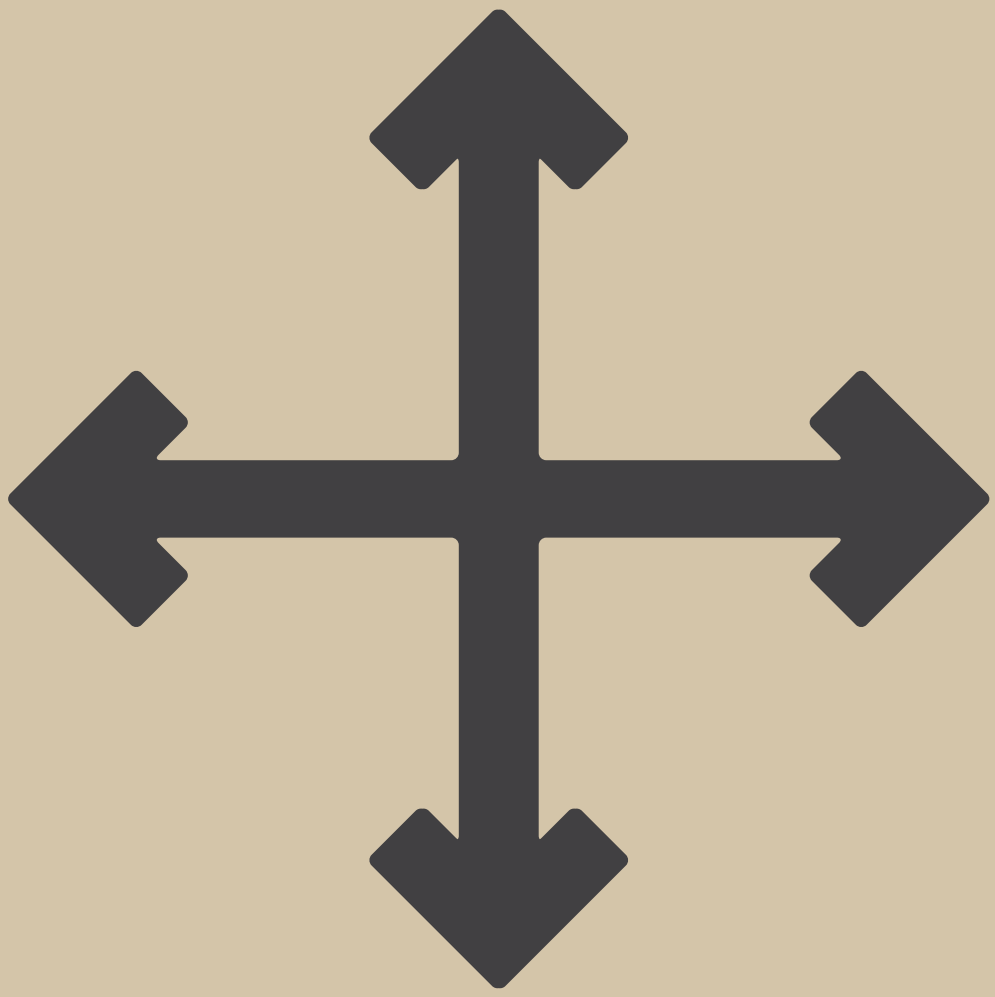
EVOLVING ANTITRUST ANALYSIS OF HOSPITAL MERGERS: HOW DIFFERENCES BETWEEN PATIENT AND INSURER PERSPECTIVES COULD CREATE "CROSS-MARKET" EFFECTS



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I. INTRODUCTION

Markets for inpatient hospital services are generally considered to be geographically compact. Patients are unwilling to travel far for certain services, so providers separated by long distances are considered unlikely to compete with each other. Despite this, empirical academic studies have found some evidence of price increases following mergers of hospital systems that are too distant to serve as close substitutes for most patients — mergers referred to as "cross-market" mergers.[2] "Cross-market" mergers can be defined as health system mergers, or components of these mergers, that combine providers that are not substitutes from the point of view of patients — i.e. mergers in which the merging systems are not located within the same market as defined by patients' willingness to substitute between hospitals.[3]

