NOTE

CROSS-MARKET MERGERS IN HEALTHCARE: ADAPTING ANTITRUST REGULATION TO ADDRESS A GROWING CONCERN

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[†] B.S., Pennsylvania State University, 2014; J.D., Cornell Law School, 2017; Articles Editor, *Cornell Law Review*, Vol. 102. Thanks to Susan Raitt and the attorneys at the Northeast Region of the Federal Trade Commission for introducing me to the world of merger review. I also owe thanks to Samantha Ostrom, Nicholas Amin, Anthony Wu, Victor Pinedo, and the *Cornell Law Review* editors and associates for their patience and assistance throughout the publication process. Finally, I thank my parents, Marie Reilly and John Lopatka, for their unwavering support of my academic pursuits.

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INTRODUCTION

In the United States, the FTC and the Antitrust Division of the Department of Justice together serve to keep domestic markets free and competitive for the benefit of American consumers.1 One such way these antitrust regulators maintain and enforce free competition is by blocking potential mergers between competing firms that would result in higher prices or lower quality products without creating offsetting positive efficiencies.2 Thus, merger review by antitrust enforcers inherently involves weighing the procompetitive benefits of mergers against the anticompetitive consequences. Since 1968, the antitrust regulators have evaluated the procompetitive and anticompetitive effects of mergers under the framework of the Horizontal Merger Guidelines.³ Mergers between firms that operate in separate and distinct geographic areas, known as "cross-market mergers," present a unique challenge to antitrust regulators in performing this balancing test, as the anticompetitive effects of such mergers are unclear.4

Since President Obama signed the Patient Protection and Affordable Care Act (ACA) into law in 2010, there has been a surge in the number of mergers between healthcare providers, as firms in the healthcare industry strive to achieve the Act's goal of "population health management." Increasingly,

¹ See Council of Econ. Advisers, Benefits of Competition and Indicators of Market Power 1–2 (2016), https://www.whitehouse.gov/sites/default/files/page/files/20160414_cea_competition_issue_brief.pdf [https://perma.cc/3X9V-2Y7P].

 $^{^2}$ $See\,FTC$, STRATEGIC PLAN FISCAL YEARS 2003-2008 3 (2003), https://www.ftc.gov/sites/default/files/documents/reports_annual/strategic-plan/spfy03fy08.pdf [https://perma.cc/GRX5-M5Z2].

³ See W. Stephen Smith & Jeff Jaeckel, Good News, Bad News, or No News? The U.S. Antitrust Enforcement Agencies' Commentary on the Horizontal Merger Guidelines, 10 M&A LAW., 10, 11 (2006).

⁴ See Gregory S. Vistnes & Yianis Sarafidis, Cross-Market Hospital Mergers: A Holistic Approach, 79 Antitrust L.J. 253, 254–59 (2013).

⁵ Kenneth L. Davis, *Hospital Mergers Can Lower Costs and Improve Medical Care*, WALL STREET J. (Sept. 15, 2014, 7:17 PM), http://www.wsj.com/articles/kenneth-l-davis-hospital-mergers-can-lower-costs-and-improve-medical-care-1410823048 [https://perma.cc/3XAJ-BSXA] (describing the benefits of population health management); Anna Wilde Mathews, *Health-Care Providers, Insurers*

2017

healthcare mergers are occurring between providers that draw patients from separate and distinct geographic markets. ⁶ Antitrust regulators, following the most recent Horizontal Merger Guidelines, have been hesitant to challenge these cross-market mergers because they do not increase the concentration of any particular geographic market, suggesting that cross-market mergers do not have a noticeable effect on competition. ⁷ Nonetheless, recent studies indicate that cross-market mergers among healthcare providers raise prices for insurance payors, and ultimately patients, without producing any improvement in quality of care. ⁸

This Note argues that the higher prices following crossmarket provider mergers are anticompetitive effects caused by the merged firm's increased bargaining power and by the crossmarket subsidization of price increases. In response to this finding, antitrust regulators should take a new approach to reviewing proposed cross-market mergers that focuses on identifying signals of a potential price increase.9 Ultimately, both regulators and courts must adapt merger review to address the unique issues surrounding cross-market mergers. Part I provides an overview of how regulators and courts currently review healthcare provider mergers under the Horizontal Merger Guidelines. Part II provides an overview of the current climate in the market for healthcare services by introducing the players in the market—providers, payors, employers, and patients and examining how they negotiate to arrive at the price for healthcare services. Part II also offers an explanation as to why healthcare providers are so keen to merge following the ACA

Supersize, Wall St. J. (Sept. 21, 2015, 11:46 AM), http://www.wsj.com/articles/health-care-providers-insurers-supersize-1442850400 [https://perma.cc/4MD6-PRBD] (noting an increase in healthcare mergers following the passage of the ACA).

⁶ Between 1998 and 2012, more than a third of all healthcare provider mergers occurred between firms operating in different geographic markets. *See* Leemore Dafny, Examining Healthcare Competition: Trends in Provider Consolidation 89–90 (Feb. 25, 2015) (transcript available at https://www.ftc.gov/system/files/documents/public_events/618591/transcript-day2.pdf [https://perma.cc/67BZ-KR8F]).

⁷ U.S. DEP'T OF JUSTICE & FTC, HORIZONTAL MERGER GUIDELINES 15 (2010) [hereinafter HORIZONTAL MERGER GUIDELINES] (explaining the importance of market concentration in horizontal merger analysis; market shares and market concentration "can directly influence firms' competitive incentives").

⁸ See Dafny, supra note 6, at 91.

⁹ Some commentators note that the FTC is already making greater efforts to scrutinize mergers of hospitals in adjoining markets. *See* Lisa Schencker, *FTC Takes Close Look at Advocate, NorthShore Merger*, Mod. Healthcare (Apr. 1, 2015), http://www.modernhealthcare.com/article/20150401/NEWS/1504099 88 [https://perma.cc/T48R-RLBS].

and how such mergers may be beneficial to society. Part III then examines both the anticompetitive and procompetitive effects of cross-market mergers between healthcare providers. Finally, Part IV proposes a new approach for regulators and courts to evaluate cross-market mergers aimed at predicting these potential competitive effects.

I

MODERN FRAMEWORK FOR MERGER REVIEW

A. Evaluation of Healthcare Provider Mergers by Antitrust Regulators

The ultimate goal of antitrust regulators in reviewing a horizontal merger is to determine whether the merged firm could exploit an increase in market power following the merger to raise prices. 10 To answer this question, the regulators first must define the market in which the merging parties operate. Once the regulators have defined the market, they must evaluate how competitive the market is currently and how competitive it will be following the merger. 11 In performing this analysis, antitrust regulators use "market concentration" as an indicator of competitiveness, with a higher concentration indicating less competition in the market. 12 If the concentration analysis indicates that the merger is anticompetitive to such an extent that it will harm consumers, regulators may seek to block the consummation of the merger in court. 13 Additionally, in cases involving mergers that have already been consummated, the regulators may use actual price effects to demonstrate that the merger is anticompetitive and may seek a retroactive remedy such as disgorgement.14

1. Market Definition

In order to determine if a horizontal merger will be anticompetitive, antitrust regulators must identify both the line of commerce and the section of the country the merger will impact.¹⁵ Market definition is based solely on the concept of "de-

¹⁰ See Keith N. Hylton, Brown Shoe Versus the Horizontal Merger Guidelines, 39 Rev. Indus. Org. 95, 97 (2011).

