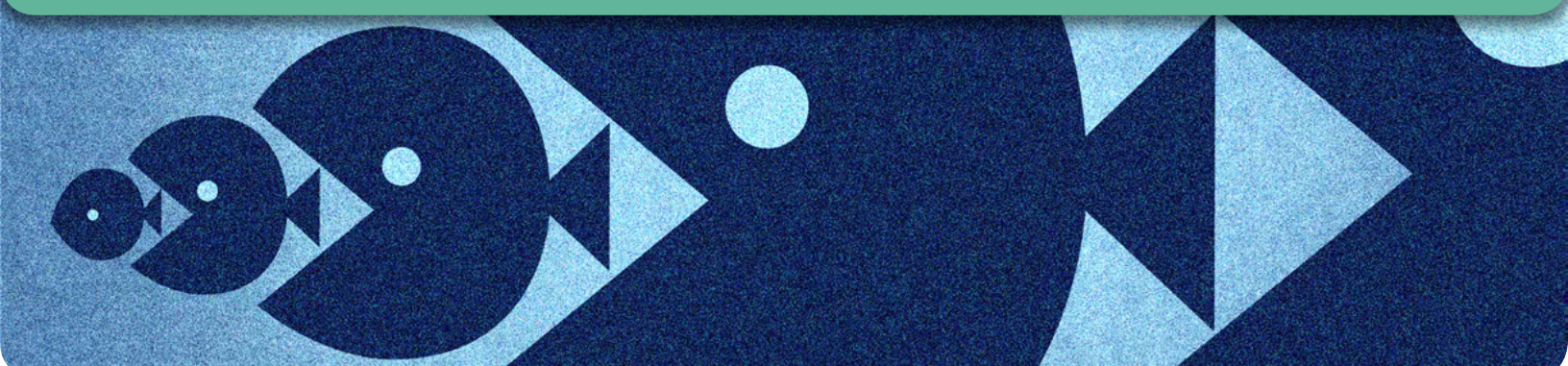


KEY TAKEAWAYS FROM THE ADVOCATE-NORTHSHORE MERGER LITIGATION



BY STEVEN TENN ¹



I. INTRODUCTION

Few hospital mergers are litigated; the Federal Trade Commission (“FTC”) has challenged only seven hospital mergers since 2005.² Often times, the merging parties are able to constructively work with the FTC to resolve the agency’s competitive concerns. This process works most efficiently and effectively when the merging parties have a clear understanding of how the FTC is likely to review a given merger to determine whether it raises significant competitive issues.

The FTC’s review of hospital mergers has evolved over time. Therefore, it is important to keep abreast of the agency’s current approach. The few hospital mergers that go to trial are one source of such information since the litigation process requires the FTC and its economic experts to publicly articulate the competitive concerns at issue and how they were analyzed.

This article describes the FTC’s approach in a recent litigation, *FTC v. Advocate Health Care Network*, where the FTC successfully challenged a proposed merger of two healthcare systems with hospitals in the northern suburbs of Chicago. I discuss the case from my perspective as the FTC’s economic expert in that matter.

I consider areas where the two sides agreed, as well as where they disagreed. Merger litigation retrospectives more commonly focus on areas of disagreement. But, an assessment of where both sides agree is also useful since they are more likely to represent settled issues where taking a contrary position might be controversial. This does not necessarily mean that contrary positions are wrong or should be avoided, since the relevant facts in this matter may differ from those in other mergers. Nonetheless, to the extent these issues arise in similar circumstances, contrary positions may be skeptically received by the FTC and may make successful resolution of the FTC’s competitive concerns more difficult for the merging parties.

¹ Dr. Steven Tenn is a vice president at Charles River Associates. Dr. Tenn was the FTC’s economic expert in the *Advocate-NorthShore* litigation. Prior to joining CRA, Dr. Tenn was an economist with the FTC for 13 years. The views and opinions expressed herein are those of the author and do not reflect or represent the views of Charles River Associates or any of the organizations with which the author is affiliated.

