

The Growth of Private Equity Ownership in the Home Healthcare Market

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I. Introduction

Private equity is a class of investment whereby investors purchase a controlling stake in other companies. Investment by private equity has risen rapidly over the last decade. For example, year-over-year growth in private equity fundraising in North America from 2017-2022 was about 10%—the highest of any region in the world.¹ In the first half of 2022, private equity assets under management across buyouts, venture capital, growth, and other categories in the U.S. totaled almost \$4 trillion, or just over 50% of all private equity assets worldwide.²

Private equity has made significant investments in the healthcare sector. Key drivers of this investment include: increases in healthcare spending, uninvested capital reserves in private equity funds, and financial weakness and failures of healthcare companies prompted by the COVID-19 pandemic. Home healthcare is one of the fastest-growing markets in the healthcare sector and has attracted significant interest from private equity investors. Employment in home healthcare is expected to increase by about 8% per year through 2030.³ It is a growing and stable source of Medicare revenue, with spending averaging \$17.6 billion a year from 2016 to 2021.⁴ Moreover, home healthcare generates some of the highest earnings of post-acute care services that are reimbursed by Medicare. Indeed, the return on equity in home healthcare was about 66% in 2017—one of highest in the healthcare sector.⁵

“Home healthcare has attracted significant interest from private equity...it is a growing and stable source of Medicare revenue and generates some of the highest earnings of reimbursable post-acute care services.”

The aging U.S. population is a primary driver of increasing demand for home healthcare services. People over 65 will account for over 20% of the population in 2050, a 50% increase over 2012.⁶ Major features of the aging population are conducive to the delivery of healthcare at home, versus more expensive in-patient settings. These include an increase in dementia and Alzheimer’s, orthopedic diseases, and multiple chronic conditions.⁷ But increasing demand for

¹ *Private markets turn down the volume: McKinsey Global Private Markets Review 2023*, MCKINSEY & COMPANY 15 (Mar. 2023), Exhibit 2 at p. 8, <https://www.mckinsey.com/~media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20insights/mckinseys%20private%20markets%20annual%20review/2023/mckinsey-global-private-markets-review-2023.pdf>.

² *Id.*, Exhibit 4, a p. 10.

³ *U.S. Home Healthcare Market (2020-2030)*, GRAND VIEW RESEARCH, <https://www.grandviewresearch.com/industry-analysis/home-healthcare-industry> (last visited May 31, 2023).

⁴ *CMS Program Statistics - Medicare Home Health Agency*, CENTERS FOR MEDICARE & MEDICAID SERVICES, <https://data.cms.gov/summary-statistics-on-use-and-payments/medicare-service-type-reports/cms-program-statistics-medicare-home-health-agency> (last visited May 31, 2023).

⁵ Maggie Flynn, *Home Health Care Among Top Industries for Return on Equity*, HOME HEALTH CARE NEWS (Nov. 6, 2017), <https://homehealthcarenews.com/2017/11/home-health-care-among-top-industries-for-return-on-equity/>.

⁶ *Why is Home Healthcare Growing So Fast?* AMN HEALTHCARE,

<https://www.amnhealthcare.com/amn-insights/news/why-is-home-healthcare-growing-so-fast/> (last updated Nov. 22, 2022).

⁷ *Worldwide Home Healthcare Industry to 2028 - Increasing Prevalence of Target Diseases Such as Alzheimer's and Dementia is Driving Growth*, GLOBALNEWSWIRE (Oct. 19, 2021, 5:18 PM ET),

home healthcare also puts pressure on the supply of workers, and costs, which are estimated to increase 8.5% year-over-year between 2019-2030. Consumer out-of-pocket costs are expected to grow at a similar rate.⁸

For all of the foregoing reasons, investment in home healthcare markets is enticing to private equity investors. Private equity ownership provides opportunities to maximize revenue by cutting costs, increasing control over prices by consolidating markets, and deploying financial engineering mechanisms such as fees and dividend recapitalization.⁹ This aligns closely with the private equity model of generating high short-term returns for investors. And private equity's well-known disclosure problems, enabled by an outdated regulatory framework that is riddled with exemptions and loopholes, create opacity that works to keep investment under the "radar" of antitrust enforcers and regulatory authorities.

“The report adds to the growing body of research that explores competitive concerns around private equity ownership in vulnerable areas of the healthcare sector.”

The incursion of private equity into healthcare, and home healthcare in particular, raises pressing questions. For example, are the economic incentives and strategies typical of private equity compatible with ensuring affordability, access, and quality in healthcare? What do aggressive acquisition strategies, roll-up strategies, and rapid market exits mean for market concentration and the stability of healthcare markets? Is private equity targeting *or* driving higher concentration in healthcare markets? Is the private equity investment model incompatible with restoring competition in markets where private equity is a buyer of divested assets in challenged mergers, as was apparent in the recent litigated merger of United Health Group and Change Healthcare?¹⁰ Finally, what does this all mean for competition, prices, and quality of healthcare services?

This report examines the role of private equity in home healthcare markets. It is part of a growing body of research that explores competition concerns around private equity ownership in vulnerable areas of the healthcare sector, including outpatient and home healthcare, physician practices, nursing homes, and others.¹¹ The report is, by design, a descriptive analysis.

<https://www.globenewswire.com/en/news-release/2021/10/19/2316219/28124/en/Worldwide-Home-Healthcare-Industry-to-2028-Increasing-Prevalence-of-Target-Diseases-Such-as-Alzheimer-s-and-Dementia-is-Driving-Growth.html>.

