

Life cycle of private equity investments in physician practices: an overview of private equity exits

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Abstract

Private equity (PE) firms acquire and grow physician practices through add-on consolidation, generating outsized returns on the sale of the acquisition in 3–8 years (“exit”). Private equity’s abbreviated investment timeline and exit incentives may deter long-term investments in care delivery and workforce needed for high-quality care. To our knowledge, there has been no published analyses of the nature or duration of PE exits from physician practices. We address this knowledge gap by using novel data to characterize PE exits from dermatology, ophthalmology, and gastroenterology, physician specialties with the largest number of acquisitions between 2016 and 2020. Of 807 acquisitions, over half (51.6%) of PE-acquired practices underwent an exit within 3 years of initial investment. In nearly all instances (97.8%), PE firms exited investments through secondary buyouts, where physician practices were resold to other PE firms with larger investment funds. Between investment and exit, PE firms increased the number of physician practices affiliated with the PE firm by an average of 595% in 3 years. Findings highlight the rapid scale of ownership change and consolidation under PE ownership and motivate evaluations by policymakers on the effects of PE ownership over the life cycle of PE investments.

Key words: private equity; physician practices; markets; ownership.

Introduction

From 2000 to 2018, private equity (PE) investments in health care grew over 20-fold, from \$5 billion to over \$100 billion,¹ and spanned nearly every segment, including fertility services,² primary care,³ hospitals and health systems,^{4–6} physician practices,^{7–11} and nursing homes and hospice.^{12–14} Private equity firms generally rely on leveraged buyouts to acquire ownership of a target company, pooling capital from investors who accept greater financial risk. In exchange, investors expect returns that exceed 20% on the sale of the acquisition, typically within 3–8 years (an “exit”).¹⁵ Thus, PE exits are a natural part of the PE life cycle.

While all corporate owners of physician practices may seek to maximize profits, PE ownership confers distinct incentives to achieve rapid growth and increase firm valuation using “multiple arbitrage.”^{16,17} Multiple arbitrage refers to a common PE strategy to increase the valuation of acquired practices by combining smaller practices that trade at lower valuation multiples into a large platform practice that can command a higher valuation due to increased size, stability, and market share. In physician practice markets, PE achieves multiple arbitrage through a “roll-up” strategy under which PE acquires an established platform practice and builds market power with “add-on” acquisitions of smaller practices with the effect of increasing health care prices.^{7,10,11,18,19} Thus, by increasing the number of affiliated practices integrated with the platform practice, PE firms can profit through differences in the asset’s valuation at the time of investment and exit. Measuring this

activity is difficult given the lack of reporting and disclosure requirements for PE acquisitions.²⁰ As a result, whether PE firms achieve platform growth and exit, allowing PE firms to realize returns on their investment, is unclear.

Evidence from other industries highlights the several routes available to PE firms to exit their investments.^{21,22} First, PE firms may exit investments by selling their portfolio companies to other PE firms. This exit route, often called a secondary buyout, is likely if PE investors have already generated a high rate of return on their initial investment. Second, PE firms may exit investments through trade sales to strategic corporate buyers (eg, health systems, retail buyers, or health plan subsidiaries) seeking greater competitive advantage in their respective industries. Finally, PE firms can exit investments through an initial public offering (IPO) in which a portfolio company is listed on a public stock exchange for the first time. While an exit is critical for PE firms to realize desired returns on investment, there are important differences among exit options, with implications for long-term practice growth and stability.^{21,23} Notably, practices that undergo secondary buyouts perpetuate PE’s “buy to sell” strategy, as the secondary PE buyer must also achieve rapid growth over a short time period to realize investment returns. This contrasts with practices that undergo sale to strategic corporate buyers that generally “buy to keep,” holding on to investments over the longer term to integrate them into their existing operations.^{21,23}

While these differing exit incentives can motivate care delivery decisions made between investment and exit, there has not

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yet been a systematic examination of the life cycle of PE investments in physician practices. Global investment firms have posited that trade sales and secondary buyouts account for the largest share of exits by PE investors in health care; however, much of this reporting is based on PE investments in health technology and pharmaceutical companies.²⁴ It is unclear if these findings generalize to the physician practice setting, which has different business structures, service lines, and management practices.

