

Financialization in Health Care: History, Current Trends, and Impacts on Patients

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Financialization in health care impacts hospital and provider decision-making. The health care system is tied to the financial sector and strategies through consolidation, investments, venture capital and for-profit subsidiaries, private equity, and lending practices, where non-operating income including investment income from stocks, bonds, asset sales, and revenue from for-profit subsidiaries contribute to the net revenue for large hospitals.¹

Research has identified broad trends in consolidation and private equity in health care demonstrating that both may lead to less competition and higher prices that may be passed on to patients, as well as the potential for closure of unprofitable facilities and service lines.² At the same time, there are cases where these financial strategies have expanded patient access to services, prevented closures, and increased efficiencies and quality of care.³

This research brief provides an overview of financialization's role in health care, including its history in the broader economy and the health care system from the 1960s through 2000s, current modes of financialization among hospitals, and examples on the different types of financialization and their potential impacts on prices and access to care for patients. It provides a brief overview of policy levers and administrative options to balance financial strategies with access to affordable care.

The History of Financialization in Health Care

Financialization in the Broader Economy

Financialization is defined as the transformation of companies and organizations into tradeable assets used to accumulate capital, with decision-making driven by financial strategies rather than productive activities.⁴

Financialization emerged in the 1970s through 1990s due to changes in corporate governance, federal regulation, and economic theories that promoted firms valued based on their shareholder value rather than their products or services.⁵ Companies would sell off less profitable pieces of their business to boost short-term stock prices rather than investing in products and technologies for long-term growth.⁶

Congress has passed various laws enabling financialization in the corporate and banking sectors during this period, including:⁷

- Allowing pension funds and insurance companies to hold shares of stocks, releasing trillions of dollars for new securities investments;⁸
- Allowing banks to engage in commercial activities and consolidation;
- Exempting certain financial instruments from federal oversight resulting in their rapid expansion, including derivatives, hedge funds, and private equity; and
- Eliminating tax-deductibility of executive compensation above \$1 million unless it was performance-based, resulting in increased use of stock option pay for executives which reoriented decision-making around boosting share price rather than long-term organizational growth and longevity.⁹

These changes in the broader economy resulted in large pools of liquid capital available, and investors looked to new sectors such as health care to invest.

Financialization in Health Care

The financialization of health care involves the transformation of health care entities into assets from which the financial sector may accumulate capital.¹⁰ The rise of this phenomenon in the health sector can be traced to economy-wide shifts that occurred in the 1970s and 1980s:

“A series of regulatory and policy changes empowered financial actors to make the U.S. health care system a core part of their growth strategies. At the same time, health care entities increasingly began to operate under ‘shareholder primacy,’ a corporate governance strategy that prioritizes the interest of shareholders over other potential stakeholders, such as workers or local communities.”¹¹

Financialization in health care effectively occurred along two parallel tracks. From ‘the inside out’ as nonprofit hospitals increasingly adopted non-health care-related financial strategies, and from ‘the

outside in' as financial actors have moved into health care because they view it as a lucrative investment.¹²

Both nonprofit and for-profit hospitals started adopting new business administration practices in response to changes in government reimbursement structures for health services, tax law allowing nonprofits to engage in for-profit activities, and antitrust deregulation.¹³ Alongside these administrative changes, hospitals began pursuing non-health care-related financial strategies, including investment arms and venture capital partnerships. In 1998, the IRS allowed nonprofit hospitals to form Limited Liability Corporations (LLCs) and engage in for-profit activities without paying taxes on their business income. Hospitals began investing in startups through joint ventures with venture capital investors or launching their own venture capital subsidiaries.¹⁴

Finally, antitrust deregulation paved the way for hospital mergers and acquisitions as a financial strategy. In 1982, the Reagan Administration reoriented anti-trust enforcement from deterring monopolies to safeguarding consumer welfare through lower prices, and the main factor in merger approval became the promise of improved efficiency through larger scale that would then pass lower prices on to consumers. Following these changes, hospitals began to pursue mergers and acquisitions in part to increase efficiencies of scale, but also to increase market power and leverage higher reimbursement rates from private insurers.¹⁵

Modes of Financialization in Health Care

Following the events of the 1960s to 1990s, financialization has influenced health care entities in a variety of ways.