⁸ See Howard Gleckman, *The U.S. Predicts Big Increases In Skilled Nursing And Long-Term Care Costs*, FORBES (Apr. 4, 2023, 9:59 AM ET), <https://www.forbes.com/sites/howardgleckman/2023/04/04/the-us-predicts-big-increases-in-skilled-nursing-and-long-term-care-costs/?sh=615cbea3b05a>.

⁹ Dividend recapitalization occurs when companies borrow money to pay dividends to private equity shareholders.

¹⁰ Closing Statement of the U.S. Dep't of Justice in *U.S., et. al v. UnitedHealth Group Inc. & Change Healthcare, Inc.*, U.S. DEPARTMENT OF JUSTICE, 28 (Sep. 8, 2022), <https://www.justice.gov/atr/case/us-et-al-v-unitedhealth-group-inc-and-change-healthcare-inc> (noting that the DOJ argued that the proposed divestiture would not maintain competitive intensity post-merger because the private equity firm "TPG is already considering its exit").

¹¹ Richard M. Scheffler, Laura M. Alexander, James R. Godwin, *Soaring Private Equity Investment in the Health Care Sector: Consolidation, Accelerated, Competition Undermined, and Patients at Risk*, AMERICAN ANTITRUST INSTITUTE AND PETRIS CENTER, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF CALIFORNIA, BERKELEY, 5 (May 18, 2021), <https://publichealth.berkeley.edu/wp-content/uploads/2021/05/Private-Equity-I-Healthcare-Report-FINAL.pdf>; *The Deadly Combination of Private Equity and Nursing Homes During a Pandemic: New Jersey Case Study of Coronavirus at Private*

It will help facilitate identification of key issues around the effects of private equity ownership on competition and risks to quality of care and prioritization of patient welfare. The takeaways from the report are important for antitrust enforcement, regulators, and legislators in framing further areas of inquiry that are important for developing competition policy around private equity. Major conclusions from the report include:

- ***Home healthcare is a rapidly-growing and high return on equity market in the healthcare sector that is attracting significant interest and potential disruption from private equity investment.***
- ***The private equity investment model raises concerns over its compatibility with promoting competition, affordable and high-quality healthcare, and stable and resilient healthcare markets.***
- ***Private equity accounts for a relatively small proportion of ownership but only a few players control a large proportion of Medicare payments.***
- ***MSA-level home healthcare markets display higher levels of concentration overall and private equity owned or backed firms have made significant and rapid incursions, now operating in over 50% of all markets.***
- ***High market concentration, the role of large home healthcare firms, and the potential for further incursions by private equity emphasizes the need for antitrust enforcers and regulators to engage early.***
- ***The data collection process for this report emphasizes that significant reforms are needed to ensure that the private equity industry discloses full and meaningful data that can be used to evaluate the impact of private equity ownership on competition.***

The report proceeds in several sections. Section II provides an overview of the private equity investment model and its implications for the healthcare sector. Section III explains the methodology used to assess private equity involvement in home healthcare markets. Sections IV and V unpack the growing presence of private equity in home healthcare markets, and concentration in markets with and without private equity ownership. Section VI concludes with

Equity Nursing Homes, AMERICANS FOR FINANCIAL REFORM (Aug. 6, 2020), <https://ourfinancialsecurity.org/2020/08/report-3-private-equity-nursing-homes-coronavirus/>; Eileen Appelbaum, Eileen and Rosemary Batt, *Private Equity Buyouts in Healthcare: Who Wins, Who Loses?* Institute for New Economic Thinking Working Paper Series No. 118 (Mar. 15, 2020), <https://ssrn.com/abstract=3593887>; *Examining Private Equity in Healthcare*, University of Pennsylvania Leonard Davis Institute of Health Economic (Mar. 10, 2023), <https://ldi.upenn.edu/our-work/research-updates/the-effect-of-private-equity-investment-in-health-care/>; Atul Gupta, Sabrina T. Howell, Constantine Yannelis, and Abhinav Gupta, *Does Private Equity Investment In Healthcare Benefit Patients? Evidence From Nursing Homes*. NBER Working Paper 28474 (Feb. 2012), <http://www.nber.org/papers/w28474>.

major takeaways for assessing, and addressing, the competition enforcement and policy implications of private equity investment in home healthcare.

II. Major Features of the Private Equity Investment Model

A. Focus on Maximizing Short-Term Returns

Recent research highlights major features of private equity ownership and its potential misalignment with the goals of protecting competition and promoting the welfare of consumers. This concern arises at the most basic level of antitrust enforcement, namely, the reportability of private equity acquisitions. The current reporting requirement threshold under the Hart Scott Rodino Act’s “minimum size of transaction” is \$111.4 million.¹² However, the median private equity deal value between 2013-2023 remained below \$80 million. In 2013, the median deal value was about \$30 million. This peaked in 2021 at about \$75 million, and then fell off to about \$50 million in 2022.¹³ Private equity acquisitions thus fly below the antitrust radar, making it more difficult, if not impossible for enforcers to track acquisitions. The complex structure and opacity of private equity funds exacerbates this problem.

“Cost savings are typically not passed to patients through lower prices or through investment in staff training and development, but go instead directly to private equity investors through higher returns.”

The “roll-up” strategy allows private equity to consolidate market positions by a series of smaller acquisitions that are then merged together into one entity. Industry data reveals that so-called “add-on” deals, or when a private equity portfolio company purchases a smaller target that is rolled-up into the existing portfolio company, have increased over time. In 2013, add-on-deals comprised about 45% of total deal count by type. By 2022, this increased to about 55%.¹⁴

The role of private equity in healthcare raises further concerns. For example, the goal of maximizing returns over the short-term is achieved through two major mechanisms. One is reducing costs, often through economies of scale, from combining back-office functions.¹⁵ However, cost savings are typically not passed to patients through lower prices or investment in staff training and development, but instead go directly to investors in the form of higher

¹² The Pre-Merger Notification Office Staff, *HSR threshold adjustments and reportability for 2023*, FEDERAL TRADE COMMISSION (Feb. 16, 2023), <https://www.ftc.gov/enforcement/competition-matters/2023/02/hsr-threshold-adjustments-reportability-2023>.