We address this knowledge gap by providing an overview of PE exits following investments in 3 physician specialties with the largest number of investments to date: dermatology, ophthalmology, and gastroenterology.^{9,25} In addition, we focus on PE exits following acquisitions during 2016–2020, a period that captures the majority of acquisitions in the evaluated specialties.^{7,19,25,26} We characterize the nature of exits, the duration of investments, and specialty-specific variation in exits. Additionally, we report the increase in affiliated practice sites, as a proxy for platform growth achieved by PE firms between investment and exit.

Data and methods

Identifying PE acquisitions

First, to identify PE acquisitions from 2016–2020 across dermatology, ophthalmology, and gastroenterology specialties, we used proprietary data from PitchBook, Inc, a financial database that tracks mergers and acquisitions across industries and has been used by other studies examining PE in health care.^{7,8,10,27} We then manually verified and expanded this list using a combination of press releases, industry reports, and physician practice websites. We focused on these outpatient physician specialties as they have the highest PE acquisitions to date.^{7,9,10,25,26,28} Our sample includes physician practices, defined as clinics or offices that directly deliver care to patients, rather than management service organizations or physician enablement companies.

Identifying PE exits

For each practice acquired by PE during 2016–2020, we compiled the exit statuses of PE firms using deal information available on PitchBook, Inc. Data collected included date of initial investment, sellers and buyers of the initial investment, sellers and buyers in the exit, and corresponding dates of sale.

Practices were classified as undergoing a PE exit if some or all assets of the original PE investor were sold to another investor. This information was validated through internet searches and press releases to confirm that practices undergoing a PE exit were listed as a “realized investment” on the portfolio directory of the original PE firm’s website rather than an “active investment.” For practices that underwent an exit, we categorized both, the selling and buying PE firms according to the size of their health care investment fund, using Pitchbook data: lower middle market (investment fund size <\$500 million), middle market (investment fund size between \$500 million and \$1.5 billion), upper middle market (investment fund size between \$1.5 billion and \$5 billion), and large cap (investment fund size >\$5 billion).

We determined whether practices remained under the ownership of the original PE investor by examining the name and location of the acquired practice and comparing it with the information listed on the portfolio directory of the PE firm’s website. Practices were considered to be under the ownership

of the original PE investor if they remained listed as an “active investment” on the portfolio directory of the original PE firm’s website. Finally, practices were described as “closed” if they were described as being temporarily or permanently closed on platforms such as Google and/or Yelp. All searches were current as of December 2023. Our unit of analysis was the physician practice, defined as clinics or offices that directly deliver care to patients, rather than management service organizations or physician enablement companies.

Key variables

We examined the exit status of PE practices acquired between 2016 and 2020 as of December 2023. To define this measure, we categorized each acquired practice into 3 mutually exclusive categories: (1) whether the practice underwent a sale to a secondary buyer, (2) whether the practice remained under the same PE owner (ie, no exit), and (3) whether the practice location was listed as being closed. For practices that underwent a sale to a secondary buyer, we determined whether the secondary buyer was another PE firm (secondary buyout) or a strategic corporate acquirer (trade sale).

We calculated the investment holding period as the average number of days between when the initial PE investment was disclosed and when the PE exit was disclosed, among practices that underwent an exit.

Finally, to estimate growth of PE-backed platforms between PE investment and exit, we calculated the growth in the number of affiliated practice locations at the time of PE investment compared with the time of PE exit. Affiliated locations included all practice locations under the management of PE firms, including practices acquired through consolidation (“add-on” practices) and newly built practices under PE management. This calculation was done for PE firms with the largest number of exits within each specialty.

Statistical analysis

We conducted descriptive analyses to examine the total number of PE acquisitions during the study period, categorizing the number of acquisitions by exit status and acquisition year. For practices undergoing an exit, we examined the market segment of the PE firms (sellers and buyers)—that is, whether they operated in the lower middle market (investment fund size <\$500 million), middle market (investment fund size between \$500 million and \$1.5 billion), upper middle market (investment fund size between \$1.5 billion and \$5 billion), or large cap (investment fund size >\$5 billion).