¹¹ See HORIZONTAL MERGER GUIDELINES, supra note 7, at 7–18.

¹² See id. at 18.

¹³ See 15 U.S.C. § 53(b) (2012).

¹⁴ See Horizontal Merger Guidelines, supra note 7, at 3. The remedy of disgorgement requires the merged entity to return profits gained through an anticompetitive merger. See Einer Elhauge, Disgorgement as an Antitrust Remedy, 76 Antitrust L.J. 79, 79–80 (2009).

¹⁵ See Horizontal Merger Guidelines, supra note 7, at 7.

mand substitution": a consumer's "ability and willingness to substitute away from one product to another in response to a price increase" or a decrease in quality. 16 Regulators define the relevant line of commerce and section of the country using the "hypothetical monopolist test." 17 Under this test, a market is defined where a hypothetical monopolist could profitably impose a small but significant and nontransitory increase in price (SSNIP) for a given product in a delineated geographic area. 18 Thus, in a market defined by the hypothetical monopolist test, consumers are unwilling to substitute for different products or purchase their products in a different geographic area in response to an increase in price by the hypothetical monopolist. 19

The line of commerce, known as the product market, includes all substitutes a consumer would be willing to accept for a given good in response to an increase in price.²⁰ In practice, the product markets for healthcare mergers are divided based on the specific nature of services provided. For example, competition for the provision of essential health services occurs in the product market for "primary" or "secondary" healthcare, while competition for the provision of more specialized care occurs in the market for "tertiary" healthcare.²¹ However, for the purposes of this Note, the relevant product market may be generalized as the market for "healthcare services."

The relevant section of the country in which competition occurs, known as the geographic market, is defined as the area beyond which consumers would be unwilling to travel to receive a substitute good in response to a SSNIP.²² For health-care provider mergers, the geographic market is the "patient discharge" area: the area from which the providers attract patients.²³ In choosing healthcare providers, patients are limited

¹⁶ Id.

¹⁷ Id. at 8-9.

¹⁸ See Malcolm B. Coate & Jeffrey H. Fischer, *A Practical Guide to the Hypothetical Monopolist Test for Market Definition*, 4 J. COMPETITION L. & ECON. 1031, 1035 (2008).

¹⁹ See id.

²⁰ See HORIZONTAL MERGER GUIDELINES, supra note 7, at 7.

 $^{^{21}}$ See Cascade Health Sols. v. PeaceHealth, 515 F.3d 883, 891 (9th Cir. 2007) ("Primary and secondary . . . hospital services are common medical services like setting a broken bone and performing a tonsillectomy . . . [while] 'tertiary care' . . . includes more complex services like invasive cardiovascular surgery and intensive neonatal care.").

²² See HORIZONTAL MERGER GUIDELINES, supra note 7, at 13.

²³ See Michael A. Morrisey et al., Defining Geographic Markets for Hospital Care, 51 Law & Contemp. Probs. 165, 171, 176 (1988) (noting that the geographic market for a hospital may be defined as the area from which the hospital receives

geographically by travel costs and administrative barriers such as the extent of coverage offered by the patient's health insurance plan.²⁴ Travel costs include both the actual price of transportation as well as the value of the time the patient spends travelling to a distant provider.

2. Market Concentration

Once the product and geographic markets have been defined, antitrust regulators must evaluate the level of competition both in the market's current state and in the market following the proposed merger.²⁵ The regulators' first step in this evaluation is identifying all other firms that earn revenues in the defined product and geographic markets.²⁶ Such firms are classified as "market participants." For mergers between healthcare providers, market participants include all other healthcare providers within the relevant market. Next, regulators calculate the market shares for all market participants.²⁸ Typically, the calculation of market share is based on historical evidence of revenues, but the regulators may also consider any indicator of the firms' future competitive significance in the relevant market.²⁹ For healthcare providers, the number of hospital beds each firm maintains in proportion to the total number of beds available within the relevant market serves as a reasonable proxy for the firm's market share.30 Regulators use this market share information to calculate market concentration.³¹ Based on its concentration, a market falls into one of three categories: highly concentrated markets, which have the greatest potential to realize anticompetitive effects; moderately concentrated markets; and unconcentrated markets, which have the lowest risk of producing anticompetitive effects.³² Both regulators and courts presume that a merger causing a large increase in concentration and resulting in a highly con-

virtually all of its admissions; "virtually all" for these purposes is defined as either 75% or 90%).

²⁴ See id. at 170.

See HORIZONTAL MERGER GUIDELINES, supra note 7, at 18.

²⁶ See id. at 15.

²⁷ Id.

²⁸ See id. at 16.

²⁹ See id. at 16–17.

³⁰ See Morrisey et al., supra note 23, at 179.

Typically, market concentration is measured using the Herfindahl-Hirschman Index (HHI), which is calculated by summing the square of each market participant's market share. See HORIZONTAL MERGER GUIDELINES, supra note 7, at 18-19. Antitrust regulators identify a market with an HHI greater than 2,500 as highly concentrated. See id.

³² See id. at 19.

centrated market is anticompetitive.33 However, this presumption is rebuttable if the merging parties produce evidence showing that entry into the market by new competitors is easy, and thus the merger is unlikely to actually increase market power.34

Evaluation of Healthcare Provider Mergers by the Courts

If the antitrust regulator determines that there is a strong possibility a healthcare provider merger will have anticompetitive effects, the regulator will pursue a preliminary injunction in federal court to block the merger before it is consummated.³⁵ In deciding whether to grant this preliminary injunction, the court must evaluate the likelihood the regulator will succeed on the merits of an antitrust claim brought under Section 7 of the Clayton Act.³⁶ The court will grant a preliminary injunction where, after considering the regulator's likelihood of success on the merits and weighing the equitable impact of its decision, granting an injunction would be in the public's interest.³⁷

Courts typically place great weight upon the market concentration analysis presented by the antitrust regulator.³⁸ In Philadelphia National Bank, the Supreme Court established a presumption of anticompetitive effects from a merger that causes a large increase in concentration and results in a highly concentrated market, holding that:

[A] merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market is

Regulators presume that mergers involving an increase in HHI of greater than 200 and resulting in highly concentrated markets are presumed to enhance the market power of the merged firm to an anticompetitive level. See id.

See id. at 27-29.

The Federal Trade Commission, the regulator that evaluates healthcare mergers, derives its power to seek an injunction in federal court to block an anticompetitive merger from Section 13(b) of the Federal Trade Commission Act. David M. Stryker, Note, The Federal Trade Commission, Injunctive Relief, and Allegedly Anticompetitive Mergers: Preliminary Relief Under the Federal Trade Commission Act, 58 IND. L.J. 293, 293 (1982).