Consolidation

Consolidation is one financial strategy that hospitals continue to employ. From 1998 to 2017, there were nearly 1,600 hospital mergers, resulting in nearly 90% of hospital markets becoming highly concentrated with half of all physicians becoming affiliated with a hospital by 2016.¹⁶⁻¹⁸ Market concentration occurs when hospitals merge, are purchased by other hospitals, or acquire independent outpatient facilities resulting in a few hospital systems employing most of the doctors in a geographic area.¹⁹

This generally results in higher commercial prices charged to insurers and patients without accompanying gains in efficiency or quality.²⁰⁻²²

Dominant hospitals may be able to negotiate higher prices from insurance companies to access their doctors, resulting in commercial price increases. Studies have shown increases in commercial prices of 20 to 40% in some areas, or more expensive facility fees for "hospital-based" care resulting in price increases of 14% to 32%.²³⁻²⁵

Private Equity

In conjunction with consolidation, a growing number of health entities have been acquired by private equity investors. Private equity investment in health care has increased significantly, growing from \$5 billion in 2000 to \$100 billion in 2018.²⁶ Private equity's role in the health care system takes a variety of forms, with firms increasingly acquiring health care entities directly.²⁷

In the past decade, private equity firms have completed more than 8,000 transactions involving health care entities with a combined value of nearly \$1 trillion.²⁸ These firms have rapidly purchased hospitals, physician practices, and a variety of other providers and then quickly sold them for profit—often with the hospital acquiring debt in the process.²⁹⁻³⁰

Another strategy seen across provider types is consolidation through serial acquisition via the "roll-up model." In this model a private equity firm will target a high-revenue practice and grow that practice by acquiring or contracting with multiple small practices to expand its market share and increase revenues.³¹ This leads to further consolidation among health care providers. Sale-leasebacks are another mode of direct external ownership of hospitals, wherein real estate investment trusts acquire health care properties and lease the real estate back to health care facilities.³²

For-Profit Subsidiaries and Venture Capital

Distinct from private equity, many hospitals created for-profit subsidiaries and venture capital funds following the 1998 IRS tax code revisions.³³ At least twenty-three health systems currently have venture capital arms; mainly large institutions such as Ascension, Cleveland Clinic, Kaiser Permanente, Mayo Clinic and UPMC.³⁴

Venture capital investment by major hospitals has increased from \$284.54 million in 2010 to \$2.7 billion in 2021.³⁵ Some hospitals invest internally within their own organization, while others partner with venture capital firms. Venture capital in health care takes a variety of forms, including digital health and hospital-at-home technology, remotely operated medical devices, and consumer experience tools.³⁶

Investments and Lending

Hospitals also have a structural dependence on the financial sector through their investment portfolios and lending practices. Nonprofit hospital systems held more than \$283 billion in stocks, hedge funds, private equity, venture funds, and other investment assets in 2019.³⁷ In terms of lending, hospitals focus on building financial reserves with their investment arms and patient revenues to maintain strong credit and access municipal bonds, which are often bought by financial investors to fund hospital construction and development.³⁸ Financial actors can also gain indirect control by obtaining shares in health care entities through early investment, such as external venture capitalists funding health care start-ups in exchange for early equity.³⁹

Financialization Strategies and their Impacts on Hospitals and Patients

Financialization in health care can have different impacts on patients and providers depending on a health care entities' priorities and methods. For example, one nonprofit hospital system created a regional network and increased patient access to services through their consolidation strategy.

By integrating community hospitals and adding primary care doctors to their system this nonprofit hospital entity was able to achieve system and financial efficiencies. The acquisitions and new partnerships also provided low-income patients in outlying areas access to care provided at the central medical center.⁴⁰ At the same time, the hospital system achieved a balance of debt and equity that protected them from financial distress. This approach, with a focus on centering and improving patient care, improved access for patients and supported the financial viability of multiple hospitals so that they were able to remain open to serve the community.⁴¹

However, not all acquisitions have positive outcomes. In another instance, a nonprofit hospital was acquired by a private equity firm that sold a large share of the hospitals' assets, including property and moved to paying rent on long-term leases. They also paid out dividends and pursued leveraged buyouts of twenty-seven hospitals in nine states over three years. The private equity firm then exited, and the hospital was left with the accrued debt.⁴²

In some cases, financialization can lead to a decrease in access for low-income patients. For example, while merging with a hospital located in a

high-income area, one nonprofit system closed two hospitals in urban areas serving lower income and predominantly Black communities. The hospital system cited declining revenues and increased operating costs as reasons for the closure.⁴³

In the face of high and rising health care prices, it is important to connect the financial motives behind hospital decision-making to the real-world impact on patients. Financialization in health care has led hospitals and other entities to use consolidation, private equity, venture capital, for-profit subsidiaries, and financial sector lending practices to increase revenues, reduce costs, or both.