Recent actions by the FTC and the California Attorney General reflect growing attention placed on mergers that expand healthcare systems, even when such mergers combine providers that are unlikely to compete for inpatient discharges. In the merger of Cedars-Sinai Health System and Huntington Hospital, for example, the California AG demanded several concessions from the merging parties before allowing their merger to proceed, despite the fact that the geographic overlap between the two systems was limited.[4] The California AG's office stated that it was concerned about the potential for pricing power that could extend across distant providers — and proposed remedies designed to neutralize that potential.[5] Separately, in the merger of Beaumont Health with Spectrum Health in Michigan, the FTC conducted a lengthy review of the merger, despite the fact that, as with Cedars-Sinai and Huntington, there is little geographic overlap between the systems.[6] Neither the FTC nor the parties commented on specific substantive issues that would have led to the extended review. However, the FTC signaled last year that it may be interested in theories of harm related to "the cross-market effects" of mergers.[7] In response to the U.S. Department of Justice and Federal Trade Commission's recent request for information on merger enforcement, twenty-three state attorneys general, and the academic economists Leemore Dafny & Nancy Rose submitted comments recommending greater scrutiny of cross-market mergers between healthcare providers, and expressing the concern that such mergers have led to higher prices.[8]

The sense in which these mergers are "cross-market" depends on a tension between defining the set of relevant competitors from the point of view of patients, while examining competitive effects on prices negotiated by *insurers*. As practitioners are well aware, insurers, not patients, negotiate network inclusion and provider pricing (at least for commercial plans). Antitrust analysis took a significant step in this direction with the shift from patient flow-based analyses of market effects to willingness-to-pay-based analyses, which used patient choices to gain insight into the value to *insurers* of including a provider in their networks.[9] The insight that prices and network inclusion are negotiated by insurers well before an individual patient selects a hospital for treatment of a specific health consideration refined the set of relevant competitors. For example, although some patients may be willing to travel significant distances for care, employers and enrollees may not be willing to select a health plan that only includes more distant providers in-network — meaning that insurers cannot use those providers as substitutes in forming

2 See, e.g. Leemore Dafny, Katherine Ho & Robin S. Lee, "The Price Effects of Cross-Market Hospital Mergers: Theory and Evidence from the Hospital Industry" *RAND Journal of Economics*, 2019, 50: 286; and Matthew Lewis & Kevin Pflum, "Hospital systems and bargaining power: Evidence from out-of-market acquisitions," *RAND Journal of Economics*, 2017, 48 (3): 579-610.

3 Keith Brand & Ted Rosenbaum, "A Review of the Economic Literature on Cross-Market Health Care Mergers," *Antitrust Law Journal*, 2019, 82: 533–549.

4 "Attorney General Becerra Conditionally Approves Affiliation Agreement Between Cedars-Sinai and Huntington Memorial Hospital," *State of California, Department of Justice*, December 10, 2020, available at https://oag.ca.gov/news/press-releases/attorney-general-becerra-conditionally-approves-affiliation-agreement-between.

5 "Attorney General Becerra Conditionally Approves Affiliation Agreement Between Cedars-Sinai and Huntington Memorial Hospital," *State of California, Department of Justice*, December 10, 2020, available at https://oag.ca.gov/news/press-releases/attorney-general-becerra-conditionally-approves-affiliation-agreement-between. An attempted merger, abaondoned in 2018, between Atrium Health and UNC Health Care may have raised similar issues. See UNC Health Care - Atrium Health merger collapses - Carolina Journal - Carolina Journal.

6 See, e.g. "Beaumont-Spectrum Merger Delayed by FTC Backlog, Officials Say," *Detriot News*, September 24, 2021, available at https://www.detroitnews.com/story/news/local/oakland-county/2021/09/24/beaumont-spectrum-merger-delayed-ftc-backlog-officials-say/5847833001/.