Section 7 of the Clayton Act holds unlawful any acquisition or merger where "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. § 18 (2012).

See Stryker, supra note 35, at 298.

See Deborah A. Garza, Market Definition, the New Horizontal Merger Guidelines, and the Long March Away from Structural Presumptions, ANTITRUST SOURCE, Oct. 2010, at 1, 4 (noting that since the Horizontal Merger Guidelines evaluate mergers in terms of market concentration, "courts have generally assessed mergers that way").

so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.³⁹

In recent healthcare merger evaluations, courts have debated how much weight they should place on the merging parties' asserted nonprice and price efficiencies associated with the deal. The parties to a merger that results in an anticompetitive level of market concentration under the *Philadelphia National Bank* presumption may claim nonprice efficiencies by arguing that although prices could increase following the merger, this increase in price will be more than offset by a corresponding increase in quality. Alternatively, the parties may claim that the merger will produce price efficiencies that allow the merged firm to lower prices and increase competition with other market participants. Improvements in care and price efficiencies that may result from healthcare mergers are discussed in greater detail later in this Note.⁴⁰

Prior to 1982, courts generally ignored the efficiencies defense altogether and essentially held the *Philadelphia National Bank* presumption to be conclusive proof of anticompetitive effects. ⁴¹ This approach closely tracks the 1968 iteration of the Horizontal Merger Guidelines and is considered outdated under more recent iterations of the Guidelines, and therefore it is seldom used by modern courts. ⁴² Following the publication of the 1982 Horizontal Merger Guidelines, courts have shown a willingness to consider efficiencies as evidence to rebut the regulator's claim that a merger is presumed to be anticompetitive. ⁴³ Modern courts generally consider efficiencies to some degree in deciding whether a merger should be presumed anticompetitive. ⁴⁴ However, the weight given to the efficiencies

³⁹ Phila. Nat'l Bank v. United States, 374 U.S. 321, 363 (1963).

⁴⁰ See infra subpart III.B.

⁴¹ See William J. Kolasky & Andrew R. Dick, *The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, 71 ANTITRUST L.J. 207, 213–17 (2003).

⁴² See id. at 213 ("Unless there are exceptional circumstances, the Department will not accept as a justification for an acquisition . . . the claim that the merger will produce [efficiencies]" (quoting U.S. DEP'T OF JUSTICE, 1968 MERGER GUIDELINES 8 (1968))).

⁴³ See id. at 232 (noting that since the 1982 version of the Horizontal Merger Guidelines, four circuit courts have had the occasion to consider an efficiencies defense to a merger and all four have shown a willingness to allow the efficiencies defense to rebut a presumption of anticompetitiveness).

⁴⁴ See id. at 232.

defense and how such a defense factors into the Clayton Act Section 7 analysis varies from court to court. 45

Courts tend to differ in the burden of proof the merging parties must meet in order to rebut the Philadelphia National Bank presumption.⁴⁶ The Eleventh Circuit was the first to reject the 1968 Guidelines approach to efficiencies, holding in University Health that efficiencies may be used to rebut a prima facie showing of anticompetitive effects.⁴⁷ Following the Eleventh Circuit's lead, the Eighth Circuit in Tenet Health found that the combination of two hospitals could produce a "larger and more efficient" facility able to "provide better medical care than either of those hospitals could separately."48 In the widely followed decision Long Island Jewish Medical Center, the district court placed significant limits on the efficiencies defense, holding that the efficiencies claimed must be significant and the merger must "enhance[] rather than hinder[] competition because of the increased efficiencies."49

In the most recent decisions involving the efficiencies defense, courts have greatly increased the burden the merging parties must meet in order to rebut the Philadelphia National Bank presumption. In evaluating a merger between two manufacturers of baby formula, the D.C. Circuit in Heinz held that to rebut a presumption of anticompetitive effects based on high market concentration levels, the merging parties must supply "proof of extraordinary efficiencies" that are specific to the merger.⁵⁰ Building on *Heinz*, the Eleventh Circuit in *St. Luke*'s essentially rejected all nonprice efficiencies in healthcare provider mergers, holding that although a merger would "improve the delivery of health care," such an efficiency gain is not sufficient to rebut the Philadelphia National Bank presumption unless the merging parties show "that the merger would increase

See Peter J. Hammer, Questioning Traditional Antitrust Presumptions: Price and Non-Price Competition in Hospital Markets, 32 U. MICH. J.L. REFORM 727, 744 n.40 (1999).

The 1982 Guidelines articulated the basic requirements an efficiencies defense must meet in order to warrant consideration by regulators and courts. To meet these requirements, the efficiencies defense must contain clear and convincing evidence of substantial cost savings already enjoyed by other firms in the industry that could not be realized by less anticompetitive means than the present merger. See Kolasky & Dick, supra note 41, at 218 (citing U.S. DEP'T OF JUSTICE, 1982 MERGER GUIDELINES § 3.5 (1982)).

FTC v. Univ. Health, Inc., 938 F.2d 1206, 1222 (11th Cir. 1991).

FTC v. Tenet Health Care Corp., 186 F.3d 1045, 1054 (8th Cir. 1999).

United States v. Long Island Jewish Med. Ctr., 983 F. Supp. 121, 137 (E.D.N.Y. 1997).

⁵⁰ FTC v. H.J. Heinz Co., 246 F.3d 708, 720–21 (D.C. Cir. 2001) (citing U.S. DEP'T OF JUSTICE & FTC. 1997 HORIZONTAL MERGER GUIDELINES 30–32 (1997).

competition or decrease prices."⁵¹ Finally, in the most recent decision involving an efficiencies defense, the Third Circuit in *Penn State Hershey Medical Center* set forth four requirements for efficiencies: (1) the efficiencies must "offset the anticompetitive concerns in highly concentrated markets"; (2) the efficiencies "must be merger specific"; (3) the efficiencies "must be verifiable, not speculative"; and (4) the efficiencies "must not arise from anticompetitive reductions in output or service."⁵² Overall, under the current state of the law, the merging parties must offer a highly compelling efficiencies defense to overcome the *Philadelphia* presumption.

П

OVERVIEW OF THE MARKET FOR HEALTHCARE SERVICES

A. Structure of the Market for Healthcare Services

In order to understand the effects of cross-market health-care provider mergers on prices, it is important to first understand the main players—healthcare providers, health insurance payors, employers, and employees/patients—and how they interact. This Part examines the negotiations process between providers, payors, employers, and patients.

First, providers and health insurance payors negotiate over the price at which a plan will accept a hospital into its network.⁵³ A payor, for purposes of this Note, is a private health insurance provider that reimburses the medical expenses of patients enrolled in its health insurance plan.⁵⁴ A payor seeks to maximize the coverage of its plan at the lowest possible price in order to make its plan as attractive as possible to employers and patients.⁵⁵ The more patients a provider currently serves, the more attractive the provider is to a payor, since the payor

 $^{^{51}\,\,}$ Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 791 (11th Cir. 2014).