Impacts of Consolidation on Patients

A variety of incentives behind mergers and acquisitions have been described, such as reduced costs of capital, reduced operating costs, benefits of scale, and clinical standardization.⁴⁴ However, the existing evidence is mixed. While some studies have found that acquired hospitals exhibit reduced operating costs, merged hospitals and physician practices are not systematically less costly, higher quality, or more effective than independent firms.⁴⁵

Many studies have also documented substantial increases in prices resulting from mergers in concentrated markets, where hospitals have been found to negotiate contracts with insurers that are favorable to them, with more desirable payment forms, higher service prices, or both.⁴⁶ When dominant hospitals negotiate higher payments from insurance carriers or charge higher facility fees, insurers can pass those costs to privately insured patients through higher premiums and cost-sharing.⁴⁷⁻⁴⁸

High out-of-pocket costs are especially burdensome for certain groups, like low-income families and communities of color. Lower-income families spend a greater share of their income on health costs than those with higher incomes, even when the more affluent patient has higher expenses associated with having a family member in fair or poor health.⁴⁹

Similarly, Black and Hispanic people have reported higher rates of delaying or going without care due to cost.⁵⁰ Black cancer survivors on high deductible health plans, for instance, face greater cost-related barriers to care than white cancer survivors on the same plan.⁵¹

Consolidation may also result in the addition, termination, or closure of services and facilities. Some rural hospitals, for instance, have merged with larger hospitals to prevent closure and expand

access to care and services like colonoscopies, emergency medicine, and imaging.⁵²⁻⁵⁵

Some acquired hospitals, including those facing bankruptcy, have also benefitted from capital investment and improvements such as expanded facilities, new partnerships, and service restoration.⁵⁶ At the same time, other studies have found that hospital systems that acquire rural hospitals reduce key services, such as primary care and obstetrics.⁵⁷⁻⁵⁸

Labor and delivery department closure has been linked to an increase in emergency deliveries, preterm births, travel times, and transportation challenges for people without cars.⁵⁹ This suggests that, although a merger can improve hospital financial viability, it can also result in service line reductions and gaps in community needs.⁶⁰ Additionally, faith-based hospitals that expand via consolidation may eliminate certain reproductive health services, thereby restricting access for people seeking reproductive care.⁶¹

Impact of Private Equity on Patients

Private equity firms claim that they provide financial and management expertise to health systems, offering the opportunity to maximize cost efficiencies and manage growth through mergers and acquisitions necessary to take advantage of scale economies or modern management techniques.⁶² However, the infusion of private equity in health care can affect patient care and costs.

Some studies have found that private equity may improve care quality under certain market and regulatory conditions.⁶³⁻⁶⁴ However, research has also linked the introduction of private equity with lower quality of care, higher risk of hospital-based infections, and increased costs to patients with a “mixed to harmful” impact on quality.⁶⁵⁻⁶⁶ Further complicating matters, other research has found that private equity acquisitions have no substantial impact on patient-level outcomes such as mortality or readmission rates for acute conditions.⁶⁷

This mix of findings demonstrates the need for additional research on the relationship between private equity investment and health outcomes.