We plotted the median, interquartile range, and distribution of the time between PE investment and exit for physician practice investments that underwent a PE exit. To examine exit status by physician specialty, we created Sankey diagrams to visualize exit trajectories of PE investments by physician specialty. Finally, to estimate growth of PE-acquired platforms between PE investment and exit, we calculated the increase in affiliated physician practices for PE firms with the largest number of exits within each specialty.

Limitations

As with all research related to PE investments, this study has data limitations, chief among them the absence of consistent reporting requirements for PE transactions, including exits. Our ability to discern the exact nature and timing of PE exit was contingent on manual validation of transactions that are

voluntarily and publicly reported by PE firms themselves. Relatedly, we were unable to identify partial exits or participation of minority investors or continuation funds in exit transactions.

Second, this study is descriptive in nature and does not control for market factors that may affect investment exit decisions, such as the fund debt structure, regulatory oversight, overall fund performance, and macroeconomic conditions, including effects of the COVID-19 pandemic. Our analysis is based on PE acquisitions in 3 procedural specialties with the largest PE acquisitions to date and may have limited generalizability to other specialties facing different exit incentives (eg, primary care).^{9,19,26} In addition, while analyses are current as of December 2023, our assessment of investment duration for practices that are held for under 7 years at the time of analysis may not reflect the true investment duration that would be observed with additional years of follow-up. Future research should examine exit trajectories over longer time periods. Nonetheless, the results presented here lay an important foundation for subsequent studies on the associations of PE exit strategies on care access, delivery, and patient outcomes.

Results

Nature of PE exits from investments in physician practices

A total of 807 physician practices in dermatology, ophthalmology, and gastroenterology were acquired by PE firms between 2016 and 2020. Among all acquisitions, 73.7% of physician practice acquisitions ($n = 595$) were undertaken by PE firms operating in the lower middle market (investment fund <\$500 million) or middle market (investment fund between \$500 million and \$1.5 billion) (Appendix Table S1).

Across all specialties, 51.6% of practices ($n = 417$) underwent an exit of the original PE investor in which some or all assets were sold to a secondary buyer (Figure 1). Of practices that underwent an exit, 97.8% of practices ($n = 408$) underwent a secondary buyout where the practice was resold to a buyer that was another PE firm. Secondary buyouts typically resulted in sales from lower market firms to higher market firms (Appendix Figure S1). For example, a majority of PE firms exiting investments in the lower middle market (investment fund <\$500 million) resold practices to PE firms operating in the middle (investment fund between \$500 million and \$1.5 billion), upper middle (investment fund between \$1.5 billion and \$1.5 billion), and large cap markets (investment fund >\$5 billion).

Of practices that underwent an exit, 2.2% of practices ($n = 9$) were sold to a secondary buyer that was a strategic corporate acquirer. A total of 344 (42.6%) practices remained under the ownership of the initial PE investor 3 to 7 years following the initial investment. Over the same follow-up period, 5.7% of practices ($n = 46$) were temporarily or permanently closed.

Duration between PE investment and exit

Figure 2 summarizes the duration between PE investment and exit, for practices that underwent a PE exit in our sample ($n = 417$). Across all deal years, the median investment holding period was 2.9 years (mean = 3.0, SD = 1.43) with some variation within deal years. The median investment holding period for investments made in 2016 was 3.7 years (mean = 3.9 years, SD = 1.94), 4.8 years in 2017 (mean = 4.3, SD =



Figure 1. Private equity exits, by year of acquisition, 2016–2020. Source: Authors' analysis of Pitchbook data, industry reports, and press releases. "Sale to PE" includes practices that underwent a second acquisition where some or all assets of the original PE investor(s) were purchased by another PE firm. "Sale to Strategic" includes practices that underwent a second acquisition where some or all assets of the original PE investor(s) were purchased by a strategic corporate buyer that is not a PE firm. "No Exit" includes practices that have not undergone an exit—that is, practices that remain under the ownership of the initial PE firm. "Closed Operations" includes practices that are listed as temporarily or permanently closed on platforms such as Google and/or Yelp as of December 2023. Abbreviation: PE, private equity.

1.38), 3.8 years in 2018 (mean = 3.5 years, SD = 0.88), 2.8 years in 2019 (mean = 2.4 years, SD = 0.89), and 1.7 years in 2020 (mean = 1.7 years, SD = 0.54).