 $^{^{52}}$ FTC v. Penn State Hershey Med. Ctr., No. 16–2365 2016 WL 5389289, at *13–15 (3d Cir. July 26, 2016) (rejecting the merging parties' efficiencies defense that the merger would relieve "capacity constraints" and "engage in risk-based contracting" because these efficiencies were "insufficient to rebut the presumption of anticompetitiveness" established by the FTC's market concentration analysis).

⁵³ See David A. Argue & Richard T. Shin, An Innovative Approach to an Old Problem: Hospital Merger Simulation, 24 ANTITRUST 49, 49 (2009).

⁵⁴ See Gary T. Schwartz, National Health Care Program: What Its Effect Would Be on American Tort Law and Malpractice Law, 79 CORNELL L. REV. 1339, 1346 (1994) (noting Medicare as an example of a nonprivate health insurance payor).

⁵⁵ See Office of Att'y Gen. Martha Coakley, Examination of Health Care Cost Trends and Cost Drivers 28 (2010) (arguing that payors "must maintain stable, broad provider networks").

maximizes its profits by enrolling as many employers and patients in its plan as possible and a high usage rate indicates that the provider is popular with employers and patients.⁵⁶ A provider, on the other hand, seeks to maximize its revenue by maximizing the number of patients directed to it by the payor.⁵⁷ Thus, the more patients enrolled in a payor's plan, the more attractive the plan is to a provider.⁵⁸ In recent years, bargaining power has shifted in favor of providers due in large part to antitrust regulators' inability to successfully challenge provider mergers.⁵⁹

Next, payors and employers negotiate over the price at which an employer may enroll its employees in the payor's health plan.⁶⁰ An employer seeks to maximize both the quality and convenience of healthcare services for its employees at the lowest possible price. 61 Large employers that have workers living throughout a broad geographic region will demand a health plan that offers coverage over the entire area. 62 Large employers, therefore, play an important role in cross-market mergers where workers living in separate geographic healthcare services markets are employed by the same firm.

Finally, patients either select a healthcare provider from the health plan provided to them by their employers or negotiate for a health plan directly with a payor.⁶³ For the purposes of this Note, it is assumed that all patients receive a health insurance plan from their employer. Since the cost of healthcare is covered by insurance, an employee is not concerned

⁵⁶ See id. (providing "the total number of [patients] who are associated with . . . the provider system" as a proxy for the provider's leverage over a payor).

See Kelly J. Devers et al., Hospitals' Negotiating Leverage with Health Plans: How and Why Has It Changed?, 38 HEALTH SERVS. RES. 419, 422 (2003) (examining how "[t]he threat of a plan excluding a hospital from a contract, and channeling large blocks of patients elsewhere" impacts negotiations between payors and providers).

⁵⁸ See id.

Thomas R. McCarthy & Scott J. Thomas, Antitrust Issues Between Payers and Providers, Antitrust Health Care Chron., Mar. 2002, at 2-3.

See Vistnes & Sarafidis, supra note 4, at 266-67.

See id. at 267 ("All else equal, a health plan with a more comprehensive provider network will be more attractive to both employers and employees.").

See Argue & Shin, supra note 53, at 53 ("[A] broader set of hospital choices increases . . . the likelihood of a payor winning an employer's contract.").

According to the U.S. Census Bureau, over half of all workers receive health insurance from their employer. Hubert Janicki, U.S. Census Bureau, Em-PLOYMENT-BASED HEALTH INSURANCE: 2010, at 1-2 (2013), https://www.census .gov/prod/2013pubs/p70-134.pdf [https://perma.cc/LFL6-M52U] (noting that the percentage of workers receiving employment-based health insurance is decreasing).

with price when selecting a healthcare provider.⁶⁴ Rather, when selecting which provider to use, the employee is concerned with nonprice factors such as quality of care and convenience.⁶⁵

B. Economic Incentives for Healthcare Providers to Merge

Economically rational firms merge because the profits generated by the merged firm will surpass the acquisition costs expended by the merging parties. For healthcare providers, a merged firm lowers its costs and increases its profits by achieving "clinical integration." Clinical integration is the coordination of healthcare services across patients and facilities to maximize the quality and value of those services. From an antitrust perspective, regulators take the position that once clinical integration has been achieved by a provider merger, the merged entity can negotiate jointly with payors without engaging in an agreement in restraint of competition. Following the passage of the ACA, achieving clinical integration is especially profitable due to the financial incentives the Act offers providers for reducing patient readmissions.

Many experts believe that the main reason for the recent upswing in healthcare mergers is the ACA passed in 2010.⁷¹ Section 3025 of the Act establishes the Readmissions Reduction program, which, by withholding Medicare funding, penalizes healthcare providers who readmit previously discharged

⁶⁴ See Argue & Shin, supra note 53, at 50.

⁶⁵ See id.

 $^{^{66}}$ See Ronald N. Johnson & Allen M. Parkman, Premerger Notification and the Incentive to Merge and Litigate, 7 J.L. Econ. & Org. 145, 148–54 (1991).

⁶⁷ Am. Hosp. Ass'n, Clinical Integration—the Key to Real Reform 1 (2010), http://www.aha.org/research/reports/tw/10feb-clinicinteg.pdf [https://perma.cc/H7MD-P82C].

⁶⁸ See Stephen M. Shortell et al., Remaking Health Care in America: The Evolution of Organized Delivery Systems 129 (2d ed. 2000).

⁶⁹ See Deborah L. Feinstein, Antitrust Enforcement in Health Care: Proscription, Not Prescription 2–5 (June 19, 2015) (transcript available at https://www.ftc.gov/system/files/documents/public_statements/409481/140619_aco_speech.pdf [https://perma.cc/X559-SB68]).

⁷⁰ See Kenneth Kizer, Examining Health Care Competition: Trends in Provider Consolidation 82 (Feb. 25, 2015), (transcript available at https://www.ftc.gov/system/files/documents/public_events/618591/transcript-day2.pdf [https://perma.cc/4VYL-XPA6]) ("[T]he drive to consolidate providers is largely driven by this need to achieve clinical integration because of the [Affordable Care Act].").

⁷¹ See id. at 109–11.

patients for continued treatment of prior ailments.⁷² In order to avoid readmissions, healthcare providers seek to control the entire "continuum" of healthcare for their patients, from diagnosis, to treatment, to rehabilitation.⁷³ Controlling the entire spectrum of services, known as population health management, reduces the possibility that an error by one provider will result in a readmission for a different provider.⁷⁴ Furthermore, population health management allows health systems to minimize the actuarial risk of any one hospital receiving an excessive number of readmissions.⁷⁵ In order to achieve the goal of population health management, providers use mergers to improve quality of care, increase capacity, and expand the range of services they offer.

Clinical integration results in more efficient delivery of healthcare services by coordinating and consolidating activities by separate providers. 76 A merger allows healthcare providers to share patient information, leading to faster and more accurate diagnoses.⁷⁷ Furthermore, a merger may greatly reduce administrative overhead costs associated with the management of a health system.⁷⁸ Finally, the merged firm may be better able to allocate its resources by assigning physicians and beds to correspond to the needs of its patients.⁷⁹

See Patient Protection and Affordable Care Act § 3025, Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified as amended in scattered sections of 26 & 42 U.S.C.).