¹³ *US PE Breakdown Q1-2023*, PITCHBOOK 9, https://files.pitchbook.com/website/files/pdf/Q1_2023_US_PE_Breakdown.pdf (last visited May 31, 2023).

¹⁴ PITCHBOOK, *supra* note 13, based on chart titled “Share of PE deal count by type,” at 9.

¹⁵ Hoag Levins, *The Effect of Private Equity Investment in Health Care*, UNIVERSITY OF PENNSYLVANIA, LEONARD DAVIS INSTITUTE OF HEALTH ECONOMICS (Mar. 10, 2023), <https://ldi.upenn.edu/our-work/research-updates/the-effect-of-private-equity-investment-in-health-care/>.

returns. A second mechanism for achieving higher returns is commanding higher levels of revenue. This is achieved by gaining negotiating leverage over suppliers and commercial healthcare insurers, often through consolidation. Financial arbitrage, unethical billing practices, and anti-competitive tactics can further boost revenue.¹⁶

Another implication of private equity investment for healthcare is that portfolio companies are often required to take on debt to finance their own acquisitions. They also pay hefty management fees and dividends, often financed by taking on additional debt. This depletes healthcare firms of resources that could have been used to improve service, upgrade equipment, or improve working conditions for healthcare staff.¹⁷ This combination of financial extraction and debt leveraging leaves private equity portfolio companies in financially vulnerable positions, necessitating extensive and across-the-board cost-cutting that can, among other things, jeopardize quality of care.¹⁸

“The private equity investment model raises serious questions about its compatibility with prioritizing the quality of healthcare services and patient well-being.”

In sum, the private equity investment model raises serious questions about its compatibility with prioritizing the quality of healthcare services and patient well-being. It appears to be at odds with the prevailing value-based care model of healthcare delivery in the U.S., which has a focus on patient health outcomes, such as helping patients improve their health, reducing the effects and incidence of chronic disease, and living healthier lives.¹⁹ Indeed, recent studies have found that in nursing home and dialysis markets, private equity ownership is correlated with poorer health outcomes and higher prices.²⁰ Moreover, the failure of healthcare assets that are consolidated (or debilitated) by private equity leaves communities with fewer choices in healthcare providers and a less stable and resilient healthcare system.

B. Accelerating Healthcare Acquisitions and Rapid Market Exits

Private equity’s strategy around consolidation remains a major driver of high, short-term returns, with potentially adverse implications for market concentration and the quality of healthcare.²¹ To get a sense of how private equity investment differs from other ownership

¹⁶ *Fact Sheet: Private Equity is the Driving Force Behind Surprise Medical Billing*, AMERICANS FOR FINANCIAL REFORM (Oct. 15, 2021), <https://ourfinancialsecurity.org/2021/10/fact-sheet-private-equity-is-the-driving-force-behind-surprise-medical-billing/>.

¹⁷ Brian Ayash and Rastad Mahdi, *Leveraged Buyouts and Financial Distress*, CALIFORNIA POLYTECHNIC STATE UNIVERSITY 5 (Jul. 19, 2019) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3423290.

¹⁸ *Id.*

¹⁹ NEJM Catalyst, *What Is Value-Based Healthcare?* NEW ENG. J. MED. CATALYST (Jan. 1, 2017), <https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0558>.

²⁰ Scheffler, et al., *supra* note 11, at 2.

²¹ *See*, Comments of the American Antitrust in response to Request for Information on Merger Enforcement in Docket No. FTC-2022-0003-0001 (Apr. 21, 2022), https://www.antitrustinstitute.org/wp-content/uploads/2022/04/AAI-Merger-Guidelines-Comments_4.21.22.pdf, Comments

models, we compared acquisition, investment, and exit activity for private equity firms to a control group of publicly-traded firms over the period 1996-2022. This involved identifying the largest U.S.-based private equity firms, as measured by total funds raised,²² which are more likely to be diversified across a number of sectors, including healthcare, thus providing a reference point for investment activity by sector. The control sample includes the largest publicly-traded firms, by revenue.²³

Comparing the two samples indicates that private equity firms are far more active, on all fronts, than public firms. For example, private equity firms made, on average, about 95 acquisitions each across a variety of sectors and industries from 1996-2022. This compares to about 65 acquisitions, on average, for each firm in the public control group. The average acquisition rate for private equity firms is, therefore, about 1.5 times higher than for publicly-traded firms. This ratio is far higher when the large digital companies, which are far more acquisitive than non-digital firms, are removed from the public sample.²⁴ Moreover, private equity firms make investments at a rate that is five times higher than that of public firms.

“Private equity firms are far more acquisitive than, and exit markets significantly more frequently, than public firms.”

Private equity also has a relatively high rate of market exit. For example, standard holding periods for private equity currently average about five years.²⁵ Comparing the private equity and publicly control group samples reveals that the rate of exit by private equity firms is almost eight times higher than for public firms. These differences are not surprising but they are highly relevant to concerns over competition. High rates of acquisition and exit by private equity owned or backed firms can contribute to rising concentration as a result of roll-ups and asset churn. This can have adverse implications for the prices and quality of services. Rising concentration can also affect the stability of healthcare markets, which ranked third highest for exits by the top private equity firms in the sample.²⁶

of Americans for Financial Reform Education fund, Center for Economic and Policy Research, and United for Respect in response to Request for Information on Merger Enforcement in Docket No. FTC-2022-0003-0001 (Apr. 21, 2022), https://ourfinancialsecurity.org/wp-content/uploads/2022/04/4.21.22-PE_AFR-CEPR-UFR-Comment-DOJ-FTC-mergers.pdf.

