



Closing the Gaps

Policy Solutions for Cross-Market Hospital Mergers

Policy Brief

Neil Mehta, Erin Fuse Brown, & Daniel Arnold

Brown University

Summary of the Issue

Health care systems are increasingly pursuing mergers across multiple markets, known as "cross-market mergers." These mergers have slipped through gaps in policy on antitrust enforcement. This policy brief offers background and policy recommendations for regulating cross-market mergers for federal authorities (the Federal Trade Commission, the Department of Justice, and Congress) and state authorities (state attorneys general, legislatures, and health care oversight offices).

Key Takeaways

- Cross-market mergers are mergers between entities in different geographic markets.
- These mergers have dodged scrutiny by antitrust authorities, which traditionally focus on mergers of entities in the same geographic market
- However, new evidence suggests that these transactions are increasing health care costs
- A combination of state- and federal-level interventions can increase accountability, control costs and strengthen oversight of these transactions

Overview of Policy Options

- FTC/DOJ: Scrutinize cross-market mergers and their risks under the updated 2023 merger guidelines
- FTC: Use authority under Section 6(b) of the FTC Act to study cross market health care mergers and expand guidance on coordinating cross-state merger investigations
- 3. Congress: Amend the Hart-Scott-Rodino Act to reduce the threshold for reportable transactions, including serial transactions above the threshold in aggregate
- 4. **State legislature:** Enhance reporting requirements for potential healthcare entity transactions, with a focus on factors that may lead to price increases in cross-market agreements
- 5. **State AG, health care oversight agency:** Strengthen cross-state partnerships to oversee cross-market mergers that go beyond state lines
- 6. **State legislature:** Expand state antitrust and health care transaction oversight authority to explicitly cover cross-market transactions in health care, to evaluate out-of-state financial data and practices of acquiring firms, and to be able to

- approve or place conditions on transactions, including limiting price increases, all or nothing contracting, or other anti-competitive practices
- State legislature: Establish broad reporting and transparency requirements for health care entities to identify their chain of ownership and control entities, including controlling parent, financial backers, affiliates, and subsidiaries
- 8. **State legislature:** Equip antitrust authorities with the ability to monitor markets following a cross-market transaction for changes in price, quality, or access

Background

Over the past five decades, since 1970, large health systems have come to dominate U.S. healthcare. Increasingly, physicians are employed by hospital networks and their subsidiaries rather than self-employed in independent practices. The consolidation of U.S. healthcare has been cited as a driver of decreasing competition and rising costs for patients.

Recently, much of this consolidation has occurred in the form of "cross-market mergers," which involve mergers across multiple markets. While this brief focuses on mergers across geographic markets (such as a merger between two hospitals in different regions), cross-market mergers can also take place across product markets (e.g. a merger between a hospital and an ambulatory surgery center).

Existing estimates suggest that cross-market mergers account for a significant share of consolidating transactions. Between 2000 and 2010, around one in three mergers between hospitals were cross-market transactions. Between 2010 and 2019, 55% of hospitals that were targets of M&A transactions were in different commuting zones than the entity acquiring them.

One example of a cross-market merger is the 2022 deal between Advocate Aurora Health and Atrium Health. Advocate Aurora Health was a nonprofit health system in Wisconsin and Illinois. Atrium Health was a system in North Carolina, South Carolina, Georgia, and

¹ Fulton B. D. (2017). Health Care Market Concentration Trends In The United States: Evidence And Policy Responses. *Health affairs (Project Hope)*, 36(9), 1530–1538. https://doi.org/10.1377/hlthaff.2017.0556

²King, J. S., & Fuse Brown, E. C. (2017). The Anti-Competitive Potential of Cross-Market Mergers in Health Care. Saint Louis University Journal of Health Law & Policy, 11(1). https://scholarship.law.slu.edu/jhlp/vol11/iss1/5/

³ Lewis, M. S., & Pflum, K. E. (2015). Diagnosing hospital system bargaining power in Managed Care Networks. *American Economic Journal: Economic Policy*, 7(1), 243–274. https://doi.org/10.1257/pol.20130009

⁴ Fulton, B. D., Arnold, D. R., King, J. S., Montague, A. D., Greaney, T. L., & Scheffler, R. M. (2022). The Rise Of Cross-Market Hospital Systems And Their Market Power In The US. *Health affairs (Project Hope)*, *41*(11), 1652–1660. https://doi.org/10.1377/hlthaff.2022.00337

Alabama. The combined entity, Advocate Health, operates in six states and now has 69 hospitals.^{5,6}

Recent economic research has generally found that such mergers lead to higher prices for patients. One leading explanation is that large insurers, not patients, negotiate with health systems (on behalf of employers that operate across multiple markets), making the employers "common customers" across multiple geographic markets. Therefore, when a system grows through a cross-market M&A transaction, it will still attain more bargaining power against an insurer and be able to negotiate higher prices. This theory has been criticized by the American Hospital Association, a hospital advocacy group.