See Laura Wood, Research and Markets, Avoiding the Readmissions Penalty Zone: Population Health Management for High-Risk Populations, BUS. WIRE (Mar. 7, 2013, 5:12 AM), http://www.businesswire.com/news/home/201303070 05474/en/Research-Markets-Avoiding-Readmissions-Penalty-Zone-Population [https://perma.cc/LDC8-X533] (noting the importance of monitoring the "care continuum," especially discharge facilities, in order to achieve population health management).

⁷⁴ See id.

See Kenneth L. Davis, Hospital Mergers Can Lower Costs and Improve Medical Care, WALL St. J. (Sept. 15, 2014, 7:17 PM), http://www.wsj.com/articles/kenneth-l-davis-hospital-mergers-can-lower-costs-and-improve-medicalcare-1410823048 [https://perma.cc/3XAJ-BSXA] ("[W]ithout [population health management] there is too great a risk that . . . patients who are high utilizers of medical services[] will unbalance the scales.").

See SHORTELL ET AL., supra note 68, at 129.

⁷⁷ See Kizer, supra note 70, at 83.

⁷⁸ See id. at 98.

For example, in San Francisco, a population health management system created a "medical respite and sobering center" where victims of alcohol abuse could be treated at a far lower cost than in a traditional emergency room. Jeffrey Bendix, Experts See Potential in Population Health Management, but Obstacles Remain, MED. ECON. (Aug. 11, 2015), http://medicaleconomics.modernmedicine .com/medical-economics/news/experts-see-potential-population-health-management-obstacles-remain [https://perma.cc/8QAU-GDXD].

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EFFECTS OF CROSS-MARKET HEALTHCARE PROVIDER MERGERS

A. Anticompetitive Effects of Cross-Market Mergers

In the case of a cross-market merger, market concentration following the merger is unaffected because the merging providers operate in separate geographic markets. Therefore, patients, the consumers of healthcare services, have the same variety of healthcare provider choices before and after the cross-market merger. However, empirically, the prices of a healthcare provider increase 14 to 18% after joining an out-ofmarket health system.⁸⁰ Despite this increase in price, studies indicate that the merged firm lowers its average costs by anywhere from 5 to 14%, suggesting that cross-market mergers reduce consumer surplus.⁸¹ Typically, the increase in market concentration caused by a merger results in higher prices as the merged firm commands greater market power than the merging parties held individually before the consummation of the merger.82 This Part argues that the merged firm is able to charge higher prices due to increased bargaining power gained through the common consumer effect, the exploitation of differing demand elasticities for healthcare services, known as the cross-subsidization of prices effect, and improved negotiation skill.

1. Common Consumer Effect

Healthcare providers in separate geographic markets that merge into a single provider system command more leverage in negotiating for inclusion in a payor's network because the value of the merged firm to the payor's network is greater than that of the sum of the merging parties.⁸³ If a payor's network is thought of as a blanket of coverage, providers that are not part of the plan may be thought of as holes.⁸⁴ Payors seek to minimize the number of holes in their plans in order to make them attractive to employers.⁸⁵ By merging, healthcare providers in-

⁸⁰ See Matthew S. Lewis & Kevin E. Pflum, Hospital Systems and Bargaining Power: Evidence from Out-of-Market Acquisitions, RAND J. Econ. 22 (forthcoming 2016) (available at https://www.aeaweb.org/conference/2015/retrieve.php?pdf id=537 [https://perma.cc/DH76-B9CL]).

⁸¹ Teresa D. Harrison, *Do Mergers Really Reduce Costs? Evidence from Hospitals*, 49 ECON. INQUIRY 1054, 1055 (2011).

⁸² See Matthew Weinberg, The Price Effects of Horizontal Mergers, 4 J. Competition L. & Econ. 433, 445–46 (2007).

⁸³ See Vistnes & Sarafidis, supra note 4, at 255.

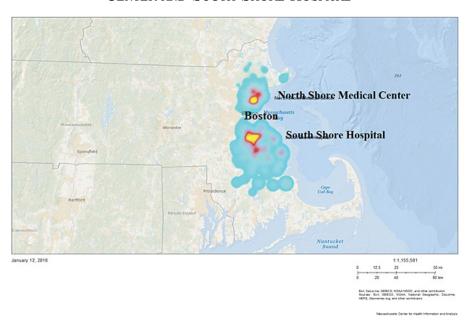
⁸⁴ See id.

⁸⁵ See id. at 275.

crease the size of the hole that would result if they were to drop out of a payor's health plan, thereby increasing their bargaining power with the payor.⁸⁶ Thus, the merger creates an "interhospital linkage" in which a payor's bargaining position with respect to the merged firm depends on whether the payor can contract with a second provider.⁸⁷ A horizontal merger increases the bargaining strength of the merged firm because it eliminates other providers with which the payor may contract if it fails to reach a deal with the first provider.

A cross-market merger may result in interprovider linkage because large employers consider coverage across a payor's entire network when selecting a plan for its employees.⁸⁸ Large employers consider the entire extent of the plan because they draw employees from a wide geographic area. Figure 1, below, illustrates a situation in which two providers operating in separate geographic markets may increase their bargaining power over a payor through a cross-market merger.

FIGURE 1: PATIENT DISCHARGE AREAS FOR NORTH SHORE MEDICAL CENTER AND SOUTH SHORE HOSPITAL⁸⁹



⁸⁶ See id.

⁸⁷ See id. at 258.

⁸⁸ See id.

⁸⁹ Figure 1 was generated using patient origin data from the Massachusetts Center for Health Information and Analysis.

Figure 1 displays the geographic extent of the patient discharge areas for North Shore Medical Center in Salem, Massachusetts and South Shore Hospital in South Weymouth, Massachusetts. The two providers are located about thirty miles apart,⁹⁰ and Figure 1 shows that the providers' respective patient discharge areas do not overlap, indicating that the providers operate in separate geographic markets. A hypothetical large employer in central Boston, roughly equidistant from North Shore and South Shore, may employ people from both the northern and southern suburbs.⁹¹ Therefore, the large employer, in order to provide health coverage for all of its employees, would seek a plan that offers both North Shore and South Shore. If North Shore and South Shore were to merge and leave a payor's network, the merged firm would leave a hole in coverage for both the northern and southern suburbs, making the plan less desirable for the large central employer. This potential hole caused by the merged firm would be more damaging to a payor's plan than the potential holes caused by the merging parties individually.92 Therefore, the merged firm would command greater bargaining leverage over a payor than that which North Shore and South Shore commanded over the same payor prior to the merger.

In a situation like the hypothetical North Shore-South Shore merger where employers and patients value both of the merging parties, the increase in bargaining power gained by the merged firm is due to the "common consumer effect." When healthcare providers in separate geographic areas merge, the merged firm can raise its price when there is a payor or group of payors that negotiated with both merging parties and desires to include both merging parties in its network. He closer the proximity of the merging firms, the more likely there are common consumers and large employers, who value both parties. He closer the proximity of the merging firms, the more likely there are common consumers and large employers, who value both parties.