²² Data sourced from *The 25 Largest Private Equity Firms in One Chart*, VISUAL CAPITALIST (Nov. 4, 2020), <https://www.visualcapitalist.com/25-largest-private-equity-firms-chart>. Firms are ranked by funds raised between 2015-2020. A flow variable such as funds raised, or revenue (for public firms) is likely to be a more representative of investment activity than a stock variable such as funds under management, especially in light of pandemic-related disruption. Firms with funds raised above \$25 billion are included in the dataset. Data on acquisitions, investments, and exits are sourced from company-specific queries on Crunchbase.com.

²³ Data sourced from *Companies Ranked by Revenue*, COMPANIES MARKET CAP (last visiting June 2, 2023), <https://companiesmarketcap.com/largest-companies-by-revenue/>. Firms with revenues above \$200 billion are included in the dataset.

²⁴ See, Diana L. Moss and David Hummel, *Anticipating the Next Generation of Powerful Digital Players: Implications for Competition Policy*, AMERICAN ANTITRUST INSTITUTE (Jan. 18, 2022), <https://www.antitrustinstitute.org/work-product/new-aai-analysis-unpacks-acquisitive-growth-by-digital-firms-warns-of-next-wave-of-expansion-and-need-for-sector-wide-approach-to-competition-policy/>.

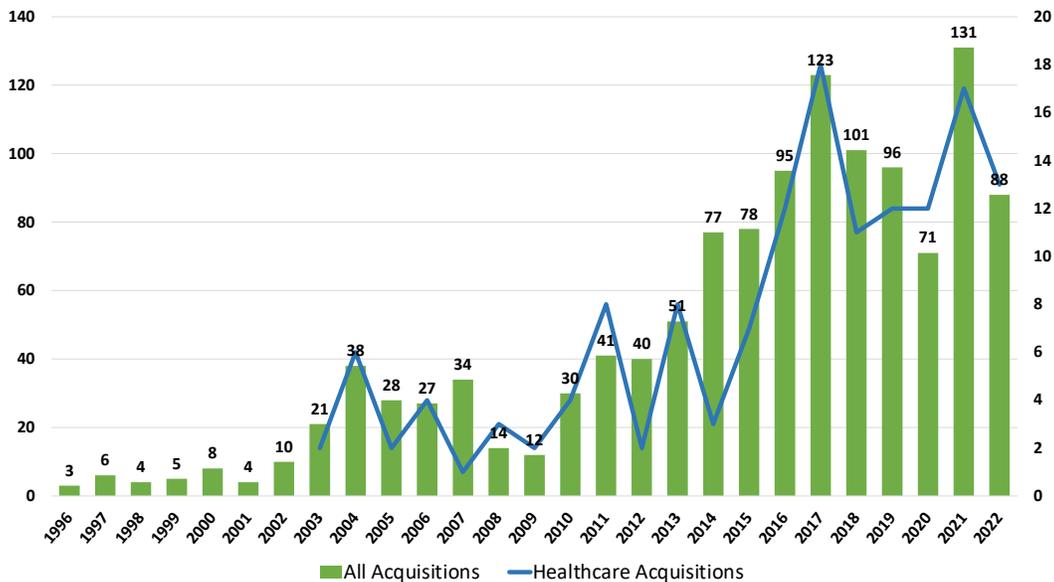
²⁵ *US PE Breakdown: 2021 Annual*, PITCHBOOK 33, https://files.pitchbook.com/website/files/pdf/2021_Annual_US_PE_Breakdown.pdf (last visited May 31, 2023). Private equity exits, i.e., “divestments” or “realizations” are defined as the “. . . means by which a private equity firm realizes a return on its investment . . . Exit methods include a trade sale (most common), flotation on a stock exchange (common), a share repurchase by the company or its management or a refinancing of the business (least common).” See *Exits (AKA divestments or realizations)*, INSTITUTIONAL LIMITED PARTNERS ASSOCIATION, <https://ilpa.org/glossary/exits-aka-divestments-or-realizations/> (last visited May 31, 2023).

²⁶ Other sectors with a high rate of private equity exits include finance, energy, software, and manufacturing.

“Healthcare ranked third highest for market ‘exits’ by private equity. A rapid rate of exit has potential adverse implications for market concentration and effects on price, quality, and the stability of healthcare markets.”

We next looked to unpack acquisition activity by the top private equity firms in our sample. Figure 1 shows total acquisitions by the top private equity firms over the period 1996-2022 (green columns). There is what appears to be a small cycle of activity from 2002-2008. Another much larger cycle, however, begins around 2010, peaks in 2017 and generally declines thereafter. The spike in activity in 2021 is likely due to a combination of COVID-19 pandemic related delays in acquisition activity, combined with normal activity in that year. While these disruptions may have extended into 2022, transactions in that year show a return to an overall trend on the downside of the major acquisition cycle. Private equity acquisition cycles shown in Figure 1 correspond to larger national and global trends in M&A activity.²⁷

Figure 1
Total vs. Healthcare Acquisitions by the Largest Private Equity Firms (1996-2022)



Healthcare acquisitions by private equity are a nontrivial proportion of total acquisitions. For example, healthcare acquisitions for the private equity firms in our sample accounted for about 12.5% of total acquisitions from 2013-2022.²⁸ This is similar to acquisition activity by *all* private

²⁷ *US Deals 2023 Outlook: Successful dealmakers will find opportunities*, PRICE WATERHOUSE COOPER, <https://www.pwc.com/us/en/services/consulting/deals/outlook.html> (last visited May 31, 2023) (“M&A activity down from 2021 highs but above historical levels”).