Private equity exit status by specialty

Figure 3 shows variation in exit trajectories across specialties and acquisition years. Among acquisitions in dermatology ($n = 253$), 63.8% of acquisitions in 2016 ($n = 23$), 68.9% of acquisitions in 2017 ($n = 51$), 54.9% of acquisitions in 2018 ($n = 39$), 50.0% of acquisitions in 2019 ($n = 21$), and 62.0% of acquisitions in 2020 ($n = 18$) were sold to another PE firm. Within gastroenterology ($n = 204$), 31.0% of acquisitions in 2016 ($n = 8$), 100% of acquisitions in 2017 ($n = 12$), 87% of acquisitions in 2018 ($n = 40$), 59.3% of acquisitions in 2019 ($n = 38$), and 80.3% of acquisitions in 2020 ($n = 45$) were sold to another PE firm. Among gastroenterology practices acquired in 2019, 14% ($n = 9$) were sold to a strategic buyer. Within ophthalmology ($n = 350$), 71% of practices acquired in 2017 ($n = 20$), 23.6% of 2018 acquisitions ($n = 17$), 53.8% of 2019 acquisitions ($n = 42$), and 19.8% of 2020 acquisitions ($n = 34$) and were sold to another PE firm. Only 1 ophthalmology acquisition was identified in 2016 and remained under the initial PE firm as of December 2023.

Practice growth between PE investment and exit

Within PE firms with the largest number of exits, the number of affiliated physician practices increased by 595% in 3.0 years on average (Table 1).

Within dermatology, Chicago Pacific Founders, ABRY Partners, and Pantheon Ventures had the highest number of exits during the study period. Deals by these PE firms involved platform acquisitions that spanned anywhere from 13 to 42 practice sites at the time of initial investment. At the time of exit, the number of practice sites affiliated with the PE firm

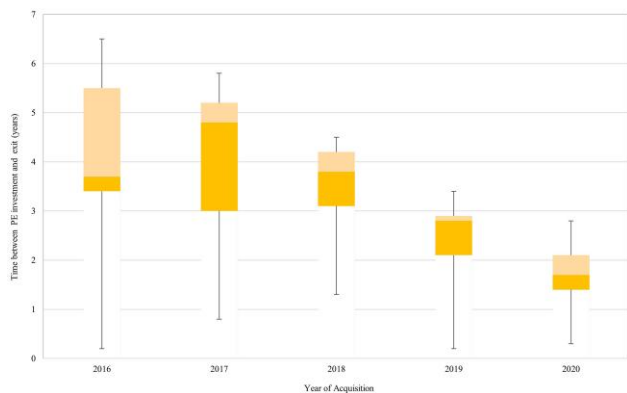


Figure 2. Duration between private equity investment and exit, 2016–2020. Source: Authors’ analysis of Pitchbook data, industry reports, and press releases. Time between initial PE investment and PE exit is calculated as the number of days (converted to years) between PE investment and exit for practices that underwent an exit during the study period. Abbreviation: PE, private equity.

increased by 105% in 2.6 years (ABRY Partners, from 42 practice sites in 3 states to 88 practice sites in 11 states) to 392% in 2.3 years (Pantheon Ventures, from 13 practice sites in 1 state to 64 practice sites in 4 states).

Within gastroenterology, Frazier Healthcare Partners, Waud Capital Partners, and Audax Private Equity had the highest number of exits during the study period. The increase in the number of practice sites affiliated with the PE firm ranged from 33% in 4.1 years (Frazier Healthcare Partners, from 60 practice sites in 1 state to 80 practice sites in 4 states) to over 900% in 2.4 years (Audax Private Equity, from 21 practice sites in 1 state to 212 practice sites in 6 states).

In ophthalmology, HIG Capital, Revelstoke Capital Partners, and Shore Capital Partners had the highest number of exits during the study period. Increases in the number of affiliated practice sites ranged from a 130% increase in 4.6 years (HIG Capital, from 40 practice sites in 2 states to 92 practice sites in 5 states) to 3000% in 2.8 years (Shore Capital Partners, from 5 practice sites in 1 state to 155 practice sites in 11 states).