7 The FTC has already stated that it will broadly consider the possible "cross-market effects of a transaction" in second requests. *See*, "Making the Second Request Process Both More Streamlined and More Rigorous During this Unprecedented Merger Wave," *FTC*, September 28, 2021, *available at* https://www.ftc.gov/news-events/blogs/competition-matters/2021/09/making-second-request-process-both-more-streamlined.

8 See "Request for Information on Merger Enforcement, Public Comments of 23 State Attorneys General," April 21, 2022; and Leemore Dafny & Nancy Rose, "Response to DOJ-FTC Merger Guidelines Request for Information," April 21, 2022.

9 See Joseph Farrell, David Balan, Keith Brand & Brett Wendling, "Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets," *Review of Industrial Organization*, 2011, 39: 271-296; David Dranove & Andrew Sfekas, "The Revolution in Health Care Antitrust: New Methods and Provocative Implications," *The Milbank Quarterly*, 2009, 87: 607-632.

a marketable provider network.[10] In other words, the set of hospitals that some patients may view as substitutes at the point of care may not be substitutes for insurers.

Despite significant improvements, however, an analysis that focuses on patient choice at the point at which they need care can still fail to reflect the set of providers that insurers would consider when constructing networks. While the standard method generally finds that provider markets are more compact than patient flows may indicate, the emerging cross-market merger literature suggests that the opposite may also be true — providers that are not substitutes for patients seeking care may be part of the set of competitors that is relevant for assessing the competitive impact of a merger on insurers and their negotiations with providers. In particular, if employers or other plan sponsors view hospitals as substitutable in meeting the overall needs of their enrollee base, insurers marketing to these groups may, as a result, find that they can substitute between a larger set of hospitals in constructing a hospital network.

After first reviewing the impact of the insurer perspective in standard hospital merger analysis, the remainder of this article will address how economic models of insurer behavior can generate potential cross-market effects by positing scenarios in which provider mergers may impact provider-insurer negotiations, without combining hospital systems that patients would consider close substitutes. These scenarios are split into two groups: mechanisms by which a cross-market merger would affect the set of options available to insurers in constructing provider networks; and mechanisms under which cross-market mergers would affect bargaining between insurers and providers without altering the set of possible provider networks.

II. THE IMPACT OF THE INSURER PERSPECTIVE ON STANDARD MARKET DEFINITION IN HOSPITAL MERGERS

Economists and antitrust practitioners generally use a two-stage model to examine competition between health care providers. In the first stage, insurers assemble networks of providers, negotiating both network inclusion and allowed reimbursement. In the second stage, because patients are at least partially insulated from the price of care as long as they stay in-network, providers compete with each other for patients on the basis of non-price characteristics, such as quality of care. Providers that are especially valuable to patients in this second stage (e.g. because they offer services with few nearby substitutes) will have bargaining leverage to negotiate higher prices with insurers in the first stage of competition. Such providers will increase the marketability of insurers' health plans to plan sponsors (e.g. employers) and enrollees, all else equal.[11]

Mergers between providers that serve as substitutes from the patient's and enrollee's perspective will tend to increase those providers' bargaining leverage with insurers, allowing them to negotiate for higher prices.[12] Antitrust analyses generally begin with the second stage — calculating providers' post-merger increase in value to patients, and then translating that increase in value into their likely post-merger ability to negotiate higher prices in the first stage.[13]

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10 Although, the fact that *many* patients do not view two hospitals as substitutes, does not mean that insurers could not negotiate lower prices by threatening to offer a narrow network plan that would exclude the hospital and threaten some, if not all, of its patient base. The FTC's 2020 defeat in its challenge to the merger of Jefferson Health and Albert Einstein Healthcare Network stemmed from such a divergence. The Court opined that "insurers, not patients seeking and receiving medical care, are the payors," and the FTC had failed to prove that insurers could not avoid a price increase by looking to hospitals outside its proposed market. The Court further opined that, despite the FTC's analysis suggesting a small but significant and non-transitory increase in price ("SSNIP") would be possible, testimony from insurers demonstrated that such a price increase could be defeated by insurers. Memorandum Opinion, *FTC v. Thomas Jefferson University, et al.*, December 8, 2020.