Private equity’s debt structure also affects health care systems. This structure functions by aggressively increasing hospital system debt, which then compels private equity-owned systems to cut costs and reduce investments in workforce skills, technology, and other quality improvement initiatives.⁶⁸ In turn, this may lead to staffing reductions, service line termination, and hospital

closure if profits are low.⁶⁹ Lastly, the “roll up model” practiced in private equity across health care provider types contributes to hospital consolidation and concentration, which reproduces all of the outcomes described in the previous section.⁷⁰

Impact of Venture Capital and Investments on Patients

Regarding venture capital and the development of new technologies such as health apps and devices, nonprofit health system officials assert that these investments are beneficial to their missions, providing extra income and better care through new medical devices, software and other innovations, including ones their hospitals use.⁷¹ Still, these ventures face a variety of barriers to generating returns, including lack of sustained funding, limited adoption among clinicians, and oversaturation of similar products in the market.⁷²

Additionally, many startup technologies do not have the resources to conduct randomized controlled trials to demonstrate their efficacy.⁷³ These barriers culminate in high rates of failure or closure. For example:

- More than three in five (65% of) venture capital investments fail to return their capital;⁷⁴
- an estimated 98% of digital health startups ultimately fail;⁷⁵ and
- the number of documented cases of hospitals investing millions in venture capital projects is underreported, including cases where the companies are shut down or their devices discontinued when the initial results do not produce the desired returns.⁷⁶

Policy and Administrative Responses

In response to these issues, there are a variety of approaches that policymakers and hospital administrators can consider.

Many states have pursued regulations on hospital consolidation, such as:

- pre-merger notification and review;
- the authority to reject or approve mergers; and
- the authority to set conditions on merger approvals, such as conditions to not increase negotiated rates above a certain percentage, maintain access to services, or both.⁷⁷

Health equity assessments are another proposed component of antitrust enforcement.⁷⁸ Given that most health care markets are already consolidated, there are also suggested policies to address

anti-competitive behavior among hospital systems, dominant or otherwise.⁷⁹ These include:

- Anti-tiering and Anti-steering clauses;
- Most Favored Nation provisions; and
- All or Nothing provisions.

Notably, there has not yet been a comprehensive review of the efficacy of state-level policies at preventing price increases and maintaining access to affordable services for communities affected by consolidation. This is an area where further study is needed.

There are also a variety of state-level regulations to address private equity in health care.⁸⁰ These include:

- Transparency laws requiring notification of private equity health care acquisitions or approval by a state entity; and
- Corporate Practice of Medicine (CPOM) laws that limit non-medical individuals or groups from owning medical practices.

Beyond the adoption and enforcement of existing regulations, policy makers can also explore regulating transactions to align private equity goals with patient outcomes by regulating deals that could negatively impact access to care, costs, and patient satisfaction.⁸¹

Lastly, a hospital might explore ways of increasing the participation and power of care providers and affected community members in hospital financial decisions.⁸² If current trends persist, hospitals will continue relying on financial strategies such as consolidation, private equity, venture capital, and investments to fund their operations. Therefore, it is valuable to involve the care providers and patients who are impacted by these financial decisions.

Potential strategies include increasing physician and nurse membership on hospital boards and hospital community boards.⁸³ By placing patients and care professionals like doctors and nurses at the center of decision-making, health care entities can balance financial motives while ensuring critical care remains affordable and accessible to the communities that need it most.