²⁸ Other sectors where private equity has been particularly acquisitive include manufacturing, software, and services.

equity firms based on PitchBook data for the same time period.²⁹ A closer look at private equity acquisitions in healthcare is shown in the word cloud in Figure 2. They are particularly focused on pharmaceuticals, medical devices, hospitals, and biotechnology. Acquisitions involving nursing and residential care and home healthcare are also apparent in Figure 2.

Figure 2
Healthcare Acquisitions by the Largest Private Equity Firms (1996-2022)



A final takeaway from the analysis of private equity acquisitions is that they are accelerating. Average year-over-year growth rate for *all* private equity acquisitions in our sample from 1996-2022 is 26%. For healthcare, however, this rate is far higher, or 42%. Year-over-year growth in private equity acquisitions in healthcare, therefore, outstrip that for all private equity acquisitions. In the second half of the period (2010-2022), which captures the major cycle of acquisition activity, year-over-year growth for all private equity acquisitions remains about the same as for the full period, but the rate of healthcare acquisitions increases to 47%.

Table 1
Year-Over-Year Growth in Acquisitions by Private Equity

Period	All Acquisitions	Healthcare Acquisitions
1996-2022	26%	42%
2010-2022	24%	47%

The analysis in the foregoing section highlights two major observations. First, the private equity investment model appears far less compatible with promoting competition, creating stability in healthcare suppliers, and delivering value-based care. Second, private equity firms are highly acquisitive. Overall investment, especially in healthcare, has accelerated over the last 25 years.

²⁹ *US PE Breakdown*, *supra* note 13, at 8, 13. All private equity acquisitions in healthcare account for about 15% of total acquisitions for the period 2013-2022.

Moreover, private equity firms have a high rate of market exit relative to public firms. These trends are magnified in healthcare where private equity acquisitions are a non-trivial percentage of total acquisitions across sectors. Taken together, these trends call for more intense scrutiny of private equity involvement in healthcare, and especially home healthcare, by antitrust enforcers, regulators, and legislators.

“Year-over-year growth rate for all private equity acquisitions in healthcare far outstrips that for private equity acquisitions across all sectors.”

III. Dataset of Home Healthcare Companies

Analysis of the role of private equity in the home healthcare markets relies on a novel dataset of home healthcare agencies in the U.S. Home healthcare markets feature Medicare payments as the largest source of revenue. The dataset includes agencies under different ownership models such as public (including state and local governments), non-profit, and private for profit (including private equity owned or backed).

Private equity refers to any of several types of deals: leveraged buyout, growth or platform, and substantial or majority holdings of shares of publicly listed companies. We identified entities that fit these criteria by comparing the publicly available list of home healthcare agencies registered with the Centers for Medicare & Medicaid Services (CMS) as receiving Medicare payments in 2020, to ownership information from the PitchBook database, corporate websites, and media sources.³⁰

Private equity entities are included in the dataset based on two criteria. One is if they match the home healthcare definition used by CMS. That is, services that are “given by a variety of skilled healthcare professionals at home . . . including . . . skilled nursing care, as well as other skilled care services, like physical and occupational therapy, speech language therapy, and medical social services.”³¹ The second criteria for inclusion in the dataset is a clear and direct match between private equity entities for which there is a CMS record, and other information sources.³²

³⁰ See *Home Health Quality Reporting Program (HHQRP)*, CENTERS FOR MEDICARE & MEDICAID SERVICES, <https://data.cms.gov/provider-data/topics/home-health-services> (downloaded July 2022).

³¹ *Medicare and Home Health Care*, CENTERS FOR MEDICARE & MEDICAID SERVICES, 3 <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/Downloads/HHQHBenefits.pdf> (last visited May 31, 2023); See also, *Home Health Providers*, CENTERS FOR MEDICARE & MEDICAID SERVICES, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/HHAs> (last visited May 31, 2023).

³² *Medicare and Home Health Care*, *supra* 31, at 3; *Home Health Providers*, *supra* 31.

We determined if there was a “match” if CMS and other sources contain the same information based on any two of three criteria: agency name, location address, and location telephone number.³³ This approach produces a conservative estimate of private equity owned locations because not every location listed on corporate websites has a corresponding match in the CMS payment data, and there are several private equity owned agencies for which there is insufficient information about their locations due to the well-known opacity of the industry. A total of 8,591 home healthcare agency locations registered with CMS appear in the final sample, with corresponding information on Medicare beneficiary payments, and “episode of care.”³⁴

“Taken together, private equity trends in healthcare, and especially home healthcare, call for more intense scrutiny by antitrust enforcers, regulators, and legislators.”

Our analysis then turned to identifying the geographic scope of home healthcare markets. These markets comprise local-level areas in which consumers can switch to alternatives providers should prices or quality of care be adversely affected. The Federal Trade Commission/U.S. Department of Justice Horizontal Merger Guidelines discuss geographic market definition based on “the locations of suppliers [that] encompass the region from which sales are made.”³⁵ For the purposes of this analysis, geographic markets are identified by home healthcare providers with CMS-certified locations in the same metropolitan statistical area (MSA). This process produced 382 MSAs in total.

IV. Growing Presence of Private Equity in Home Healthcare Markets

The dataset of CMS-registered home healthcare providers reveals that as of early 2023, private equity was behind 5.7%, or about 492 of 8,591 total providers.³⁶ These agencies collected at least \$1.4 billion in Medicare payments in 2020. Further, we identified 37 private-equity owned or backed “parent” companies behind the 492 home healthcare providers. These parent companies have acquired about 330 individual, and frequently small, home healthcare companies and consolidated them into what is now three dozen firms.

