*, October 21, 2020, https://www.americanbar.org/groups/health_law/publications/health_lawyer_home/2020-october/fal-cta/.

¹³⁴ 42 U.S.C. § 1395nn.

physician members (rather than contractors) must personally provide at least 75% of the physician-patient services furnished by the group practice.¹³⁵ If private equity-backed portfolio practices do not meet all the requirements of a “group practice” under Stark, such as the unified business or centralized decision-making requirements, the portfolio practice would be unable to share revenues or permit referrals within the practice.

The in-office ancillary services exception is the primary Stark Law exception that portfolio practices rely upon to capture referrals for ancillary services within the practice. The purpose of the exception was to permit physicians to provide rapid diagnostic or therapeutic services during a patient’s office visit, such as imaging, laboratory, or physical therapy. In addition to requiring qualification as a group practice, the in-office ancillary services exception has several requirements, including limitations on who performs or supervises the services, the location of services, and who may bill for the services.¹³⁶ The intricate requirements of Stark’s group practice definition and the in-office ancillary services exception mean that investigations into the structure and compensation terms of private equity-backed physician practices may reveal noncompliance. Because the Stark Law is a strict liability statute and violations can constitute false claims under the FCA, private equity-driven platform and management practices may be a ripe area for investigation and enforcement.

Existing fraud and abuse laws already provide mechanisms to address some of the most egregious practices—upcoding, billing for medically unnecessary care, and marketing and kickback schemes—that private equity companies may be using to increase profits. Thus, in the fraud and abuse context, the key policy recommendation is to increase federal enforcement under existing laws to penalize and deter private equity-owned companies from engaging in nefarious billing and referral practices and allow government payers to recoup ill-gotten revenues. Moreover, to the extent that private equity parent companies encourage these strategies (and profit from them), government enforcers and private whistleblowers can hold private equity companies liable under the FCA for the misconduct of their portfolio practices.^{137,138,139} More targeted investigations of private equity portfolio company practices, including by the cross-agency Health Care Fraud Prevention and Enforcement Action Team, could yield more recoveries and deter bad behavior.

The problem of overutilization from self-referred services, however, is more difficult to address with existing fraud and abuse laws.¹⁴⁰ Concerns about overutilization of self-referred anatomic pathology services prompted the Government Accountability Office to recommend CMS add a self-referral “flag” to Part B claims to track in-office referrals and to identify potentially unnecessary services, but CMS has declined to do so.¹⁴¹ Similarly, MedPAC expressed concern that the in-office ancillary services exception creates incentives to increase volume and advised exploring ways to limit

¹³⁵ 42 C.F.R. § 411.352.

¹³⁶ 42 C.F.R. § 411.355(b).

¹³⁷ United States ex rel. Medrano v. Diabetic Care RX, LLC, No. 15-cv-62617-BLOOM/Valle, 2019 WL 1054125 (S.D. Fla. March 6, 2019).

¹³⁸ United States ex rel. Martino-Fleming v. South Bay Mental Health Center, Inc., No. 15-13065-PBS, 2018 WL 4539684 (D. Mass. Sep. 21, 2018).

¹³⁹ United States of America, ex rel. Cho and Baker v. H.I.G. Capital, LLC and H.I.G. Surgery Centers, LLC, No. 8:17-cv-983-T-33AEP, 2020 WL 5076712 (M.D. Fla. Aug. 26, 2020).

¹⁴⁰ Baker, Laurence C., Scott W. Atlas, and Christopher C. Afendulis. “Expanded Use of Imaging Technology and The Challenge of Measuring Value.” *Health Affairs* 27, no. 6 (2008): 1467-78, <https://doi.org/10.1377/hlthaff.27.6.1467>.

¹⁴¹ U.S. Gov’t Accountability Office, “Medicare: Action Needed to Address Higher Use of Anatomic Pathology Services by Providers Who Self-Refer,” GAO-13-445, June 2013, <https://www.gao.gov/products/gao-13-445>.

the exception, reduce payment rates for diagnostic services furnished under the exception, or use bundled payments.¹⁴² Yet, some in-office ancillary services may be more convenient for patients, better coordinated, and provided in a lower-cost setting than they would be otherwise. Perhaps reflecting this tension, many of the recent changes to the Stark and AKS rules have moved toward loosening restrictions, particularly aimed at reducing providers' compliance burden and promoting value-based payment arrangements or waiving their application to participants in Medicare ACOs altogether, without significantly altering the in-office ancillary services exception.^{143,144} Moving physician practices that self-refer ancillary services to alternative payment models, such as capitation or bundled payments, could reduce incentives for overutilization that fee-for-service payment currently provides.

B. Targeting Private Equity

In this section, we consider: (1) light-touch policies to promote greater transparency of private equity ownership stakes; (2) tax policies to mitigate advantages possessed by private equity, not just in health care, compared to other forms of capital; and (3) strengthening state corporate practice of medicine laws.