² In recent years, hospital mergers have usually been reviewed by the FTC, rather than the Department of Justice’s (“DoJ’s”) Antitrust Division. The FTC’s successful 2004 challenge of a consummated merger, *Evanston Northwestern Healthcare Corp.*, was a turning point in its hospital merger enforcement program. Before then, the FTC (and DoJ) had unsuccessfully challenged a series of hospital mergers. There was a flurry of activity in November and December 2015 when the FTC voted out complaints for three separate hospital mergers. The FTC has not challenged any hospital mergers since then.

II. CASE BACKGROUND

In December 2015, the FTC and the state of Illinois challenged the proposed merger of Advocate Health Care Network (“Advocate”) and NorthShore University HealthSystem (“NorthShore”).³ The plaintiffs’ complaint alleged that the merger would eliminate competition between Advocate and NorthShore for the provision of inpatient general acute care hospital services sold and provided to commercial payers and their insured members, respectively. The complaint also alleged the North Shore Area of Chicago was the relevant geographic market in which to analyze the transaction.⁴

Advocate is the largest health system in Illinois, with 11 hospitals in the state.⁵ The competitive concern raised by the proposed transaction involved two Advocate hospitals located in the northern suburbs of Chicago (Lutheran General Hospital and Condell Medical Center).

NorthShore is a health system that operates four hospitals, all of which are in the northern Chicago suburbs (Evanston Hospital, Glenbrook Hospital, Highland Park Hospital and Skokie Hospital).⁶ With the exception of Skokie, these hospitals were involved in a consummated hospital merger which the FTC successfully challenged in 2004. That matter involved the acquisition of Highland Park by Evanston Northwestern Healthcare Corp, which is now known as NorthShore.⁷ However, due to the difficulty of “unscrambling the eggs” in a consummated merger, the FTC order in *Evanston Northwestern Healthcare Corp.* did not require that Highland Park be divested. Instead, the FTC order imposed a behavioral remedy.⁸ NorthShore acquired Skokie in 2009. The transaction was not challenged by the FTC.

In April 2016, the preliminary injunction trial for *FTC v. Advocate* began in the U.S. District Court for Northern District of Illinois. In June 2016, the district court ruled for the parties, finding that the plaintiffs had failed to properly define the geographic market.⁹ The plaintiffs appealed to the Seventh Circuit, which in October 2016 reversed the district court decision, concluding that “the district court’s geographic market finding here was clearly erroneous.”¹⁰ The Seventh Circuit remanded the matter back to the district court to reconsider plaintiffs’ motion for a preliminary injunction.

In March 2017, the district court issued its second (and final) decision, in which it sided with the plaintiffs and granted a preliminary injunction.¹¹ The district court found that the geographic market had been properly defined, that the plaintiffs’ competitive effects analysis was sound and rejected the parties’ efficiency claims. Immediately following the decision, Advocate and NorthShore announced they would abandon the deal.

3 Complaint for Temporary Restraining Order and Preliminary Injunction Pursuant to Section 13(b) of the Federal Trade Commission Act, *FTC v. Advocate*, No. 15-cv-11473 (December 21, 2015).

4 The North Shore Area comprises parts of northern Cook County and southern Lake County in Illinois. This region contains two Advocate, four NorthShore, and five third party general acute care hospitals.

5 See: <http://www.advocatehealth.com/overview-of-advocate>. There are 12 hospitals if one includes a children’s hospital located on the campuses of two of the Advocate hospitals.

6 See: <http://www.northshore.org/about-us>.

7 For background on that case, see: <https://www.ftc.gov/enforcement/cases-proceedings/0110234/evanston-northwestern-healthcare-corporation-enh-medical-group>.

8 The FTC’s order required, among other things, that Evanston Northwestern Healthcare Corp. establish separate and independent contract negotiating teams, one for Evanston and Glenbrook hospitals, and another for Highland Park, allowing payers to negotiate with them separately. Counsel for NorthShore recently said that no payer has ever opted to negotiate separately pursuant to the consent. See, “Chicago Hospitals Aim For Win In Price-Hike Suit,” *Law360*, May 11, 2017.

9 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (June 20, 2016).

10 Seventh Circuit Court of Appeals decision, *FTC v. Advocate*, No. 16-2492 (October 31, 2016), 3.

11 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017).