³³ Private equity firms operate with significant opacity, *e.g.*, in home healthcare, firms do not provide information about the locations of their agencies.

³⁴ See *Medicare Post-Acute Care and Hospice Provider Utilization and Payment Public Use Files (PAC PUF)*, CENTERS FOR MEDICARE & MEDICAID SERVICES, <https://www.hhs.gov/guidance/document/medicare-provider-utilization-and-payment-data-post-acute-care-and-hospice-0>. Both the “matched” list of private equity providers and beneficiary, payment, and episode of care data were merged using CMS certification number, a unique six-character identification number assigned to each home health agency by CMS. We found 82 additional private equity providers registered with CMS in 2023 but for which no payment data is available in the most recent provider-level data release. These providers were excluded from the dataset..

³⁵ See *Horizontal Merger Guidelines*, Section 4.2.1 U.S. DEPARTMENT OF JUSTICE AND FEDERAL TRADE COMMISSION (Aug. 19. 2010). This definition accepts that some home healthcare agencies provide services to beneficiaries outside of the boundaries of the geographic market where they are located, which is in line with U.S. antitrust agency guidelines.

³⁶ Most recent year for which CMS provider-level payment data is available.

This swath of consolidation by private equity owned or backed firms highlights the acquisition or financing of hundreds of home healthcare agencies across the country. Many more agencies have been in and out of private equity ownership over the last twenty years. Private equity firms have acquired non-profit companies and turned them into profit-making portfolio companies.³⁷ They have consolidated large and small chains, regionally and nationally, under flagship brands to be later sold to other private actors or taken public through IPOs or mergers.

Examples of leading home healthcare agencies that have been acquired by private equity include Innovage, and what was formerly Kindred at Home (now rebranded as CenterWell Home Health, a Humana subsidiary). Kindred was the largest home health provider in the U.S. when private equity firms acquired a majority stake of the company in 2018. Mission Healthcare, based in San Diego, CA, made six acquisitions in 2021 alone in California, Idaho, and Utah.

“Private equity firms have acquired non-profit home healthcare companies to create profit-making portfolio companies and consolidated chains under flagship brands to be sold to private actors or taken public.”

A few large private equity owned parent firms have an outsized presence in home healthcare. Table 2 shows the five largest of the 37 total parent private equity owned or backed home healthcare agencies, ranked by 2020 Medicare revenue. The table also includes statistics on number of locations and revenue collected per location. These top five companies account for about 63% of total revenue by private equity owned or backed companies and 57% of their locations. On average, they collected over \$850 million in Medicare revenue and operated almost 280 locations in 2020. The largest home healthcare company, Accentcare, backed by private equity firm Advent International, is disproportionately large, collecting just over twice as much as the average revenue for all five firms.

³⁷ LAURA K. OLSON, ETHICALLY CHALLENGED: PRIVATE EQUITY STORMS US HEALTH CARE 155 (2022).

Table 2
Top Five Private Equity Owned or Backed
Parent Agencies by Medicare Revenue (2020)

Parent Company	Private Equity Owners	Medicare Revenue	Number of Locations	Medicare Revenue per Location
Accentcare	Advent International	\$362,358,000	57	\$6,357,158
Elara Caring	Kelso Private Equity and Blue Wolf Capital Partners	\$174,849,000	66	\$2,649,227
Interim Healthcare	Wellspring Capital Management	\$125,177,000	87	\$1,438,816
Aveanna Healthcare	Bain Capital and J.H. Whitney Capital Partners	\$103,928,000	43	\$2,416,930
Mission Healthcare	Vistria Group	\$89,856,702	25	\$3,594,268
Total		\$856,168,702	278	

It is clear from Table 2 that there is a significant disparity in Medicare revenue generated per location for the largest private equity owned or backed healthcare companies. To get a better sense of how Medicare revenue collected relates to other important variables, we took a closer look at the home healthcare companies that generated the most *revenue per location*, as shown in Table 3.

“The top five home healthcare companies account for about 63% of total revenue by private equity owned or backed companies and 57% of their locations.”

Table 3
Top Five Private Equity Owned or Backed
Parent Agencies by Medicare Revenue per Location (2020)

Parent Company	Medicare Revenue	Number of Locations	Revenue Per Location	Episode of Care	Medicare Beneficiaries
Team Select Home Care	\$17,573,328	2	\$8,786,664	206,796	64,980
Trilogy Home Healthcare	\$75,729,115	11	\$6,884,465	43,857	16,126
Accentcare	\$362,358,002	57	\$6,357,157	17,479	4,900
Excelin Home Health	\$33,926,730	7	\$4,846,675	9,000	4,748
AccordCare	\$11,923,387	3	\$3,974,462	6,597	3,465

Medicare revenue and number of locations are strongly correlated for the top private equity owned or backed firms that generate the most revenue per location. As we would expect, Medicare revenue and episode of care and Medicare revenue and Medicare beneficiaries are also strongly, positively correlated. This means that the volume of services delivered, the number of Medicare beneficiaries served, and the revenue collected from delivery of services

are all strongly related. While correlation does not imply causation, departures from the strength of these correlations—for activity by both private equity owned or backed *and* non-private equity firms—may raise questions about the conduct of individual firms, or firms in specific home healthcare markets.

The relationship between “episode of care,” Medicare beneficiaries served, and revenue collected from home healthcare services is an important indicator of how home healthcare companies are operating in markets.”

Finally, it is helpful to examine activity by private equity owned or backed home healthcare companies at the state level. Table 4 shows the eight states where such companies account for a particularly large share of registered CMS providers *and* a large share of Medicare payments. The average share of private equity owned or backed registered CMS providers and share of Medicare payments in these eight states is 13% and 18%, respectively. Mississippi and Minnesota have some of the highest shares of private equity in terms of Medicare payments but lower shares of registered CMS providers. This may signal the presence of large private equity owned or backed home healthcare companies operating in those states, which is worth monitoring.