Although cross-market transactions have generally remained unchallenged in court, ¹¹federal antitrust authorities have intensified inquiries targeting these transactions. The Federal Trade Commission has begun requesting more information from entities involved in cross-market hospital transactions, which some acquirers view as a safer alternative to highly scrutinized hospital mergers within the same market.¹² Furthermore, the DOJ/FTC's 2023 Merger Guidelines acknowledged multimarket contact—when firms compete in multiple markets simultaneously—as an example of "aligned incentives," a secondary indicator that a merger could increase the risk of coordination between firms. The guideline¹³ reads: "[f]or example, firms might compete less aggressively in some markets in anticipation of reciprocity by rivals in other markets." This arrangement has been

⁵ Godwin, J., Levinson, Z., & Hulver, S. (2023, August 23). *Understanding Mergers Between Hospitals and Health Systems in Different Markets*. KFF.

https://www.kff.org/health-costs/issue-brief/understanding-mergers-between-hospitals-and-health-systems-in-different-markets/

⁶Market consolidation: Cross-market systems: The Source on Healthcare Price & Competition. The Source on HealthCare Price and Competition. (2022, May). https://sourceonhealthcare.org/market-consolidation/cross-market-systems/

⁷ Arnold, D. R., King, J. S., Fulton, B. D., Montague, A. D., Gudiksen, K. L., Greaney, T. L., & Scheffler, R. M. (2025). New evidence on the impacts of cross-market hospital mergers on commercial prices and measures of quality. *Health services research*, *60*(1), e14291. https://doi.org/10.1111/1475-6773.14291

⁸ Lewis, M. S., & Pflum, K. E. (2017). Hospital systems and bargaining power: Evidence from out-of-market acquisitions. *The RAND Journal of Economics*, 48(3), 579–610. https://doi.org/10.1111/1756-2171.12186

⁹ Dafny, L., Ho, K., & Lee, R. S. (2019). The price effects of cross-market mergers: Theory and evidence from the hospital industry. *The RAND Journal of Economics*, *50*(2), 286–325. https://doi.org/10.1111/1756-2171.12270

¹⁰ Argue, D. A., & Fowdur, L. (2021). (rep.). An Examination of New Theories on Price Effects of Cross-Market Hospital Mergers. American Hospital Association (AHA). Retrieved from

https://www.aha.org/position-paper/2021-05-10-examination-new-theories-price-effects-cross-market-hospital-mergers.

¹¹ Vistnes, G. (2024, August 21). Cross-Market Hospital Mergers: Assessing Likely Harm and Implications for Government Action. Americanbar.org; American Bar Association.

https://www.americanbar.org/groups/antitrust_law/resources/journal/86-1/cross-market-hospital-mergers/

¹² Kacik, A. (2024, October 31). *FTC drills down on cross-market hospital mergers*. Modern Healthcare. https://www.modernhealthcare.com/mergers-acquisitions/cross-market-hospital-mergers-ftc-data/

¹³ U.S. Department of Justice and the Federal Trade Commission . (2023, December 18). *Merger Guidelines*. https://www.ftc.gov/system/files/ftc_gov/pdf/P234000-NEW-MERGER-GUIDELINES.pdf

described as a potential mechanism underlying price increases from cross-market mergers. ¹⁴

Impacts of Cross-Market Mergers: Recent Evidence

Study	Major Finding(s)
Lewis & Pflum (2017) ¹⁵	Hospitals acquired by out-of-market systems saw price increases 17% greater than unacquired hospitals, as well as price increases of 8% at hospitals near the acquired entity.
Schmitt (2018) ¹⁶	Based on variations in cross-market consolidation, multimarket contact increases hospital prices.
Danfy et al. (2019) ¹⁷	Cross-market mergers drive price increases between 7-9% when the markets are in the same state, but not across different states.
Arnold et al. (2025) ¹⁸	Hospitals acquired in cross-market transactions had a 12.9% increase in prices six years post-acquisition without changes to several quality measures.
	Price increases were larger if the acquirer was a serial acquirer or when the acquired hospital had a greater market share than the acquirer.