III. KEY ISSUES IN THE *ADVOCATE-NORTHSHORE* LITIGATION

A. *Inpatient General Acute Care Hospital Services is a Relevant Product Market*

In previous litigated hospital mergers, the FTC alleged a product market consisting of inpatient general acute care hospital services sold and provided to commercial payers and their insured members, respectively (“GAC Services”).¹² Unsurprisingly, the FTC did the same in *Advocate-NorthShore*. The parties agreed that GAC Services was the relevant product market.¹³

The Horizontal Merger Guidelines explain that market definition “focuses solely on demand substitution factors.”¹⁴ The evidence in *Advocate-NorthShore* showed that the choice of whether inpatient or outpatient care is appropriate is a clinically driven decision, i.e. one that is determined based on medical considerations, not price. This implies that inpatient and outpatient services are not substitutes, and therefore outpatient services should be excluded from the product market. Beyond that, outpatient services often are subject to different competitive conditions than inpatient services, most notably a different set of competitors. While inpatient services are provided only by hospitals, outpatient services are provided by a wider range of facilities, such as outpatient clinics.¹⁵

B. *The Geographic Market is Defined Based on the Hypothetical Monopolist Test*

In *Advocate-NorthShore*, the two sides agreed that the Merger Guidelines’ hypothetical monopolist test is the appropriate means for defining the relevant market.¹⁶ The hypothetical monopolist test is an iterative approach where one starts with a candidate market and then tests whether a hypothetical monopolist who owned all of the hospitals located in that area would be able to profitably increase price by a small but significant amount, often taken to be 5 percent. If so, then the candidate market is a relevant market within which the proposed transaction can be analyzed. If not, one expands the candidate market to include additional hospitals and then repeats the analysis until the candidate market is sufficiently large to pass the test.

While geographic market definition is often a focal point in hospital merger litigation, it is far less critical in the FTC’s investigatory review process. In my experience, FTC staff typically place much greater emphasis on the competitive effects analysis. Moreover, when considering market concentration, FTC staff may rely on measures that do not require explicit delineation of the geographic market, such as the approach described below.

Multiple approaches of measuring market shares and concentration were considered in *Advocate-NorthShore* to ensure the results were not sensitive to the employed market definition.¹⁷ In one approach, for example, shares and concentration were calculated separately for each ZIP code in the Chicago metropolitan area. Then, separately for each of the parties’ hospitals, the average concentration was calculated across the ZIP codes from which a given hospital attracts patients, weighting each ZIP code by the number of admissions to the hospital from that ZIP code. This method measures the average level of concentration across the area from which a given hospital attracts patients. Moreover, it incorporates admissions to hospitals throughout the Chicago area without having to explicitly define a geographic market.

12 Memorandum in Support of Plaintiffs’ Motion for a Preliminary Injunction, No. 15-cv-11473 (February 26, 2016), 8-13.

13 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 6.

14 U.S. Department of Justice and Federal Trade Commission’s 2010 Horizontal Merger Guidelines (August 19, 2010), 7.

15 Individual inpatient GAC services generally are not substitutes for each other. For example, a cardiac procedure is not a substitute for an orthopedic procedure. Because of this lack of interchangeability, in principle one might separately delineate each individual inpatient GAC service as a distinct product market. Instead, solely for analytical convenience, a “cluster market” of inpatient GAC services is typically employed in hospital mergers.

16 Amended/Corrected Reply Memorandum in Support of Plaintiffs’ Motion for a Preliminary Injunction, *FTC v. Advocate*, No. 15-cv-11473 (April 7, 2016), 6-8.

17 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 17 n. 2.