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Sources—

1. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
2. Henke, R. M., Fingar, K. R., Jiang, H. J., Liang, L., & Gibson, T. B. (2021). Access To Obstetric, Behavioral Health, And Surgical Inpatient Services After Hospital Mergers In Rural Areas. *Health Affairs*, 40(10), 1627–1636. <https://doi.org/10.1377/hlthaff.2021.00160>
3. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
4. Hunter, B. M., & Murray, S. F. (2019). Deconstructing the Financialization of Healthcare. *Development and Change*, 50(5), 1131–1483. <https://doi.org/10.1111/dech.12517>
5. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
6. Sampson, R. C., & Shi, Y. (2020). Are U.S. firms becoming more short-term oriented? Evidence of shifting firm time horizons from implied discount rates, 1980–2013. *Strategic Management Journal*, 44(1), 231–263. <https://doi.org/10.1002/smj.3158>
7. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
8. Statista. (2024). Value of retirement assets in the United States from 1995 to 2023, by type. <https://www.statista.com/statistics/940498/assets-retirement-plans-by-type-usa/>
9. Lowenstein, R. (2005). *Origins of the Crash: The Great Bubble and its Undoing*. Penguin Books.
10. Hunter, B. M., & Murray, S. F. (2019). Deconstructing the Financialization of Healthcare. *Development and Change*, 50(5), 1131–1483. <https://doi.org/10.1111/dech.12517>
11. Bruch, J. D., Roy, V., & Grogan, C. M. (2024). The Financialization of Health in the United States. *New England Journal of Medicine*, 390(2), 178–182. <https://doi.org/10.1056/nejmms2308188>
12. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
13. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
14. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
15. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
16. Gaynor, M. (2020). What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2020/03/Gaynor_PP_FINAL.pdf
17. Fulton, B. D. (2017). Health Care Market Concentration Trends In The United States: Evidence And Policy Responses. *Health Affairs*, 36(9), 1530–1538. <https://doi.org/10.1377/hlthaff.2017.0556>
18. Furukawa, M. F., Kimmey, L., Jones, D. J., Machta, R. M., Guo, J., & Rich, E. C. (2020). Consolidation Of Providers Into Health Systems Increased Substantially, 2016–18. *Health Affairs*, 39(8), 1321–1325. <https://doi.org/10.1377/hlthaff.2020.00017>
19. Gaynor, M. (2021). Antitrust Applied: Hospital Consolidation Concerns and Solutions. Statement before the Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights U.S. Senate. Washington; District of Columbia. https://www.judiciary.senate.gov/imo/media/doc/Gaynor_Senate_Judiciary_Hospital_Consolidation_May_19_2021.pdf
20. Fulton, B. D. (2017). Health Care Market Concentration Trends In The United States: Evidence And Policy Responses. *Health Affairs*, 36(9), 1530–1538. <https://doi.org/10.1377/hlthaff.2017.0556>
21. Furukawa, M. F., Kimmey, L., Jones, D. J., Machta, R. M., Guo, J., & Rich, E. C. (2020). Consolidation Of Providers Into Health Systems Increased Substantially, 2016–18. *Health Affairs*, 39(8), 1321–1325. <https://doi.org/10.1377/hlthaff.2020.00017>
22. Fuse Brown, E. C. (2023). Health Care Consolidation: Background, Consequences, and Policy Levers. Alliance for Fair Health Care Pricing. https://allianceforfairhealthpricing.org/wp-content/uploads/sites/203/Health-Care-Consolidation-Background-Consequences-and-Policy-Levers_AFFHP_9.13.2023-1.pdf
23. Gaynor, M., & Cooper, Z. (2018). The Price Ain't Right: Hospital Prices and Health Spending on the Privately Insured [working paper]. National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w21815/w21815.pdf
24. Capps, C., Dranove, D., & Ody, C. (2018). The effect of hospital acquisitions of physician practices on prices and spending. *Journal of Health Economics*, 59, 139–152. <https://doi.org/10.1016/j.jhealeco.2018.04.001>
25. Carlin, C. S., Feldman, R., & Dowd, B. (2017). The impact of provider consolidation on physician prices. *Health Economics*, 26(12), 1789–1806. <https://doi.org/10.1002/hec.3502>
26. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
27. Bruch, J. D., Roy, V., & Grogan, C. M. (2024). The Financialization of Health in the United States. *New England Journal of Medicine*, 390(2), 178–182. <https://doi.org/10.1056/nejmms2308188>
28. Schulte, F. (2022). Sick Profit: Investigating Private Equity's Stealthy Takeover of Health Care Across Cities and Specialties. KFF Health News. <https://kffhealthnews.org/news/article/private-equity-takeover-health-care-cities-specialties/>
29. Borsa, A., Bejarano, G., Ellen, M., Bruch, J. D. (2023). Evaluating trends in private equity ownership and impacts on health outcomes, costs, and quality: systematic review. *BMJ*; 382, e075244. [10.1136/bmj-2023-075244](https://doi.org/10.1136/bmj-2023-075244)
30. Gondi, S., Song, Z. (2019). Potential Implications of Private Equity Investments in Health Care Delivery. *JAMA* 321(11):1047–1048. [10.1001/jama.2019.1077](https://doi.org/10.1001/jama.2019.1077)
31. Fuse Brown, E. C. (2024, March). Private Equity Investment in Physician Practices: Legal and Policy Responses. Brown University School of Public Health. Providence; Rhode Island.