11 Hospitals may be considered substitutes from both an insurer's and a patient's perspective even if patients are unlikely to be able to select between hospitals at the time they are seeking care due to the earlier selection of narrow network plans. In its complaint in *FTC v. Methodist Le Bonheur*, the FTC noted that narrow networks were common in the region and patients in narrow networks may not have had access to both systems. The FTC argued that the hospitals were still substitutes for insurers which could assemble viable networks excluding one or the other merging party, but not both. The merger would eliminate the option of excluding one system, and with it insurers' ability to play the two hospitals off each other in constructing a network. Administrative Part 3 Complaint, *FTC v. Methodist Le Bonheur Healthcare, a corporation, and Tenet Healthcare Corporation, a corporation*. This case can be distinguished from cross-market mergers because the hospitals could be considered substitutes from the point of view of individuals even if they limit their ability to make this substitution at the point of care by selecting a narrow network plan. The choice between alternative hospitals would in this instance be made in conjunction with plan choice.

12 See Joseph Farrell, David Balan, Keith Brand & Brett Wendling, "Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets," Review of Industrial Organization, 2011, 39(4): 271-296.

13 See Joseph Farrell, David Balan, Keith Brand & Brett Wendling, "Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets," Review of Industrial Organization, 2011, 39(4): 271-296; David Dranove & Andrew Sfekas, "The Revolution in Health Care Antitrust: New Methods and Provocative Implications," *Milbank Quarterly*, 2009, 87(3): 607-632; "Mergers Markets," Federal Trade Commission, Guide to Antitrust Laws, available at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/markets; *FTC v. Advocate Health Care Network*, 841 F.3d 460 (7th Cir. 2016); *FTC v. Penn State Hershey Med. Ctr.*, 838 F.3d 327 (3d Cir. 2016); *ProMedica Health System, Inc. v. Federal Trade Commission*, 749 F. 3d 559 (6th Cir, 2014).

III. CROSS-MARKET MERGER EFFECTS MAY BE GENERATED IF A MERGER ALTERS THE SET OF AVAILABLE SUBSTITUTES FOR INSURERS, EVEN IF NOT FOR PATIENTS

In a conventional analysis of hospital merger effects, a post-merger price increase is evaluated through an analysis of patient substitution, under the assumption that insurers' networks will be close to complete — they will include all or almost all providers in a market. In that case, the value of the merged system to a patient is the difference between the value of the full network and the value of the full network except for the merged system. This is compared to the value of the entities premerger, which is the sum of the value added by the inclusion of each individual hospital in an otherwise complete network. The change in value to insurers is assumed to be an aggregation of the change in value to individual patients — in other words, the set of hospitals that are substitutes for patients are also assumed to be substitutes for insurers. However, theoretical models of insurer network formation and marketing posit ways in which insurer and patient perspective on providers may diverge.[14]

Could an insurer construct a similarly profitable network with one or the other of the merging parties, even if patients would not consider them substitutes? Taking into account how insurers assemble networks can affect which hospitals are considered substitutes *for insurers*. In particular, hospitals that are not substitutes from a patient's perspective could be substitutes from an insurer's perspective, generating cross-market price effects. If insurers are able to market plans with either one or the other of two merging parties, they may be substitutes to insurers assembling a network. A merger would eliminate this alternative, raising the possibility of an anticompetitive price increase even if the merger does not combine providers that are substitutes from a patient perspective.

Hypothetical scenario under which hospitals that are not substitutes from the point of view of patients might be substitutes from the point of view of insurers are posited in Dafny, Ho & Lee (2019).[15] In particular, the article considers an insurer marketing health plans to employers with employees who live in different geographies. If, for example, there is an employer which will offer its employees plans that have one or the other of two hospitals, but will not offer plans that lack both, then the loss of the combined system to an insurer would be greater than the sum of the loss of each hospital individually.[16] If either of the two hospitals decided to try to raise prices, the insurer could drop it and still market the partial network to employers, giving the insurer leverage over the two providers. This leverage would disappear in a merger that combined the two hospitals.