C. Post-Merger Elimination of Competition between Close Substitutes

The *Advocate-NorthShore* matter raised the standard unilateral effects concern that the elimination of competition between two close substitutes would lead to significant anticompetitive effects, such as higher prices. Both sides agreed that the competitive impact of the proposed merger is largely determined by the degree of substitution between the two systems, irrespective of the level of substitution from the parties to other hospitals.¹⁸

Perhaps surprisingly, the two sides also agreed that Advocate and NorthShore are good (close) substitutes for each other, and that they competitively constrain each other.¹⁹ The reason for this agreement is that both sides measured substitution by estimating similar hospital choice models using patient discharge data from the Illinois Department of Health. In fact, both sides cited to the same research paper as the basis for the analyses.²⁰ This econometric model has been used by some FTC economists for more than a decade, and had previously been employed in merger litigation in *FTC v. St. Luke's Health System, Ltd.*²¹ An advantage of this hospital choice model is that it flexibly controls for patient preferences.²²

D. Multiple Approaches for Predicting Merger Effects

The two sides disagreed on how to use the close level of substitution between Advocate and NorthShore to predict the post-merger price increase.²³ Plaintiffs relied on an economic model which takes as inputs the key factors that the Merger Guidelines identify as those which determine the incentive to raise price post-merger: the degree of substitution between the parties and variable cost margins. Defendants countered that the FTC's "standard" hospital merger simulation model should be used instead. In this approach, which as discussed below is not in fact standard, a regression model is used to estimate the relationship between price and a measure of bargaining leverage known as "willingness to pay" ("WTP").²⁴ The regression model is then used to predict the change in price that would arise from the parties' increased bargaining leverage post-merger.

The validity of the price-WTP regression approach relied upon by the defendants depends on whether it is possible to identify the causal effect of merger-related increases in WTP on price. The economics literature recognizes the difficulty of identifying causal effects in such price-concentration analyses.²⁵ An appropriate econometric model that is capable of identifying causal effects is required, rather than simply measuring the correlation between the two measures (price and WTP). The requisite causal effect was not estimated, a deficiency that was highlighted in the district court's opinion.²⁶

A key takeaway from this exchange is that there is no "official" empirical approach that has been endorsed or recommended by the FTC, the FTC's Bureau of Economics, or economists generally to evaluate hospital mergers. As the Merger Guidelines make clear, merger review is a fact-specific process that may draw on a range of different analytical tools. The key question is whether the approach employed is sensible given economic theory and the facts of the case, and is implemented in a reliable manner. Since multiple approaches may be employed, this is an area where interactions between economists with the FTC and the merging parties can be particularly fruitful during the merger review process.

18 *FTC v. Advocate* trial transcript at 1645:16-1646:15 and 1655:3-10 [Tenn].

19 Amended/Corrected Reply Memorandum in Support of Plaintiffs' Motion for a Preliminary Injunction, *FTC v. Advocate*, No. 15-cv-11473 (April 7, 2016), 13-14.

20 Raval, Rosenbaum, & Tenn (Forthcoming), "A Semiparametric Discrete Choice Model: An Application to Hospital Mergers," *Economic Inquiry*.

21 Details of this matter are available at: <https://www.ftc.gov/enforcement/cases-proceedings/121-0069/st-lukes-health-system-ltd-saltzer-medical-group-pa>.

22 For details, see citation in footnote 20.

23 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 17-26.

24 The WTP measure is calculated using the hospital choice model described earlier.

25 See, for example, Einav & Levin (2010), "Empirical Industrial Organization: A Progress Report," *Journal of Economic Perspectives*, 145-62. This literature is directly applicable since WTP is essentially a complicated share measure.

26 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 25-26.

E. Compelling Competitive Effects Explanation Consistent with the Evidence is Critical

The controversy in the *Advocate-NorthShore* matter over which model should be employed highlights a well-known observation: the ability to consistently intertwine qualitative and quantitative evidence into a coherent explanation is critical. Plaintiffs' market definition and competitive effects analyses flowed directly from payer and employer testimony that including local options makes a health plan far more desirable to employers with employees living in the northern Chicago suburbs.²⁷ This was corroborated by documentary evidence demonstrating strong competition between Advocate and NorthShore in the northern suburbs of Chicago. This qualitative evidence was consistent with empirical analysis showing the parties are close substitutes, with the proposed merger significantly increasing the parties' bargaining leverage due to the fact that patients living in the northern suburbs generally prefer local treatment options (and, in particular, have a preference for being treated at either Advocate or NorthShore). Each of these elements was individually important in building a case that the elimination of competition between Advocate and NorthShore would lead to a significant anticompetitive effect. The merger simulation model provided an estimate of the post-merger price increase that is consistent with the overall body of evidence in this matter.