32. Batt, R., Appelbaum, E., Katz, T. (2022). The Role of Public Reits in Financialization and Industry Restructuring. Institute for New Economic Thinking Working Paper, 189. <https://ssrn.com/abstract=4209720>
33. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
34. Diaz, N. (2023). 23 Health Systems with Investment Arms. Becker's Health IT. <https://www.beckershospitalreview.com/innovation/22-health-systems-with-investment-arms.html>
35. Pifer, R. (2022). Hospitals bet big on venture capital amid COVID-19 revenue flux. HealthcareDive. <https://www.healthcaredive.com/news/hospital-venture-capital-COVID-19/619852/>
36. Pifer, R. (2022). Hospitals bet big on venture capital amid COVID-19 revenue flux. HealthcareDive. <https://www.healthcaredive.com/news/hospital-venture-capital-COVID-19/619852/>
37. Rau, J. (2021). Mission and money clash in nonprofit hospitals' venture capital ambitions. KFF Health News. <https://kffhealthnews.org/news/article/mission-and-money-clash-in-nonprofit-hospitals-venture-capital-ambitions/>
38. Bruch, J. D., Roy, V., & Grogan, C. M. (2024). The Financialization of Health in the United States. *New England Journal of Medicine*, 390(2), 178–182. <https://doi.org/10.1056/nejmms2308188>
39. Gondi, S., Song, Z. (2019). The Burgeoning Role Of Venture Capital In Health Care. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20181218.956406>
40. La France, A., Batt, R., Appelbaum, E. (2021). Hospital Ownership and Financial Stability: A Matched Case Comparison of a Nonprofit Health System and a Private Equity-Owned Health System. *Adv Health Care Manag*. 6;20. doi: 10.1108/S1474-823120210000020007
41. La France, A., Batt, R., Appelbaum, E. (2021). Hospital Ownership and Financial Stability: A Matched Case Comparison of a Nonprofit Health System and a Private Equity-Owned Health System. *Adv Health Care Manag*. 6;20. doi: 10.1108/S1474-823120210000020007
42. La France, A., Batt, R., Appelbaum, E. (2021). Hospital Ownership and Financial Stability: A Matched Case Comparison of a Nonprofit Health System and a Private Equity-Owned Health System. *Adv Health Care Manag*. 6;20. doi: 10.1108/S1474-823120210000020007
43. Fuse Brown, E. C. (2023). Health Care Consolidation: Background, Consequences, and Policy Levers. Alliance for Fair Health Care Pricing. https://allianceforfairhealthpricing.org/wp-content/uploads/sites/203/Health-Care-Consolidation-Background-Consequences-and-Policy-Levers_AFFHP_9.13.2023-1.pdf.
44. Noether, M., May, S., Stearns, B. (2019). Hospital Merger Benefits: Views from Hospital Leaders and Econometric Analysis. American Hospital Association. <https://www.aha.org/system/files/media/file/2019/09/cra-report-merger-benefits-2019-f.pdf>
45. Gaynor, M. (2021). Antitrust Applied: Hospital Consolidation Concerns and Solutions. Statement before the Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights U.S. Senate. Washington; District of Columbia. Retrieved from https://www.judiciary.senate.gov/imo/media/doc/Gaynor_Senate_Judiciary_Hospital_Consolidation_May_19_2021.pdf
46. Gaynor, M. (2021). Antitrust Applied: Hospital Consolidation Concerns and Solutions. Statement before the Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights U.S. Senate. Washington; District of Columbia. Retrieved from https://www.judiciary.senate.gov/imo/media/doc/Gaynor_Senate_Judiciary_Hospital_Consolidation_May_19_2021.pdf
47. Scheffler, R. M., Arnold, D. R., & Whaley, C. M. (2018). Consolidation Trends In California's Health Care System: Impacts On ACA Premiums And Outpatient Visit Prices. *Health Affairs*, 37(9), 1409–1416. <https://doi.org/10.1377/hlthaff.2018.0472>