For this hypothetical possibility (i.e. providers that are substitutes from the point of view of insurers without being substitutes for patients) to hold in the real world, several relevant fact patterns would need to be true. First, there must be some link between the geographic regions where the health systems are located. In the hypothetical above, there would need to be a meaningful number of employers with operations that span the different regions, or whose employees reside across different regions.[17] Further, to establish the potential for anticompetitive harm, it should be demonstrated that employers actually approach insurance coverage this way — i.e. that plan sponsors be willing to select plans that leave some of their employees without a nearby option — and that insurers have considered playing the merged entities off each other as a result.

Would a merger change the ability of an insurer to substitute one merging hospital or system for a nonmerging hospital or system? This question addresses whether the merger changes an insurer's ability to play one merging party off against a party not involved in the merger. For example, two community hospitals may be close substitutes from the perspective of patients, allowing insurers to swap one out for the other in a narrow network plan.[18] If one hospital were purchased by a hospital system, which then bargained as an all-or-nothing unit with insurers, an insurer may no longer threaten to replace it with its competitor.

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14 See Katherine Ho & Robin Lee, "Equilibrium provider networks: Bargaining and exclusion in health care markets," *The American Economic Review*, 2019, 109(2): 473-522; Keith Brand & Ted Rosenbaum, "A Review of the Economic Literature on Cross-Market Health Care Mergers," *Antitrust Law Journal,* 2019, 82: 533–549. In these cases, while the insurer perspective may be different from that of patients seeking care, insurers ultimately market their plans to plan sponsors and enrollees. Their ability to substitute between hospitals in network formation will depend on the extent to which their customers will view plans with different hospitals as acceptable substitutes.

15 Leemore Dafny, Katherine Ho & Robin S. Lee, "The Price Effects of Cross-Market Hospital Mergers: Theory and Evidence from the Hospital Industry" *RAND Journal of Economics*, 2019, 50: 286.

16 Leemore Dafny, Katherine Ho & Robin S. Lee, "The Price Effects of Cross-Market Hospital Mergers: Theory and Evidence from the Hospital Industry" *RAND Journal of Economics*, 2019, 50: 286 at 294.

17 See Leemore Dafny, Katherine Ho & Robin S. Lee, "The Price Effects of Cross-Market Hospital Mergers: Theory and Evidence from the Hospital Industry" *RAND Journal of Economics*, 2019, 50: 286.

18 Indeed, some evidence suggests that insurers may have strong incentives to only include one of the two hospitals in their network. See, e.g. Ho, Kate & Robin S. Lee, *Equilibrium Provider Networks: Bargaining and Exclusion in Health Care Markets*, 109 American Economic Review 2 (2019).

Ho & Lee (2019) consider a model in which insurers and health systems negotiate network inclusion of the systems constituent hospitals as a unit. Under the assumption that all system hospitals will either be placed in or out-of-network, they conclude that an insurer may decide to include the acquired hospital in-network, as part of negotiating the inclusion of the larger health system — which may be necessary for a marketable network.[19] A community hospital, which insurers may have been able to swap out for the acquired hospital pre-merger, may no longer be used as a replacement and leverage in negotiations.[20] Under this theory of competitive effects, the non-merging community hospital might then be excluded from possible narrow network plans.[21] This mechanism has been discussed as an update to the standard two-stage model that may result in different price effects when insurers choose to create narrow networks.[22]

Antitrust practitioners may recognize this as a claim of anticompetitive tying — requiring the purchase of products in different markets as a condition of purchase for a product over which the seller possesses market power.[23] Under this theory, a health system with a "'must have' hospital in just one of its markets" would gain "the ability to raise rates on hospitals even in geographic markets in which it does not have a dominant competitive position."[24] In the case of a specific merger, the potential competitive effect through this mechanism would depend on several factors, including the use of narrow networks and the bargaining leverage of any "must-have" facilities. For instance, how large is the patient population for which the hospital is a "must-have" and what would be the cost of failing to include it in-network, both in terms of lost enrollees or increased reimbursement.