Discussion

Using novel sources of data, we provide new policy-relevant evidence of the PE life cycle in physician practices. Our main findings highlight the rapid pace of ownership change for many of these practices: on average, over half of the physician practices acquired by PE firms underwent an exit within 3 years of acquisition. In nearly all instances, PE-acquired practices were resold to other PE firms as secondary buyers, resulting in changes to practice ownership from 1 temporary owner to another. During the period between PE investment and exit, PE firms increase the number of physician practices affiliated with the PE firm by nearly 600% in 3 years, highlighting the remarkable scale of growth and consolidation under PE ownership.

Our key finding is that, on average, over half of PE-acquired practices were resold within 3 years to other PE firms with larger investment funds. This finding raises important policy concerns about the potential implications of PE’s multiple arbitrage approach to increasing the valuation of acquired practices. First, secondary buyouts necessitate aggressive growth over short horizons as new PE owners will expect investments to generate higher future returns and also be

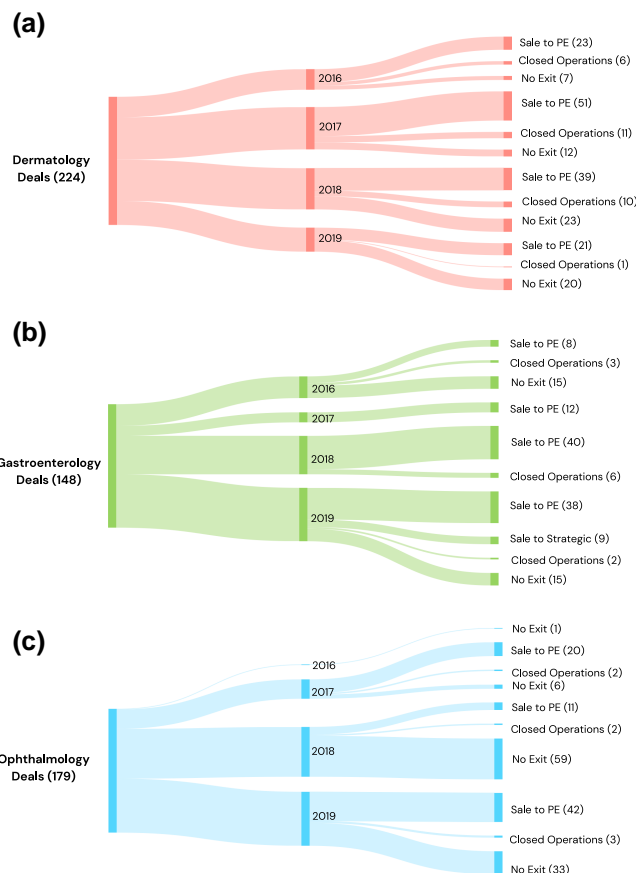


Figure 3. Private equity exits across physician specialties, 2016–2020. Source: Authors’ analysis of Pitchbook data, industry reports, and press releases. This Sankey diagram follows the trajectory of PE exits from investments within each specialty through different deal years. “Sale to PE” includes practices that underwent a second acquisition where some or all assets of the original PE investor(s) were purchased by another PE firm. “Sale to Strategic” includes practices that underwent a second acquisition where some or all assets of the original PE investor(s) were purchased by a strategic corporate buyer that is not a PE firm. “No Exit” includes practices that have not undergone an exit—that is, practices that remain under the ownership of the initial PE firm. “Closed Operations” includes practices that are listed as temporarily or permanently closed on platforms such as Google and/or Yelp as of December 2023. Abbreviation: PE, private equity.

liquidated within the life of the fund. How these exit goals alter ownership decisions regarding longer-term investments in infrastructure, personnel, and quality remains a key question for future research. Second, the prevalence of PE exits through secondary buyouts offers those physicians with retained equity the potential for a “second bite of the apple”²⁹ from future transactions. However, with each subsequent exit, physician employees may have declining influence to choose their investment partners, who can influence operational and managerial decision-making. The effect of subsequent buyouts on longer-term workforce autonomy and satisfaction, as well as workforce recruitment and retention,³⁰ is unknown.