48. Arnold, D., Whaley, C. (2020). Who Pays for Health Care Costs? The Effects of Health Care Prices on Wages. RAND Corporation. https://www.rand.org/pubs/working_papers/WRA621-2.html
49. Claxton, G., Claxton, G., Twitter, M. R., Kurani, N., & Ortaliza, J. (2022, March 10). How affordability of employer coverage varies by family income. Peterson-KFF Health System Tracker. <https://www.healthsystemtracker.org/brief/how-affordability-of-health-care-varies-by-income-among-people-with-employer-coverage/>
50. Peterson-KFF Health System Tracker. (2024). Delay of Needed Care. <https://www.healthsystemtracker.org/indicator/access-affordability/delay-needed-care>
51. Cole M.B., Ellison J.E., Trivedi A.N. (2020). Association Between High-Deductible Health Plans and Disparities in Access to Care Among Cancer Survivors. *JAMA Netw Open* 3(6):e208965. doi:10.1001/jamanetworkopen.2020.8965
52. O'Hanlon, C. E., Kranz, A. M., DeYoreo, M., Mahmud, A., Damberg, C. L., & Timbie, J. (2019). Access, Quality, And Financial Performance Of Rural Hospitals Following Health System Affiliation. *Health Affairs*, 38(12), 2095–2104. <https://doi.org/10.1377/hlthaff.2019.00918>
53. American Hospital Association. (2023, March). Hospital Mergers and Acquisitions Can Expand and Preserve Access to Care. <https://www.aha.org/system/files/media/file/2023/03/FS-mergers-and-acquisitions.pdf>
54. Burke, D., Wang, B., Wan, T., Diana, M. (2002). Exploring Hospitals' Adoption of Information Technology. *Journal of Medical Systems*, 26(4), 349–355. <https://link.springer.com/article/10.1023/A:1015872805768>
55. Cutler, D., Scott Morton, F. (2013). Hospitals, Market Share, and Consolidation. *Journal of the American Medical Association* 310(18), 1964–1970. <https://jamanetwork.com/journals/jama/article-abstract/1769891>
56. Kauffman Hall. (2021). Partnerships, Mergers, and Acquisitions Can Provide Benefits to Certain Hospitals and Communities. American Hospital Association. <https://www.aha.org/system/files/media/file/2021/10/KH-AHA-Benefits-of-Hospital-Mergers-Acquisitions-2021-10-08.pdf>
57. Henke, R. M., Fingar, K. R., Jiang, H. J., Liang, L., & Gibson, T. B. (2021). Access To Obstetric, Behavioral Health, And Surgical Inpatient Services After Hospital Mergers In Rural Areas. *Health Affairs*, 40(10), 1627–1636. <https://doi.org/10.1377/hlthaff.2021.00160>
58. O'Hanlon, C. E., Kranz, A. M., DeYoreo, M., Mahmud, A., Damberg, C. L., & Timbie, J. (2019). Access, Quality, And Financial Performance Of Rural Hospitals Following Health System Affiliation. *Health Affairs*, 38(12), 2095–2104. <https://doi.org/10.1377/hlthaff.2019.00918>
59. Kozhimannil, K. B., Hung, P., Henning-Smith, C., Casey, M. M., & Prasad, S. (2018). Association Between Loss of Hospital-Based Obstetric Services and Birth Outcomes in Rural Counties in the United States. *JAMA*, 319(12), 1239–1247. <https://doi.org/10.1001/jama.2018.1830>
60. Henke, R. M., Fingar, K. R., Jiang, H. J., Liang, L., & Gibson, T. B. (2021). Access To Obstetric, Behavioral Health, And Surgical Inpatient Services After Hospital Mergers In Rural Areas. *Health Affairs*, 40(10), 1627–1636. <https://doi.org/10.1377/hlthaff.2021.00160>
61. Gold, J. (2019, April 29). Will Ties to a Catholic Hospital System Tie Doctors' Hands. KFF Health News. <https://kffhealthnews.org/news/will-ties-to-a-catholic-hospital-system-tie-doctors-hands/>
62. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>