1. Transparency in Private Equity Ownership

The lack of accessible information about physician practice ownership makes it more difficult for policymakers, regulators, and payers and purchasers to understand the effects of private equity investment in physician practices.¹⁴⁵ Enhancing transparency of practice ownership would not directly regulate private equity investment in physician practices but rather enable policymakers and purchasers to better monitor any effects of private equity ownership on price, quality, patient experience, and utilization. A national online private equity ownership database could be a centralized approach to improving transparency, and there are two existing systems administered by CMS—Open Payments and Physician Compare—that could be expanded to include practice ownership status or serve as models for a new online database. The Sunshine Act's Open Payments online database is a disclosure database of payments from pharmaceutical and device manufacturers to physicians and teaching hospitals, and Physician Compare reports physicians' and clinics' star ratings.^{146,147}

2. Tax Advantages

The attractiveness of the private equity model is bolstered by the tax advantages it enjoys relative to other sources of capital. As discussed earlier, as compensation for its investment management services, a private equity firm typically receives a management fee equal to 2% of assets under management plus 20% of the profits generated by a fund. The 2% fee is subject to ordinary

¹⁴² MedPAC, Report to the Congress: Aligning Incentives in Medicare, Ch. 8, Addressing the Growth of Ancillary Services in Physicians' Offices, June 2010, http://www.medpac.gov/docs/default-source/reports/Jun10_Ch08.pdf?sfvrsn=0.

¹⁴³ Centers for Medicare and Medicaid Services. Modernizing and Clarifying the Physician Self-Referral Regulations, 85 Fed. Reg. 77492 (Dec. 2, 2020).

¹⁴⁴ Centers for Medicare and Medicaid Services. Final Waivers in Connection With the Shared Savings Program, 76 Fed. Reg. 67,992 (Nov. 2, 2011).

¹⁴⁵ MedPAC, *Report to Congress, Medicare and the Health Care Delivery System, chap. 3, Congressional request: Private equity and Medicare* (June 2021), http://www.medpac.gov/docs/default-source/default-document-library/jun21_medpac_report_to_congress_sec.pdf?sfvrsn=0.

¹⁴⁶ "The Sunshine Act's Open Payments Data," Centers for Medicare & Medicaid Services (website), accessed June 30, 2021, online database URL: <https://openpaymentsdata.cms.gov/>.

¹⁴⁷ "Physician Compare," Medicare.gov (website), accessed June 30, 2021, . <https://www.medicare.gov/physiciancompare/>. Physician Compare URL: <https://www.medicare.gov/physiciancompare/>.

income and self-employment taxes, but the 20% share of the fund's profits are considered "carried interest" and taxed at preferential capital gains rates (and not subject to self-employment tax).¹⁴⁸ This share of the fund's profits is most naturally thought of as payment for the service of investment management, and as such should be taxed as ordinary income. President Biden has proposed to make this change as part of the American Families Plan, and Rep. Bill Pascrell (D-NJ) proposed a similar tax reform in a bill in 2021.^{149,150} Alternatively, this issue could be addressed in part by equalizing tax rates on capital gains and ordinary income (without the former change, carried interest would still be exempt from self-employment tax), which President Biden has also proposed. These proposals would affect private equity broadly, not solely their health care investments.

While not specific to private equity, physician practice acquisitions commonly derive tax advantages from paying a higher acquisition price in exchange for the current physician owners agreeing to work for a lower annual salary for some number of years. This trade-off effectively allows the physicians selling the practice to convert some salary income (taxed at ordinary income rates and subject to payroll taxes) into long-term capital gains (taxed at preferential rates).¹⁵¹ Equalizing ordinary income and capital gains tax rates, as discussed previously, would partially fix this loophole. Alternatively, tax rules could be constructed to make illegal this sort of artificial tax arbitrage.

These tax reforms do not seek to penalize private equity, but rather to level the tax treatment of private equity's earnings with other types of investment managers.

3. Corporate Practice of Medicine: Legal Prohibition and Ethical Guidance

Courts traditionally have addressed many of the general concerns that private equity investment raises through what is known as the "corporate practice of medicine" prohibition. In brief, this judicially created doctrine bars nonprofessionals from owning or controlling medical practices. This general legal principle is subject to various exceptions or qualifications, and it is not actively enforced in some states.¹⁵² However, where it does apply, such laws create a strong bar to arrangements where nonphysician investors have an ownership interest.^{153,154}

One difficulty with the corporate practice of medicine prohibition is that, as currently deployed, it is a blunt legal tool. The prohibition tends to function in an all-or-nothing fashion based on the presence or absence of "lay" ownership. Thus, one technique private equity investors have used to avoid the corporate practice prohibition is the "friendly" or "captive" professional corporation model, which leaves ownership of the clinical entity with locally licensed physicians but contracts

¹⁴⁸ Tax Policy Center, *Briefing Book*, May 2020, <https://www.taxpolicycenter.org/briefing-book/what-carried-interest-and-how-it-taxed>.

¹⁴⁹ "American Families Plan," The White House (website), accessed June 30, 2021, <https://www.whitehouse.gov/american-families-plan/>.

¹⁵⁰ Carried Interest Fairness Act of 2021, H.R. 1068, 117th Cong. (2021). (2021), <https://www.congress.gov/bill/117th-congress/house-bill/1068>.