**Table 4
Largest Private Equity Shares of Registered CMS Providers
and Medicare Payments, by State (2020)**

State	Share of Registered CMS Providers (%)	Share of Medicare Payments (%)	State	Share of Registered CMS Providers (%)	Share of Medicare Payments (%)
Mississippi	11	26	Colorado	12	16
Minnesota	12	26	Louisiana	12	15
Nebraska	10	17	Virginia	10	10
Oklahoma	11	15	Tennessee	16	16

A major takeaway from the foregoing analysis is that private equity accounts for a relatively small proportion of total ownership in home healthcare but the rate of investment is high. It is also clear that a significant proportion of the Medicare revenue collected, and locations operated, by private equity owned or backed companies are concentrated in the hands of just a few firms. These findings provide antitrust enforcers, regulators, and legislators with important information for monitoring and assessing the incursion of private equity into home healthcare and the welfare of aging populations in particularly affected states.

V. Concentration in Home Healthcare Markets

It has been suggested that the home healthcare markets are “extremely fragmented”³⁸ because no agency has a significantly large national market share and the top 10 agencies together account for 27% of the national market.³⁹ This is misleading. Home healthcare is a local service for which national-level market shares do not necessarily reflect the competition that is most relevant for consumers.⁴⁰ Narrowly defined geographic markets provide a better indicator of actual competition for services that require providers to travel to patient’s home locations.⁴¹

We evaluated market concentration using the Herfindahl-Hirschman index (HHI) based on Medicare payment data for firms in the home healthcare database discussed in Section III. Based on antitrust guidelines, markets where the HHI is less than 1,500 are considered unconcentrated. Markets with HHIs between 1,500-2,500 are moderately concentrated, and those above 2,500 HHI are highly concentrated.⁴² These thresholds are an important indicator of how conducive markets are to competitive outcomes, in terms of the price and non-price dimensions of competition.

“More than half of MSA-level home healthcare markets in the U.S. are highly concentrated.”

More concentrated markets feature fewer competitors, with correspondingly weaker incentives to compete. The structure of those markets can range from a single, dominant firm and smaller fringe of rivals, to just a few relatively equal-sized firms. Concentrated markets in healthcare have been associated with higher prices, often over 20 percent, following harmful mergers.⁴³ High market concentration has also been associated with lower quality of care—in some cases as is evident in higher mortality rates.⁴⁴ As shown in Table 5, more than half of all MSA-level home healthcare markets are highly concentrated. This signals the presence of less, rather than more competition, based on all types of ownership. Private equity firms are present in about half, or about 190, of these MSA markets.

³⁸ See, e.g., Patrick Filbin, *Humana: Home Health Business Key To Value-Based Care Strategy*, HOME HEALTH CARE NEWS (Sept. 17, 2022), <https://homehealthcarenews.com/2022/09/humana-home-health-business-key-to-value-based-care-strategy/>; *Market Trends and M&A in Home Health/Hospice*, PROVIDENT HEALTHCARE PARTNERS, https://www.providenthp.com/wp-content/uploads/2019/08/Market-Trends-and-MA-in-Home-Health_Hospice-vF.pdf (last visited May 31, 2023); *Visiting the Home Health Marketplace: Observations of the Current Transaction Environment*, VMG HEALTH (Feb. 16, 2018), <https://vmghealth.com/thought-leadership/blog/visiting-the-home-health-marketplace-observations-of-the-current-transaction-environment/>.

³⁹ Aveanna Healthcare Holdings Inc., Annual Report (Form 10-K) (Mar. 28, 2022), <https://ir.aveanna.com/node/7201/html> (noting that the industry “remains highly fragmented, with the largest participants only generating low single digit market shares”).

⁴⁰ *Competition in Health Insurance: A Comprehensive Study of U.S. Markets 2022 Updated*, AMERICAN BAR ASSOCIATION, <https://www.ama-assn.org/system/files/competition-health-insurance-us-markets.pdf> (last visited May 31, 2023).

⁴¹ *Horizontal Merger Guidelines*, *supra* note 35, at Section 4.

⁴² *Id.*

⁴³ Brent D. Fulton, *Health Care Market Concentration Trends In The United States: Evidence And Policy Responses*, 36:9 HEALTH AFFAIRS 1530, 1530–31 (2017), <https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.0556>.

⁴⁴ *Id.*

Table 5
Home Healthcare Market Concentration
in All MSAs based on Medicare Payments

Concentration Level	Average HHI	Number of MSAs	Percent of MSAs
Low	820	80	21%
Moderate	2,028	87	23%
High	5,373	215	56%
Moderate + High	n/a	382	79%

Table 6 unpacks concentration in MSA-level home healthcare markets with and without a private equity presence. As shown in the top half of the table, 64% of MSA markets with a private equity presence are moderately to highly concentrated. Home healthcare firms in those markets hold, on average, 19% and 27% shares, respectively. In contrast, in MSAs where there is no private equity presence (lower half of the table), we see 93% of markets with moderate to high concentration. Home healthcare firms in those MSA markets hold, on average, 14% and 64% shares, respectively.