Existing empirical literature on the effects of cross-market mergers is limited.¹⁹ One notable study, conducted by Leemore Dafny, the former deputy director of healthcare and antitrust in the FTC's Bureau of Economics, and co-authors Kate Ho and Robin Lee, finds

¹⁴ Gudiksen, K. L., & King, J. S. (2024). The Final 2023 Merger Guidelines: Will Small Changes From The Draft Version Make A Difference? *Health Affairs Forefront*. https://doi.org/10.1377/forefront.20240222.318711

¹⁵ Lewis, M. S., & Pflum, K. E. (2017). Hospital systems and bargaining power: evidence from out-of-market acquisitions. *The RAND Journal of Economics*, 48(3), 579–610. https://doi.org/10.1111/1756-2171.12186

¹⁶ Schmitt, M. (2018). Multimarket Contact in the Hospital Industry. *American Economic Journal: Economic Policy*, 10(3), 361–387. https://doi.org/10.1257/pol.20170001

¹⁷ Dafny, L., Ho, K., & Lee, R. S. (2019). The price effects of cross-market mergers: theory and evidence from the hospital industry. *The RAND Journal of Economics*, *50*(2), 286–325. https://doi.org/10.1111/1756-2171.12270

¹⁸ Arnold, D. R., King, J. S., Fulton, B. D., Montague, A. D., Gudiksen, K. L., Greaney, T. L., & Scheffler, R. M. (2025). New evidence on the impacts of cross-market hospital mergers on commercial prices and measures of quality. *Health services research*, 60(1), e14291. https://doi.org/10.1111/1475-6773.14291

Vistnes, G. (2024, August 21). Cross-Market Hospital Mergers: Assessing Likely Harm and Implications for Government Action. Americanbar.org; American Bar Association.

https://www.americanbar.org/groups/antitrust_law/resources/journal/86-1/cross-market-hospital-mergers/

price increases of between 7% and 9% from cross-market, in-state hospital acquisitions — but not from out-of-state transactions.²⁰

However, Arnold et al. (2025) more recently showed that the price increases persisted regardless of whether the cross-market merger was in-state or out-of-state. Further, this study monitored the effects of cross-market transactions on patient mortality, heart failure readmission, heart attack readmission, and pneumonia readmission, and found no differential impact on any of the four quality measures.

Potential mechanisms driving price increases following cross-market mergers

Given that merging entities in cross-market transactions operate in different markets, it appears implausible that prices increase. However, past literature (most notably King et al., 2023) names several potential mechanisms that could drive these price changes.²¹

One leading explanation is the "common customer" mechanism described above. For example, a larger employer can link distant markets by seeking to cover all employees under one plan. Therefore, a health system across multiple geographies has more bargaining power and can negotiate higher prices with an insurer for the employer.

Another theory, the "change in control" mechanisms, suggests that when a larger owner acquires an independent hospital, the new ownership can leverage its system's knowledge, experience, and/or differential motivations (e.g. a large, for-profit system may be more inclined to maximize profits) to negotiate higher prices and realize the hospital's market power.

"Multimarket contact," another mechanism described above, suggests that as systems grow, they compete with other systems in multiple markets, and may avoid competing in one market to avoid retaliation in another. ²²

Another mechanism includes "tying," or linking sales across multiple markets to increase prices (e.g. requiring an insurer to contract with multiple hospitals on an all-or-nothing

²⁰ Dafny, L., Ho, K., & Lee, R. S. (2019). The price effects of cross-market mergers: theory and evidence from the hospital industry. *The RAND Journal of Economics*, *50*(2), 286–325. https://doi.org/10.1111/1756-2171.12270

²¹ King, J. S., Montague, A. D., Arnold, D. R., & Greaney, T. L. (2023). *Antitrust's Healthcare Conundrum: Cross-Market Mergers and the Rise of System Power*. UC Law SF Scholarship Repository. https://repository.uclawsf.edu/hastings_law_journal/vol74/iss4/3 ²² Schmitt, M. (2018). Multimarket Contact in the Hospital Industry. *American Economic Journal: Economic Policy*, 10(3), 361–387. https://doi.org/10.1257/pol.20170001

basis), in which a firm leverages its market power in one market to increase prices in another.

One other mechanism is that cross-market mergers may lead to improvements to hospital quality post-acquisition which justify price increases.

Danfy et al. (2019) offered evidence attributing price increases to the "common customer' mechanism, while Arnold et al. (2025) ruled out change-in-control and quality improvement effects from their observed price increases. However, the precise mechanism(s) by which cross-market mergers drive price increases have not been definitively established.