Since both sides agreed that the parties are close substitutes, and the level of substitution to other hospitals is not directly relevant, the defendants had the challenge of explaining why a merger of close substitutes should not raise competitive concerns. Ultimately, the district court judge was not convinced by their arguments.²⁸ In part, this was due to the limited qualitative evidence in support of their position. For example, a key part of their argument was that commercial payers supported the merger. The court discounted payer testimony on behalf of the parties, "agree[ing] with plaintiffs that the insurers' support for the merger was equivocal, unenthusiastic, and without a factual basis."²⁹ Moreover, the district court judge found defendants' argument that even mergers between close substitutes would not significantly raise price to be counterintuitive.³⁰ This highlights the need for a compelling story consistent with the available evidence.

F. Efficiencies

The central efficiency claim presented by the parties in *Advocate-NorthShore* was that the merger would allow the combined entity to participate in a narrow network health plan in which Advocate, but not NorthShore, currently participates.³¹ The parties claimed that they would participate in the plan at the pre-merger price, which would benefit consumers since adding NorthShore to the plan would make it a more attractive product.

The district court rejected this claim due to the parties' failure to show that the merger's benefits likely outweighed its anticompetitive effects.³² The parties' economic expert tried to quantify the consumer benefit associated with expanding the narrow network plan, however the court concluded that this analysis was based on assumptions that had no evidentiary basis.³³

The takeaway from this exchange is that, to be persuasive, efficiency claims must be strongly supported by reliable evidence and analysis. A concern that efficiency claims will be given relatively little weight may explain why efficiencies analyses are often insufficiently developed. But, such an approach makes it more likely that the claimed efficiencies will not be convincing and, therefore, will not be credited to the merging parties (by either the FTC during the investigatory review process or by the court in litigation).

27 As discussed below, some payers testified on behalf of the parties. Nonetheless, the details provided in their testimony were consistent with the plaintiffs' story. As discussed in the Seventh Circuit opinion, commercial payers "testified unequivocally that it would be difficult or impossible to market a network to employers in metropolitan Chicago that excludes both NorthShore and Advocate." Seventh Circuit Court of Appeals decision, *FTC v. Advocate*, No. 16-2492 (October 31, 2016), 4.

28 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 23-28.

29 *Id.*, 24.

30 *Id.*, 23 and 24-26.

31 *Id.*, 29-36.

32 Given this conclusion, the court did not need to rule on whether the claimed efficiency was merger-specific, which the plaintiffs argued it was not.

33 Memorandum Opinion and Order, *FTC v. Advocate*, No. 15-cv-11473 (March 16, 2017), 31-34.

In *Advocate-NorthShore*, as it has in other litigated mergers, the FTC pointed out that “[n]o court has ever found that a presumptively unlawful merger would generate efficiencies sufficient to outweigh its anticompetitive effects.”³⁴ Nonetheless, during the FTC’s investigatory review process, FTC staff may be more receptive to crediting merger efficiencies, particularly in situations where the likely competitive harm is relatively small in magnitude. This underscores the importance of developing a credible efficiencies analysis relatively early in the process where it has a better chance of affecting the outcome of the merger investigation.

IV. CONCLUSION

As is the case in any litigated matter, *Advocate-NorthShore* involved disagreement over a range of different topics. Nonetheless, there was agreement on a fair number of issues, suggesting that the set of “battleground” disputes has narrowed. Even where the two sides disagreed, there are key lessons to be learned from the litigation process. By getting a better appreciation for what factors may lead the FTC to conclude that a prospective hospital merger is likely anticompetitive, the merging parties can tailor their arguments and provide evidence to more effectively convey to the agency why the facts in a given matter do not support such a conclusion. This not only benefits the merging parties, but also FTC staff by facilitating their ability to effectively and efficiently review the proposed transaction.



34 Plaintiffs’ Post-Remand Reply Brief in Support of Plaintiffs’ Motion for Preliminary Injunction, No. 15-cv-11473 (January 11, 2017), 2.