⁹⁰ Driving Directions from North Shore Medical Center to South Shore Hospital, Google Maps, http://maps.google.com [https://perma.cc/3HPH-CFFG] (follow "Directions" hyperlink; then search starting point field for "North Shore Medical Center, Salem, MA" and search destination field for "South Shore Hospital, South Weymouth, MA").

⁹¹ C.f. Dafny, supra note 6, at 92.

⁹² See Vistnes & Sarafidis, supra note 4, at 255–58.

⁹³ See Dafny, supra note 6, at 91.

⁹⁴ See id. at 92

⁹⁵ See id.

2. Cross-Market Subsidization of Prices Effect

Following a cross-market merger, the merged firm may be able to increase prices by taking advantage of differing elasticities of demand in the separate geographic markets of the merging parties. For example, when a provider in a market with elastic demand merges with a provider in a separate market with inelastic demand, the merged firm may raise prices in the inelastic market to subsidize a predatory price cut in the elastic market. Predatory pricing in the elastic market serves to drive out the competition and thus increase the concentration of that market, ultimately resulting in higher prices. Process of the market is a separate market with increase the concentration of that market, ultimately resulting in higher prices.

For cross-market price subsidization to occur, the merging parties must negotiate for inclusion in the same payor networks prior to the merger.99 The merged firm may take advantage of cross-market price subsidization even if it negotiates with payors on a system-wide basis; that is, the merged firm negotiates for a single price to include all of its facilities in the payor's system rather than separate prices for each individual facility within the system. 100 For example, if a provider in a highly elastic market merges with a provider that holds a monopoly in its local market, the merged firm can charge a higher system-wide price because payors would be unwilling to risk losing the monopolist provider, even if it would otherwise be willing to drop the firm in the elastic market from its network. 101 In this example, the provider in the elastic market becomes more valuable to the payor simply through its association with the monopolist.

Unlike the common consumer effect, cross-market subsidization may occur even without employers that value the inclusion of both merging parties in its health plan. However, like the common consumer effect, cross-market subsidization will only occur when both merging parties negotiate with the same payor. Since payors typically negotiate with providers to craft networks on a statewide basis, price increases due to

⁹⁶ See id. at 93.

⁹⁷ See id.

⁹⁸ See Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 697–98 (1975).

⁹⁹ See Dafny, supra note 6, at 93.

¹⁰⁰ See Argue & Shin, supra note 53, at 52 (examining the leverage a health-care provider may extract by being the only provider in a certain geographic area).

¹⁰¹ See id.

¹⁰² See Dafny, supra note 6, at 92.

¹⁰³ See id.

cross-market subsidization are only likely to occur when the merging parties operate in the same state.¹⁰⁴

3. Improved Negotiation Skill

A cross-market merger among providers may allow the merged firm to increase its bargaining leverage through increased negotiating skill. As a result of mergers, healthcare providers become more skilled at negotiating as the merging parties share information about their previous negotiations with payors. ¹⁰⁵ For example, following a series of cross-market provider mergers that led to the creation of Tenet Healthcare in 2004, Tenet adopted a "national negotiating template and new technology to analyze payer-specific profit and loss data, giving negotiators ammunition during contract talks." ¹⁰⁶ Although the merger did not increase market concentration, Tenet was nevertheless able to increase prices by using a shared information system to increase bargaining leverage with payors. ¹⁰⁷

B. Pro-Competitive Effects of Cross-Market Mergers

While empirical evidence shows that prices tend to increase following cross-market mergers between healthcare providers, such evidence is unavailable until after the merger has been consummated. Therefore, when a merger is reviewed by regulators and the courts prior to consummation, the merging parties have the opportunity to show reasons why, despite the concerns of anticompetitive effects described in subpart III.A, the merger will benefit consumers. This subpart details two arguments the merging parties may use to dispel concerns that their cross-market merger will have anticompetitive effects: improvements in quality of care and price efficiencies resulting in reduced costs.

1. Improvements in Quality of Care

Even though regulators may claim that prices are likely to increase following a cross-market merger due to the anticompetitive effects described in subpart IV.A, the merging parties may concede that prices will increase but argue that such in-

¹⁰⁴ See Scott D. Litman, Health Care Reform for the Twenty-First Century: The Need for a Federal and State Partnership, 7 CORNELL J.L. & PUB. POL'Y 871, 872 (1998).

See FTC v. Tenet Health Care Corp., 186 F.3d 1045, 1049 (8th Cir. 1999).
Mike Colias, Ready to Rumble, 80 Hosps. & Health Networks 32, 34–36 (2006).

¹⁰⁷ See id.

¹⁰⁸ See Lewis & Pflum, supra note 80, at 22.

crease will be offset by a system-wide improvement in quality of care. 109 This defense faces three main challenges when used to support a cross-market merger: first, since the merging firms serve different geographic markets, it is difficult to show how the system will be able to efficiently allocate its resources to better serve patients; second, even if the merging parties can set forth a plan for efficient resource allocation, they must find an empirical measurement to use as a proxy for quality of care; and finally, the improvements in quality of care must be merger-specific.110

The main challenge to raising a successful improvement in care defense to a cross-market merger is the difficulty of proving improvements in quality of care with empirical evidence. Empirical evidence shows that patient admissions to a merged firm do not increase following either an in-market or crossmarket acquisition.111 Thus, regardless of whether the provider's actual quality of care increases following a merger, patients do not perceive any increase in quality of the merged firm. 112 Nevertheless, the merged firm may be able to use an increase in the "average reserve margin" of its facilities to empirically suggest that the merged firm offers better care than did the merging parties separately. 113 The average reserve margin is the number of beds a hospital keeps in reserve below its full capacity. 114 Economists frequently use average reserve margin as a proxy for quality because physicians believe that hospitals provide better care when they are operating below their capacity constraints. 115

2. Price Efficiencies

The merging parties may also contend that the merger will lead to economies of scale that will reduce the price of healthcare services and ultimately benefit consumers. One of the

¹⁰⁹ See Hammer, supra note 45, at 759 n.85 (noting that by accurately calculating quality adjusted prices, competition over quality "could be conceptually reduced to a problem of price competition").

See supra note 52 and accompanying text.

¹¹¹ See Lewis & Pflum, supra note 80, at 33-34.

¹¹²

Paul L. Joskow, The Effects of Competition and Regulation on Hospital Bed Supply and the Reservation Quality of the Hospital, 11 BELL J. ECON. 421, 425–26 (1980).

¹¹⁴ See id.

See Paul A. Pautler & Michael G. Vita, Hospital Market Structure, Hospital Competition, and Consumer Welfare: What Can the Evidence Tell Us?, 10 J. CON-TEMP. HEALTH L. & POL'Y 117, 124 (1994) ("[I]ncreases in the average reserve margin . . . reduce[] expected admission delays, and . . . hospitals provide better care when they are operating well below their capacity constraints.").

most commonly cited efficiencies used by merging parties is that the merger will allow the firm to cut down on administrative and overhead costs. However, for such a defense to be recognized by regulators and courts, the merging parties must show that the cost reductions arising out of this efficiency will be passed on to consumers rather than merely being captured by the merged firm as additional producer surplus. Empirical evidence from completed cross-market healthcare provider mergers shows that while the merged firm does indeed reduce its costs, the savings are not passed on to consumers.