Policy Recommendations

Because cross-market mechanisms are believed to drive prices through various potential mechanisms that differ from traditional anticompetitive price increases, it is crucial that federal and state officials employ a tailored policy toolkit to regulate and monitor these transactions. These strategies can strengthen existing antitrust enforcement and address key oversight gaps.

Description	Level		
1. Scrutinize cross-market mergers and their risks under the updated 2023 merger guidelines			
The DOJ/FTC's 2023 Merger Guidelines acknowledge the potential significance of multimarket contact (when firms compete in multiple markets simultaneously) and tying arrangements such as all-or-nothing contracting characteristic of cross-market mergers.	DOJ/FTC		
The DOJ and FTC should scrutinize cross-market mergers and bring enforcement action where appropriate under the expanded 2023 merger guidelines.			
Use authority under Section 6(b) of the FTC Act to study cross market health care mergers and expand guidance on coordinating cross-state merger investigations			
Under Section 6(b) of the FTC Act, the FTC may require companies to respond to questions about their "organization, business, conduct, practices, management, and relation to other corporations, partnerships, and individuals." Under Section 6(b), the FTC can also conduct studies without a specific law-enforcement related goal.	FTC		
The commission can use this section to require entities undergoing cross-market mergers to produce information about prices and competition. Some information, such as ownership, may currently be non-public and allow for more robust study of the effects of cross-market consolidation.			
Additionally, current FTC guidance on coordinating merger investigations enables state antitrust authorities to combine efforts. Further guidance on cross-state investigations specifically regarding health care entities can define the role of entities outside the state attorney general's office, such as health officials, which often play a role in overseeing intra-state health care mergers.			

3. Amend the Hart-Scott-Rodino Act to reduce the threshold for reportable transactions, including serial transactions above the threshold in aggregate.

While data on hospital ownership is widely available, transactions involving health care entities have limited federal reporting restrictions. Namely, the Hart-Scott-Rodino Act requires merging entities to file with the FTC and DOJ when the transaction exceeds an annual updated threshold of \$126.4 million in 2025. However, many health care transactions fall below this threshold.

Congress

Congress can circumvent this restriction by reducing the Hart-Scott-Rodino threshold to capture a greater share of health care transactions, and require reports of serial transactions if they collectively exceed the threshold.

4. Enhance reporting requirements for potential healthcare entity transactions, with a focus on factors that may lead to price increases in cross-market agreements.

Federally, the Hart-Scott-Rodino Act requires merging entities to file with the FTC and DOJ when the transaction exceeds an annual updated threshold of \$126.4 million in 2025. However, many health care transactions fall below this threshold.

State legislature

State lawmakers can expand antitrust authority more broadly by requiring notice of healthcare transactions that fall below this threshold. Already, more than half of the states require nonprofit entities and/or health care entities to provide prior notice of transactions, such as mergers and acquisitions, with some allowing the state attorney general or other health agency to block or place conditions on transactions. ^{23,24}

State officials can also require health care entities merging across markets to provide supplementary information, such as common insurers and existing affiliate locations, which may help identify the potential for "common customer" effects (due to large employers negotiating with a common insurer) or "multimarket contact" effects (when firms compete in multiple markets simultaneously), which could increase the risk of price increases.

Many state requirements require merging entities to notify the state's attorney general and/or the department of health. States can leverage existing health oversight offices to develop new requirements for cross-market merger notices.

²³ Fuse Brown, E. C., & Gudiksen, K. L. (2024, January 25). *Models for Enhanced Health Care Market Oversight — State Attorneys General, Health Departments, and Independent Oversight Entities*. Milbank Memorial Fund. https://www.milbank.org/publications/models-for-enhanced-health-care-market-oversight-state-attorneys-general-health-departments-and-independent-oversight-entities/

²⁴ Market Consolidation: Merger Review | The Source on Healthcare Price & Competition. (n.d.). The Source on HealthCare Price and Competition; UC College of the Law San Francisco. https://sourceonhealthcare.org/market-consolidation/merger-review/

5. Strengthen cross-state partnerships to oversee cross-market mergers that go beyond state lines.

While earlier empirical research did not find price increases from cross-state hospital transactions, newer evidence from Arnold et al. (2025) finds that prices still increase when cross-market mergers go beyond state lines. To regulate these mergers, **state attorneys general** must be prepared to coordinate merger investigations.

State AG, state health care oversight office

Existing guidance from the FTC²⁵ names several practices to streamline such investigations, such as selecting a "coordinating state" to transmit documents from the FTC and/or antitrust division to other participating states, and selecting one "liaison state" to integrate subpoena requests from multiple states. Such procedures draw on the National Association of Attorneys General Voluntary Premerger Disclosure Compact.