63. Cerullo, M., Yang, K., Joynt Maddox, K.E., McDevitt, R.C., Roberts, J.W., Offodile, A.C. (2022). Association Between Hospital Private Equity Acquisition and Outcomes of Acute Medical Conditions Among Medicare Beneficiaries. *JAMA Netw Open*. 5(4):e229581. doi:10.1001/jamanetworkopen.2022.9581
64. La Forgia, A., Bodner, J. (2023, August 14). Getting Down to Business: Chain Ownership and Fertility Clinic Performance. SSRN—Elsevier. <http://dx.doi.org/10.2139/ssrn.4428107>
65. Kannan, S., Bruch, J.D., Song, Z. (2023). Changes in Hospital Adverse Events and Patient Outcomes Associated With Private Equity Acquisition. *JAMA* 330(24), 2365–2375. doi:10.1001/jama.2023.23147
66. Borsa, A., Bejarano, G., Ellen, M., Bruch, J.D. (2023). Evaluating trends in private equity ownership and impacts on health outcomes, costs, and quality: systematic review. *BMJ* 382(1):e075244. doi:10.1136/bmj-2023-075244
67. Lee, S., Ke, J., Shahinian, V., & Dupree, J. M. (2024). Private Equity In Health Care: A State-Based Policy Perspective. *Health Affairs*. <https://doi.org/10.1377/forefront.20241106.200283>
68. Applebaum, E., Batt, R. (2024). Financialization in Health Care: The Transformation of US Hospital Systems [working paper]. Center for Economic and Policy Research. <https://cepr.net/wp-content/uploads/2021/10/AB-Financialization-In-Healthcare-Spitzer-Rept-09-09-21.pdf>
69. Fuse Brown, E. C. (2024, March). Private Equity Investment in Physician Practices: Legal and Policy Responses. Brown University School of Public Health. Providence; Rhode Island.
70. Fuse Brown, E. C. (2024, March). Private Equity Investment in Physician Practices: Legal and Policy Responses. Brown University School of Public Health. Providence; Rhode Island.
71. Rau, J. (2021). Mission and money clash in nonprofit hospitals' venture capital ambitions. *KFF Health News*. <https://kffhealthnews.org/news/article/mission-and-money-clash-in-nonprofit-hospitals-venture-capital-ambitions/>
72. Rau, J. (2021). Mission and money clash in nonprofit hospitals' venture capital ambitions. *KFF Health News*. <https://kffhealthnews.org/news/article/mission-and-money-clash-in-nonprofit-hospitals-venture-capital-ambitions/>
73. Gondi, S., & Song, Z. (2019). The Burgeoning Role Of Venture Capital In Health Care. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20181218.956406>
74. Pifer, R. (2022). Hospitals bet big on venture capital amid COVID-19 revenue flux. *HealthcareDive*. <https://www.healthcaredive.com/news/hospital-venture-capital-COVID-19/619852/>
75. Chase, D. (2016). Why 98% of Digital Health Startups Are Zombies and What They Can Do About It. *Forbes*. <https://www.forbes.com/sites/davechase/2016/05/18/why-98-of-digital-health-startups-are-zombies-and-what-they-can-do-about-it/>
76. Rau, J. (2021). Mission and money clash in nonprofit hospitals' venture capital ambitions. *KFF Health News*. <https://kffhealthnews.org/news/article/mission-and-money-clash-in-nonprofit-hospitals-venture-capital-ambitions/>
77. The Source on Health Care Price and Competition. (2024). Market Consolidation: Merger Review. <https://sourceonhealthcare.org/market-consolidation/merger-review/>
78. Community Catalyst. (2022, May 2). Community Catalyst Urges Federal Anti-Trust Regulators to Use Health Equity Assessment. <https://communitycatalyst.org/posts/community-catalyst-urges-federal-anti-trust-regulators-to-use-health-equity-assessment/>
79. The Source on Health Care Price and Competition. (2024). Key Issues: Provider Contracts. <https://sourceonhealthcare.org/provider-contracts/>
80. Lee, S. S., Ke, J., Shahinian, V., & James M. Dupree. (2024). Private Equity In Health Care: A State-Based Policy Perspective. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20241106.200283>
81. Lee, S. S., Ke, J., Shahinian, V., & James M. Dupree. (2024). Private Equity In Health Care: A State-Based Policy Perspective. *Health Affairs Forefront*. <https://doi.org/10.1377/forefront.20241106.200283>
82. Witalis, K. (2023, September). The Ever-important Role of Hospital Community Boards: Forward-thinking governance can lead to a renewed focus on nonprofit hospitals' mission. The American Hospital Association. https://trustees.aha.org/system/files/media/file/2023/09/TI_0923_witalis_community_board.pdf
83. Satiani B, Prakash, S. (2016). It is Time for More Physician and Nursing Representation on Hospital Boards in the US. It is Time for More Physician and Nursing Representation on Hospital Boards in the US. *J Hosp Med Manage* 2(1). <https://hospital-medical-management.imedpub.com/articles/it-is-time-for-more-physician-and-nursing-representation-on-hospital-boards-in-the-us.php>