Another efficiencies defense commonly used by the merging parties is that the merger will produce economies of scale, enabling the merged firm to lower its costs. Economies of scale are found when the per-patient cost of providing care declines as the number of patients increases.¹¹⁹ Thus, the merging parties would contend that the merger, by creating a health-care provider system capable of caring for more patients, will allow the merged firm to reduce its per-patient costs and ultimately reduce its prices.¹²⁰ Studies have shown that hospitals have constant returns to scale once its size reaches 200–400 beds, meaning that any merger producing a firm capable of treating more than 400 patients will not receive the full benefits of economies of scale.¹²¹

Finally, the merging parties may argue that the merger will produce economies of scope that will benefit consumers. Economies of scope arise in healthcare mergers when resources are shared across facilities and used jointly in treating patients, making it cheaper to offer multiple services together than to offer those services separately. Following a merger, providers may be able to shift physicians between facilities in order to more efficiently care for patients. Empirical evidence sug-

 $^{^{116}}$ Michael G. Vita et al., *Economic Analysis in Health Care Antirust*, 7 J. Contemp. Health L. & Pol'y 73, 97 (1991).

 $^{^{117}}$ $\,$ See id. ("[I]f cost reductions will not be passed on to consumers . . . the [FTC] is likely to challenge an acquisition.").

See Lewis & Pflum, supra note 80, at 21–22.

¹¹⁹ See Vita et al., supra note 116, at 97.

¹²⁰ See id. at 98.

¹²¹ See id.; see also Frontier Econ., A Study Investigating the Extent to Which There are Economies of Scale and Scope in Healthcare Markets and How These Can Be Measured by Monitor 11 (2012) (stating that the optimal size for an acute hospital is 200-400 beds), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/303160/Monitor_Economies_of_Scale_and_Scope__FINAL_REPORT_0_0.pdf [https://perma.cc/4WLJ-2DW4].

See Vita et al., supra note 116, at 97.

¹²³ See id. (noting that in the case of physician services, "the cost of producing multiple outputs jointly is less than the cost of producing them separately").

gests that economies of scope may be achievable in certain healthcare services such as pediatrics and emergency room care, but overall, an economies of scope argument does not provide strong support for an acquisition. 124

IV REVISED EVALUATION OF CROSS-MARKET MERGERS

In response to the recent surge in healthcare mergers, both antitrust regulators and courts should be aware of the potential for anticompetitive price increases arising from cross-market mergers. The Horizontal Merger Guidelines, as they are currently written and interpreted, provide insufficient guidance for regulators and courts in evaluating cross-market mergers, since merger review under the Guidelines is so tightly interwoven with market concentration. 125 In reviewing cross-market mergers, antitrust regulators should seek to identify potential cross-consumer effects as well as evaluate the risk of crossmarket price subsidization. 126 When faced with preliminary injunction motions in cross-market merger cases, courts should move away from their heavy reliance on traditional market concentration evaluations. 127 Instead, courts should weigh the potential for anticompetitive price effects, as presented by the regulators, against the merging parties' asserted procompetitive effects, taking into account the geographic limitations of both the anticompetitive effects and the efficiencies.

Proposed Analysis of Cross-Market Mergers by **Antitrust Regulators**

The most recent iteration of the Horizontal Merger Guidelines offers antitrust regulators some flexibility finding a merger anticompetitive without defining a relevant market by noting that "[e]vidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects."128 Through this language, the Guidelines allow regulators to bypass market definition in cases where a merger is certain to cause anticompetitive effects. 129 While this language potentially aids antitrust regulators in

¹²⁴ Id. at 100 ("The evidence on economies of scope is mixed and probably should not be used to indicate strong support for an acquisition.").

¹²⁵ See HORIZONTAL MERGER GUIDELINES, supra note 7 and accompanying text.

¹²⁶ See supra subpart II.A.

¹²⁷ See Garza, supra note 38, at 5 and accompanying text.

¹²⁸ HORIZONTAL MERGER GUIDELINES, supra note 7, at 7.

¹²⁹ See id.

blocking anticompetitive cross-market healthcare provider mergers, it has two significant limitations. First, the language does little to prevent anticompetitive mergers before they happen, since the evidence of resulting price increases, on which the regulators must rely, does not arise until after the merger has been consummated. Second, the language provides little guidance to courts that are accustomed to relying upon the *Philadelphia National Bank* presumption in granting injunctions to prevent anticompetitive mergers.

Since the Philadelphia National Bank presumption is explicitly based upon the anticompetitive harms of high market concentration, in order to invoke the presumption, regulators must define the market in which the merging parties compete horizontally. 130 Defining the market in the case of a crossmarket merger is difficult because, by definition, the merging firms do not operate in the same geographic market. Therefore, a cross-market merger, under the current Guidelines, would not result in an increase in market concentration, even though it may result in higher prices. 131 The FTC has attempted to address this problem by ignoring the Merger Guidelines' emphasis on market definition when evaluating certain crossmarket mergers and attempting to focus the court's attention solely on the anticompetitive effects. 132 However, thus far the FTC has only taken this approach to challenge mergers retroactively, after the anticompetitive effects have already occurred. 133 In order to proactively prevent mergers that will produce anticompetitive effects, regulators should compile structural evidence surrounding the deal that indicates the potential for such anticompetitive effects. Specifically, once a review of the merging parties' patient discharge data indicates that the parties operate in separate geographic markets, the regulator must identify the potential for common consumer effects and cross-market subsidization. 134

¹³⁰ See Phila. Nat'l Bank v. United States, 374 U.S. 321, 363 (1963).

¹³¹ See Lewis & Pflum, supra note 80, at 22.

 $^{^{132}}$ See in re Evanston Nw. Healthcare Corp., F.T.C. No. 9315, at 87 (2008) ("[I]t is appropriate to prove anticompetitive effects through direct evidence in place of market definition.").

 $^{^{133}}$ See Schencker, supra note 9 (quoting antitrust expert Jeff Miles claiming "[t]he FTC has not brought a cross-market merger case, but there's a good deal of . . . economic research going on looking into a theory under which they can be challenged").

¹³⁴ If the patient discharge data indicates that the parties operate within the same geographic market, traditional Horizontal Merger Analysis under the Horizontal Merger Guidelines should apply. *See* HORIZONTAL MERGER GUIDELINES, *supra*

First, to identify the potential for anticompetitive common consumer effects arising from a cross-market merger, regulators must closely analyze the geographic relationship between the merging parties. To begin, regulators should identify whether the merging parties operate any facilities within the same state and examine whether the parties negotiate with any of the same payors. The locations of the parties' facilities likely will be available publicly on the parties' websites or, if the merger involves a large enough value, in the parties' premerger notification filing. The regulators must then contact payors who offer plans in the regions the merging parties operate to determine if the parties negotiate with any of the same payors. If the parties operate facilities in the same state and negotiate with any of the same payors, anticompetitive common consumer effects are possible.