States can strengthen these partnerships by coordinating efforts of **health care oversight agencies** outside the state attorneys general's offices. One example of these agencies is Massachusetts' Health Policy Commission, which is also notified by health care entities before mergers.

6. Expand state antitrust and health care transaction oversight authority to explicitly cover cross-market transactions in health care, to evaluate out-of-state financial data and practices of acquiring firms, and to be able to approve or place conditions on transactions, including limiting price increases, all or nothing contracting, or other anti-competitive practices.

As cross-market mergers drive prices through unique mechanisms, **state legislators** can offer **state antitrust officials** alternative criteria to assess the risks of these mergers to competition, especially when the merging entities are healthcare sites.

State legislature, state AG, state health care oversight office

These criteria may include the relative market shares of the merging entities, the potential for multimarket contact (when firms compete in multiple markets simultaneously) between a growing health care system, and the presence of common insurers.

Notably, Arnold et al. (2025) have found that price increases are significantly greater in cross-market transactions when the target hospital has a larger market share than the acquiring hospital. Further, the DOJ/FTC's 2023 Merger Guidelines specifically warn against the potential for multimarket contact to enable coordination between firms. Finally, both theoretical and empirical literature have suggested that a "common customer" effect (e.g. a large employer negotiates

²⁵ Protocol for Coordination in Merger Investigations. (n.d.). Federal Trade Commission. Retrieved August 15, 2025, from https://www.ftc.gov/advice-guidance/competition-guidance/protocol-coordination-merger-investigations?

with a common insurer) may underlie these price increases, including Danfy et al. (2018).

State legislators may enable antitrust officials, such as the state attorney general, to emphasize these factors when reviewing cross-market transactions, where traditional market analyses may not be applicable.

State legislators can also expand antitrust authority to cover consideration of out-of-state financial data, the management and control structure of out-of-state acquirers, and practices of these acquirers. Further, legislators can expand the ability of antitrust officials to conditionally approve transactions, blocking price increases, all-or-nothing contracting, anti-tiering or anti-steering provisions, and other anti-competitive practices that have been associated with cross-market mergers.²⁶

7. Establish broad reporting and transparency requirements for health care entities to identify their chain of ownership and control entities, including controlling parent, financial backers, affiliates, and subsidiaries.

While transaction notices may allow state antitrust officials to map changes to health systems, the existing ownership structure and scale of systems remain obscured by the near-ubiquitous role of shell corporations, intermediaries, and financial backers in the ownership of health care entities.

State legislature, state AG, state health care oversight office

State legislatures can expand ownership transparency requirements, **enforceable by state antitrust officials and oversight agencies**, to better understand the entire chain of ownership of entities, including "ultimate owners" and financial backers, thereby better anticipating anticompetitive transactions between healthcare entities. These requirements should also include disclosure entities with control over a practice's clinical or business decision making, even if direct ownership is absent. Finally, these requirements should explicitly require disclosure of intermediary and parent entities, financial backers, affiliates, and subsidiaries associated with a practice.

One notable law, passed in January 2025 by Massachusetts (House Bill 4652, "An Act Enhancing the Market Review Process"), overhauls the state's market oversight authority and transparency requirements. The law requires health care entities, as well as their financial backers, to report entities' ownership, governance, operational structure, affiliated providers, services offered, out-of-state operations, equity investors, real estate investment trusts, and management service organizations, as well as several assets and liabilities. State lawmakers can create similar requirements to more precisely determine the

²⁶ Conditional Approval. (n.d.). The Source on HealthCare Price and Competition; UC College of the Law San Francisco. https://sourceonhealthcare.org/market-consolidation/conditional-approval/

existing landscape of health care entities in a state, as well as the downstream effects of a cross-market merger.

8. Equip antitrust authorities with the ability to monitor markets following a cross-market transaction for changes in price, quality, or access.

Under annual reporting laws such as those described in (4), state agencies can effectively monitor health care markets over time for anticompetitive signals.

However, cross-market mergers may warrant unique attention because of their existing ability to drive price changes (as well as equivalent changes to quality or access) without scrutiny. Further, it is possible that these changes present themselves over time, not only immediately after a transaction. Notably, Arnold et al. (2018) observed price increases in acquirer hospitals six years following a cross-market acquisition.

To address these concerns, **state lawmakers** can require merging entities to produce annual cost, quality, and access reports across multiple services and indicators following acquisition to monitor changes for a set period. These reports can be utilized by **state antitrust officials and oversight agencies**.

State legislature, state AG, state health care oversight office