Are both parties necessary for a viable network, even if patients would consider them substitutes or at least, not complements? If so, they may be complements to insurers creating a network, and the merger may have procompetitive effects from the removal of hold-out opportunities for providers in negotiations with insurers.

Two parties can be complementary if they are both needed to create a viable network — for example, if they both offer specialized services, like cardiac care and pediatric intensive care that do not overlap and that patients value highly.[25] In such a case two providers may be complements even if they are geographically proximate and might be substitutes at the point of care for overlapping services.

In the setting of cross-market mergers, complementarity may be delivered if geographically distant hospitals are both needed to create a network that serves large employers with a dispersed workforce. The combination of these geographically distant hospitals could even make them better substitutes, i.e. fiercer competitors, for other hospital systems that have facilities in similarly distributed locations.

In either case, mergers between complementary providers will not, in general, be expected to result in price increases. Each provider on its own has leverage to hold out for higher prices, because it serves an important role in completing an insurer's network. But when two complementary providers merge, they can only use that leverage once — they can no longer separately hold out for higher prices.[26]

Analyses of patient choices alone will not capture provider complementarity. Other evidence is required, such as insurer documents discussing the need to have both merging providers in a network, evidence showing that the merging providers do not overlap for important services, evidence showing that each merging provider brings some element to the table that the other provider does not offer, or in the

19 This bargaining mechanism, where an insurer bargains with providers knowing it may be able to swap out a provider with a competing provider, is laid out in Katherine Ho & Robin Lee, "Equilibrium provider networks: Bargaining and exclusion in health care markets," *The American Economic Review*, 2019, 109(2): 473-522.

20 Indeed, some evidence suggests that insurers may have strong incentives to only include one of the two hospitals in their network. See, e.g. Ho, Kate & Robin S. Lee, *Equilibrium Provider Networks: Bargaining and Exclusion in Health Care Markets*, 109 American Economic Review 2 (2019).

21 See, e.g. Jaime S. King & Erin C. Fuse Brown, *The Anti-Competitive Potential of Cross-Market Mergers*, 11 SAINT LOUIS UNIV. J. HEALTH LAW & POLICY, 43 (2017). See also, Glenn Melnick, Katya Fonkych, *Hospital Prices Increase in California, Especially Among Hospitals in the Largest Multi-Hospital Systems*, INQUIRY: J. HEALTH CARE ORG., PROVISION, & FIN (2016).

22 See Katherine Ho & Robin Lee, "Equilibrium provider networks: Bargaining and exclusion in health care markets," *The American Economic Review*, 2019, 109(2): 473-522.

23 See, e.g. Jaime S. King & Erin C. Fuse Brown, *The Anti-Competitive Potential of Cross-Market Mergers*, 11 SAINT LOUIS UNIV. J. HEALTH LAW & POLICY, 43 (2017); Keith Brand & Ted Rosenbaum, "A Review of the Economic Literature on Cross-Market Health Care Mergers," *Antitrust Law Journal*, 2019, 82: 533–549; and "Request for Information on Merger Enforcement, Public Comments of 23 State Attorneys General," April 21, 2022.

24 "Request for Information on Merger Enforcement, Public Comments of 23 State Attorneys General," April 21, 2022, pp. 51-2.

25 For example, an individual considering a health plan may value access to a hospital with a high-quality cardiac care program, even though that individual may not use inpatient cardiac services during the year after a plan is purchased. See, e.g. Cory Capps, David Dranove & Mark Satterthwaite, "Competition and Market Power in Option Demand Markets," *RAND Journal of Economics*, 2003, 34(4): 737–763; Robert Town & Gregory Vistnes "Hospital Competition in HMO Networks," *Journal of Health Economics*, 2001, 20(5): 733–753.

26 See Kathleen Easterbrook, Gautam Gowrisankaran, Dina Older Aguilar & Yufei Wu, "Accounting For Complementarities In Hospital Mergers: Is A Substitute Needed For Current Approaches?" *Antitrust Law Journal*, 2019, 82: 497–531.

particular case of cross market mergers, documents showing that insurers need in-network facilities in specific geographies to construct a marketable plan.