Table 6
Home Healthcare Concentration in MSAs
With and Without Private Equity Ownership

Concentration Level	Average HHI	Average Market Share	Number of MSAs	Percent of MSAs With and Without Private Equity
Markets with Private Equity Ownership				
Low	801	12%	67	36%
Moderate	2,014	19%	60	32%
High	4,384	27%	60	32%
Moderate + High			187	64%
Markets without Private Equity Ownership				
Low	917	5%	13	7%
Moderate	2,059	14%	27	14%
High	5,756	46%	155	79%
Moderate + High			195	93%

The foregoing comparisons reveal that private equity firms are operating in MSA-level home healthcare markets that are more, rather than less, concentrated. However, non-private equity firms operate in even more highly concentrated markets, and contain even larger players. For example, almost 80% of all home healthcare markets without private equity ownership are highly concentrated and the average market share of those firms is about 45%.

Given higher levels of market concentration in MSA-level home healthcare markets, and the presence of potentially large players, we looked specifically at the market shares of private equity owned or backed firms. This analysis is shown in Table 7. Private equity owned or backed home healthcare firms with smaller market shares of less than 30% operate in close to 40% of all MSAs where markets are moderately concentrated. The average market share in these MSA markets is only about 11%. And as the range of market share increases, the number of MSAs with a private equity presence declines.

Table 7
Private Equity Market Share Ranges in MSAs

Private Equity Market Share Range	Percent of All MSAs	Number of Locations	Average Private Equity Market Share	Average HHI
< 30%	39%	342	11%	2,048
30% - 49%	6%	51	39%	2,307
50% - 74%	2%	15	61%	3,446
75% - 100%	1%	5	97%	9,469

The analysis of concentration in MSA-level home healthcare markets highlights a number of major takeaways. Markets feature higher levels of concentration overall and private equity owned or backed firms have made significant and rapid incursions, operating in over 50% of all markets. However, these firms are generally operating in markets that are less highly concentrated relative to those in which non-private equity owned or backed firms operate. It is also clear that there are large players operating in markets with and without private equity.

These results strongly recommend that antitrust enforcers, regulators, and legislators should be on the lookout for consolidation and rising concentration in home healthcare markets. They should be especially aware of the emergence of dominant players, whether they be private equity owned or backed, or non-private equity firms. Indeed, the fact that only five private equity owned or back firms control a significant percentage of Medicare revenue for home healthcare reimbursements (see Table 2) should give competition enforcers and policymakers pause. It is also important to note that local markets that are even narrower than at the MSA level are likely to be even more concentrated. This is highly relevant to merger control, where antitrust markets around home healthcare could potentially be defined at even more local levels than the MSA.

“64% of MSA markets with a private equity presence are moderately to highly concentrated. However, 93% of MSA markets where there is no private equity ownership are moderately to highly concentrated.”

VI. Conclusions

This report provides insight into the role of private equity in home healthcare markets. It unpacks important features, statistics, and trends around private equity investment in the home healthcare. In doing so, the analysis lays the groundwork for future work that expands on the implications of private equity ownership for competition, prices and quality of care, and prioritization of patient well-being. The analysis emphasizes the need for antitrust enforcers, regulators, and legislators to carefully monitor the burgeoning growth of private equity, as well as non-private equity players in home healthcare markets, and changes in the structure and performance of those markets. A number of key takeaways emerge from the analysis and results.

- ***Home healthcare is a rapidly-growing and high return on equity market in the healthcare sector that is attracting significant interest and potential disruption from private equity investment.*** Private equity has made significant investments in the healthcare sector. The aging U.S. population is a major driver of the increase in demand for home healthcare services. Employment in the sector is growing rapidly but increasing demand is also increasing pressure on supply and prices. Home healthcare is a stable source of Medicare revenue of almost \$20 billion per year and generates some of the highest earnings for services that are reimbursed by Medicare. As such, home healthcare is particularly attractive to private equity investors.
- ***The private equity investment model raises concerns over its compatibility with promoting competition, affordable and high-quality healthcare, and stable and resilient healthcare markets.*** Private equity investment activity in healthcare has accelerated dramatically. Private equity is voraciously acquisitive and engages in consolidation that can increase market concentration but largely flies under the antitrust radar. Moreover, a focus on stripping out cost, gaining bargaining power, and rapidly exiting markets to generate high short-term returns potentially jeopardizes the quality of healthcare and the stability of community healthcare systems.
- ***Private equity accounts for a relatively small proportion of ownership but only a few players control a large proportion of Medicare payments.*** Private equity accounts for only about 6% of total ownership in U.S. home healthcare. However, only five private equity owned or backed companies account for well above 50% of total revenue and locations operated. Thus, a significant proportion of private equity home healthcare ownership is concentrated in the hands of just a few firms. The acquisitiveness of private equity signals the potential for even more rapid expansion into home healthcare markets.

- ***MSA-level home healthcare markets display higher levels of concentration overall and private equity owned or backed firms have made significant and rapid incursions, now operating in over 50% of all markets.*** Private equity operates in markets that are less highly concentrated relative to those in which non-private equity firms operate. But it is clear that there are large players of all types operating in home healthcare markets. Markets that are even narrower than an MSA are likely to be even more concentrated and the role of dominant firms even more problematic.
- ***High market concentration, the role of large home healthcare firms, and the potential for further incursions by private equity emphasizes the need for antitrust enforcers and regulators to engage early.*** Policies geared toward promoting competition in home healthcare markets should recognize the influence of *both* non-private equity and private equity players. Antitrust enforcers, regulators, and legislators should engage early, by closely monitoring consolidation and trends in concentration and taking strong action to promote competition.
- ***The data collection process for this report emphasizes that significant reforms are needed to ensure that the private equity industry discloses full and meaningful data that can be used to evaluate the impact of private equity ownership on competition.*** The private equity industry has a well-known disclosure problem, enabled by an outdated regulatory framework, exemptions, and loopholes. It is, therefore, almost impossible to accurately quantify the extent of private equity involvement in home healthcare. Addressing these issues should be a high priority for supporting efforts to reform financial, antitrust, and other reporting requirements involving private equity.