¹⁵¹ Rosen, Barry F., "Sale to Private Equity – Part 2," *Gordon Feinblatt, LLC*, December 12, 2020, <https://www.gfrlaw.com/what-we-do/insights/sale-private-equity-part-2>.

¹⁵² Huberfield, Nicole. "Be Not Afraid of Change: Time to Eliminate the Corporate Practice of Medicine Doctrine." 14 *Health Matrix* 14, no. 1243 (2004): 243-292.

¹⁵³ Hampton, Andre. "Resurrection of the Prohibition on the Corporate Practice Of Medicine: Teaching Old Dogma New Tricks." *University of Cincinnati*, 66 U. Cin. L. Rev. 489 (1998).

¹⁵⁴ Silverman, Stuart I. "In an era of healthcare delivery reforms, the corporate practice of medicine is a matter that requires vigilance." *Health Law and Policy Brief* 9, no. 1 (2015): 1-23.

virtually all business management functions to the designated private equity firm.¹⁵⁵ Because corporate practice of medicine doctrine does not readily attune itself to degrees of influence or particular forms of management, private equity investment can comply with the letter of the law even while violating its spirit. To achieve a more nuanced approach, states could consider legislation similar to a 2021 bill introduced in California that would require a professional practice to maintain “ultimate control” over business as well as medical matters.¹⁵⁶ Such a bill could be followed by more prescriptive regulations that specify how such control can be achieved and what forms of investment and management violate “corporate practice” principles.

An alternative to regulatory oversight of more questionable investment and management practices is to issue ethical guidance to medical professionals recommending the arrangements they should scrutinize or avoid. Professional ethical guidance is appealing because it avoids the onus of mandatory regulation and because it potentially allows a greater degree of flexibility and nuance. In the past, medical professional organizations such as the American Medical Association offered such guidance, but that practice came under antitrust scrutiny because it was seen as collective restraint on market mechanisms.¹⁵⁷ A more acceptable avenue exists, however. Because antitrust laws do not apply to state actors, states could legally authorize their medical licensing boards to issue ethical guidance relating to forms of investment and management that pose greater professional concerns.¹⁵⁸

Conclusion

There is growing concern over private equity’s rapid entry into physician specialty markets, particularly given the negative experiences with private equity investment in emergency and hospital-based specialties that fueled the rise of out-of-network surprise medical billing and recent studies suggesting potential harms from private equity ownership of nursing homes and hospitals.

While it is unclear whether private equity poses greater risks than other types of capital, it appears likely that private equity investors are adept at identifying and exploiting existing market dysfunctions, payment loopholes, and opportunities to increase profits in ways that may threaten patient welfare, restrict the professional autonomy of acquired physicians, and increase health care consolidation and costs. Understanding what is driving such investment—the playbook—points to the related risks and potential policy solutions.

Thus, our primary policy recommendations are aimed at addressing the market failures and loopholes themselves to allow private equity to offer beneficial capital and efficiencies to physician markets, while reducing harms to consumers and practitioners. Second, we recommend pursuing transparency of ownership to track the effects of private equity investment and tax changes to put private equity on a level playing field with other investors. Finally, it is worth considering whether

¹⁵⁵ Souter, Patrick. “Private Equity Investment in the Physician Practice: Has Its Time Finally Come or Will the Mistakes of the Past Be Repeated?” *Journal of Health and Life Sciences Law*. June 01, 2020. <https://www.americanhealthlaw.org/content-library/journal-health-law/article/5a4d6c17-f1cb-4c1f-b233-24a6688ac674/Private-Equity-Investment-in-the-Physician-Practice>.

¹⁵⁶ Lucas, Carol. “Corporate Practice of Medicine on Steroids,” *JD Supra*, May 11, 2021, <https://www.jdsupra.com/legalnews/corporate-practice-of-medicine-on-9931045/>.

<https://www.jdsupra.com/legalnews/corporate-practice-of-medicine-on-9931045/>
https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=20210220SB642

¹⁵⁷ American Medical Ass’n, 94 F.T.C. 980, 1015 (1979), aff’d by equally divided court, 455 U.S. 676 (1982).

¹⁵⁸ For analysis of the legal constraints on doing so, see *N.C. State Bd. of Dental Exam’rs v. F.T.C.*, 574 U.S. 494 (2015).

policies specifically targeting private equity, such as enhanced corporate practice of medicine laws or ethical guidance for physicians, would blunt the particular risks posed by private equity investment in physician practices.

Finally, our historical review of the boom and bust of PPMCs in the 1990s raises the prospect that private equity interest in physician practices may similarly fizzle, particularly if policymakers can eliminate many of the market failures and perverse incentives driving low-hanging profit opportunities and place a check on the add-on approach to consolidation.



The USC-Brookings Schaeffer Initiative for Health Policy is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics and aims to inform the national health care debate with rigorous, evidence-based analysis leading to practical recommendations using the collaborative strengths of USC and Brookings.

Questions about the research? Email communications@brookings.edu.
Be sure to include the title of this paper in your inquiry.

© 2021 The Brookings Institution | 1775 Massachusetts Ave., NW, Washington, DC 20036 | 202.797.6000