IV. CROSS-MARKET MERGERS AND THE EFFECT ON PROVIDER BARGAINING POWER AND OBJECTIVE

In addition to the above mechanisms, in which a cross-market merger might change the bargaining *leverage* of merging parties there are also theories under which a cross-market merger might impact prices by changing the merged entities skill or objective in insurer negotiations. For example, if one of the merging parties has more skilled negotiators or access to better information, the merger may extend that advantage to the other party. One academic study has suggested such a mechanism, arguing that an independent hospital may achieve higher prices through access to better negotiators or better information when it joins a larger system.[27] It is also theorized that different owners may pursue different objectives in negotiating with insurers, including placing more emphasis on increasing revenue with less concern on community response to increased prices.[28]

The price impact of a cross-market merger that changed bargaining skill or objectives would not be captured through standard merger analyses such as a change in concentration or patient willingness-to-pay analyses. The history of prior acquisitions may reveal past post-merger price increases, but any such increase would have to account for pro-competitive factors that could explain higher prices such as changes in quality or expanded services. Price increases could also reflect a pro-competitive benefit if patients prefer to receive care at a hospital that is part of a larger system, perhaps under the assumption that member hospitals have access to a broader set of resources.

V. ARE DEPARTURES FROM THE STANDARD METHOD NECESSARY?

A greater focus on the potential gap between patients' preferences and insurers' decisions may lead to important changes in the types of health system mergers that are challenged and that survive review. In some cases, mergers of relatively distant providers may come under additional scrutiny, while mergers of providers with some overlap may be shown not to raise competitive concerns. It is important to note, however, that in many cases the difference between the two may not be large enough to justify a departure from a conventional patient-based analysis. Arguments for differences between the two may require local conditions such as evidence of the popularity of narrow insurer networks. Additionally, critics have questioned whether health systems have the level of sophistication necessary to recognize their potential leverage from links between hospitals in different geographic areas — though those questions will depend on the facts of each case.[29]

Although the economic tools remain under development for quantifying substitutability and complementarity in insurer networks beyond patient substitutability, antitrust practitioners should pay attention to both the empirical and theoretical developments around the potential for cross-market merger effects. The price impact of mergers between hospitals that are geographically proximate varies widely — with some mergers followed by higher prices and some mergers followed by lower prices (relative to benchmark hospitals).[30] Mergers between more geographically distant hospitals would reasonably be expected to have similarly different price effects. To assess whether an individual merger is more or less likely to raise prices, the specific features of the merging entities, other providers, and impacted insurers, employers and patients should be compared to the proposed theoretical mechanisms under which cross-market mergers may impact prices. Enforcement agencies considering a more aggressive stance against health system consolidation may look at cross-market mergers as an area in need of increased scrutiny. However, with an understanding of the conceptual underpinnings, antitrust practitioners may also be able to address agencies' merger concerns including with a more complete analysis of post-merger competitive constraints imposed by non-merging entities outside the affected patient-based markets.

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27 See Matthew Lewis & Kevin Pflum, "Hospital systems and bargaining power: Evidence from out-of-market acquisitions," *RAND Journal of Economics*, 2017, 48(3): 579-610.

28 See "Request for Information on Merger Enforcement, Public Comments of 23 State Attorneys General," April 21, 2022, pp. 52-3.

29 See Jeffrey Brennan, "Cross-Market Hospital Mergers: An Antitrust Theory Challenged by Facts and Law," CPI Antitrust Chronicle, May 2019; David Argue & Lona Fowdur, "An Examination of New Theories on Price Effects of Cross-Market Hospital Mergers," *American Hospital Association*, https://www.aha.org/position-paper/2021-05-10-examination-new-theories-price-effects-cross-market-hospital-mergers.

30 Chris Garmon, "The Accuracy of Hospital Merger Screening Methods," *The RAND Journal of Economics*, 2017. 48(4): 1068-1102.