Industry reports suggest that PE firms exit investments in other health care segments, such as health technology and life sciences, by selling portfolio companies to strategic corporate acquirers.²⁴ In contrast, we find that, for physician practice investments to date, PE firms have predominantly exited investments in evaluated specialties through secondary

Table 1. Increases in physician practices affiliated with PE firms between investment and exit, 2016–2020.

Specialty	PE firm	Platform company	Practice sites at time of investment	Practice sites at time of exit	States at time of investment	States at time of exit	Growth in practice sites (%)	Time between investment and exit, mean years
Derm	Chicago Pacific Founders	Pinnacle Dermatology	24	88	IL, IN, MI	AZ, IL, IN, MD, MI, MN, NC, TN, TX, VA, WV	266.7	2.6
Derm	ABRY Partners	US Dermatology Partners	42	86	MO, KS, TX	AZ, CO, KS, MD, MO, OK, TX, VA	104.8	2.6
Derm	Pantheon Ventures	Anne Arundel Dermatology	13	64	MD	MD, NC, TN, VA	392.3	2.2
Gastro	Frazier Healthcare Partners	United Digestive	60	80	GA	FL, GA, NC, SC	33.3	4.1
Gastro	Waud Capital Partners	GI Alliance	70	308	TX, LA	AR, AZ, CO, FL, IL, IN, KS, LA MS, MO, OK, TX, UT, WA	340.0	3.3
Gastro	Audax Private Equity	Gastro Health	21	212	FL	AL, MD, FL, OH, VA, WA	909.5	2.4
Ophtho	HIG Capital	American Vision Partners	40	92	AZ, NM	AZ, CA, NM, NV, TX	130.0	4.6
Ophtho	Revelstoke Capital Partners	CEI Vision Partners	17	47	OH	IN, KY, OH, VA	176.5	2.7
Ophtho	Shore Capital Partners	EyeSouth Partners	5	155	GA	AL, FL, GA, IL, TX, KY, LA, NC OH, PA, TN	3000.0	2.8
Average							594.8	3.0

Abbreviations: Derm, dermatology; Gastro, gastroenterology; Ophtho, ophthalmology; PE, private equity.

Source: Authors' analysis of Pitchbook data, industry reports, press releases, and archived and current versions of portfolio company and affiliated practices websites. This table summarizes changes in the number of physician practices at the time of investment and exit for PE firms with the largest number of exits in each specialty. The number of affiliated practice sites in the year of initial investment and the year of eventual sale is determined by using current and archived versions of portfolio company and private equity firm websites using The Internet Archive. The closest available version to the date of investment and/or exit was used to determine the count and growth in the number of affiliated practices under the PE. The time between investment was calculated as the time between initial PE investment and PE exit (converted to years).

buyouts in which portfolio companies were resold to other PE firms rather than to strategic corporate acquirers. The single exception in our sample is the sale of Capital Digestive Care, a gastroenterology practice initially acquired by the PE firm Kelso Private Equity, to SCA Health (part of UnitedHealth Group subsidiary, Optum) in June 2022.^{31,32} As additional years of data become available, future research must examine potential variation in exit trajectories that emerge over the life cycle of secondary buyouts, including greater participation of strategic corporate acquirers (eg, health systems, retail buyers, or health plan subsidiaries) in exit transactions.

Finally, our study highlights the remarkable pace at which PE firms increase the number of physician practices affiliated with the PE firm. While we do not have data to differentiate between increases in affiliated locations resulting from add-on consolidation vs organic practice expansion, our results provide preliminary evidence that PE acquisitions may warrant greater antitrust scrutiny. If PE's multiple arbitrage strategy results in increased market power through add-on consolidation, PE acquisitions can generate market-wide anticompetitive effects, particularly in geographic markets with high PE penetration.^{9,19} Until recently, physician practice consolidation, in general and by PE firms in particular, had faced limited regulatory scrutiny by federal antitrust agencies. As the Federal Trade Commission and the Department of Justice revise Merger Guidelines,³³ examining the cumulative effects of add-on consolidation by PE firms will be key areas for research and policy focus. A key component to this understanding will be greater ownership transparency of health care providers,

which is needed to accurately evaluate the scope and scale of PE consolidation as well as its long-term effects on care delivery.²⁰

Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

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Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as [supplementary materials](#).

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