Next, regulators must obtain additional evidence from payors and employers to determine whether common consumer effects are likely enough to warrant blocking the merger. The regulator must examine more carefully the parties' patient discharge information to gauge the possibility that an employer operating within or in between the separate geographic markets of the merging parties might value the inclusion for both parties in its health plan for the benefit of its employees. 138 For example, in the hypothetical North Shore-South Shore merger, where the merging parties' facilities are a mere thirty miles apart and between them lays central Boston, it is likely that an employer would have workers who live in both the northern and southern suburbs. This hypothetical central Boston employer would want access to both of the merging providers in its health plan. Using patient discharge data, regulators can determine the distance patients are willing to travel for care at a given healthcare facility. 139 Figure 2, below, details how, by

note 7, at 13-14 (describing how to define a geographic market based on the location of customers).

¹³⁵ In general, payors must operate facilities in the same state in order to negotiate with the same payors. *See* Colias, *supra* note 106, at 33.

Addresses at which the parties conduct business must be included in the parties' premerger notification form. *Antitrust Improvements Act Notification and Report Form for Certain Mergers and Acquisitions*, FTC, https://www.ftc.gov/system/files/attachments/form-instructions/instructions_-_final_05-13-14.pdf [https://perma.cc/6GWU-U84E].

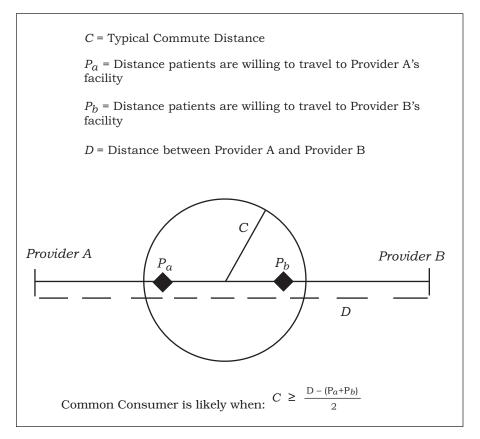
¹³⁷ See supra section II.A.1.

¹³⁸ See Vistnes & Sarafidis, supra note 4, at 255–57 and accompanying text.

 $^{^{139}}$ See, e.g., Fig. 1; supra note 89. The distance patients are willing to travel is represented by the edge of the patient discharge area for North Shore and South Shore.

using this information on patients' willingness to travel for healthcare and the typical commute distance for the area in which the merging parties operate, regulators may determine, as a threshold matter, whether any common consumers are likely to exist. 140

FIGURE 2: EXAMINING THE LIKELIHOOD OF A COMMON CONSUMER



In Figure 2, P_a and P_b represent the radius of the patient discharge areas for Provider A and Provider B's facilities respectively. Thus, if the distance between P_a and P_b is less than 2^*C , the diameter of the circle representing the typical commute distance for the metropolitan area in which Provider A and Provider B operate, an employer could draw a typical commuter from both Provider A and Provider B's patient discharge area. Therefore, as a threshold matter, under these conditions, a common consumer is likely to exist.

¹⁴⁰ ELIZABETH KNEEBONE & NATALIE HOLMES, BROOKINGS, THE GROWING DISTANCE BETWEEN PEOPLE AND JOBS IN METROPOLITAN AMERICA 3 (2015).

If, as a threshold matter, common consumers of the two merging parties are likely, then regulators should proceed by contacting large employers in the area of concern to determine if employers in the area value including both providers in its health plan. 141 If both providers are valued by local employers, the regulators should next interview payors to evaluate the bargaining power of the merging parties and the prospective power of the merged firm. Specifically, the regulators would need to determine if payors would be willing to drop the merged firm from its network if the firm threatened a SSNIP. 142 When obtaining evidence from payors, regulators must be mindful of the risk that payors will fabricate claims in order to shift bargaining power over providers in their favor. 143 Despite the fact that the merging parties operate in separate geographic markets, if the regulators determine that employers desire both parties in their health plans and payors would be unable to resist a SSNIP from the merged firm, then the common consumer effect is likely to cause an increase in prices following the merger and the regulator may choose to block the merger.

Next, the regulators must evaluate the potential for anticompetitive effects arising from cross-market subsidization of prices. Like the common consumer effect, for cross-market subsidization to occur, there must exist payors that negotiate with both parties. 144 If such common payors exist, regulators must examine the elasticity of demand for healthcare in the separate geographic markets of the merging parties. 145 Elasticity of demand is the absolute value of the ratio of the percent change in quantity demanded for a product to the percent change in price of that product. 146 An elasticity value less than one indicates that the market is inelastic while a value greater than one indicates that the market is elastic. 147 In an inelastic market, consumer demand is not heavily dependent on price while in an elastic market, consumers are highly sensitive to

¹⁴¹ See supra note 100 and accompanying text.

¹⁴² See HORIZONTAL MERGER GUIDELINES, supra note 7, at 9–10.

 $^{^{143}}$ Providers and payors are engaged in an ongoing battle over bargaining power in negotiations. See McCarthy & Thomas, supra note 59, at 2–5.

¹⁴⁴ See supra note 104 and accompanying text.

¹⁴⁵ Cross-market subsidization of prices occurs when the merged firm exploits differences in elasticity between the separate geographic markets of the merging parties. *See* Dafny, *supra* note 6, at 89–90 and accompanying text.

¹⁴⁶ JEANNE S. RINGEL ET AL., RAND, THE ELASTICITY OF DEMAND FOR HEALTH CARE: A REVIEW OF THE LITERATURE AND ITS APPLICATION TO THE MILITARY HEALTH SYSTEM 9 (2002).

¹⁴⁷ Furthermore, a value of zero indicates that the market is perfectly inelastic while an infinite value indicates the market is perfectly elastic. *See id.* at 10.

price when making their purchasing decisions. ¹⁴⁸ Therefore, in the context of healthcare providers, a provider in an inelastic market will lose fewer consumers following a price increase than a provider in an elastic market.

Calculating elasticity for healthcare services markets presents a unique challenge because the consumers who respond to price are payors rather than the patients who ultimately consume the services. He rom a payor's perspective, the value of including a provider in its plan increases as the number of possible substitute providers in that market decreases. Market concentration serves as a good proxy for market elasticity since a payor would be less sensitive to an increase in price in a market with many substitute providers. A highly concentrated market is likely to be inelastic while an unconcentrated market is likely to be elastic. Thus, in evaluating the elasticity of demand for a particular healthcare market, regulators should begin by calculating market concentration for the market.

Next, regulators should consider whether there is a significant difference in market concentration between the separate geographic markets of the merging parties, where one market is highly concentrated while the other is unconcentrated. A significant difference in market concentration suggests a parallel difference in elasticity between the markets. The merged firm could potentially exploit this difference in elasticity by raising prices in the inelastic market to subsidize predatory prices in the elastic market. Is such conditions are present, regulators should inquire as to whether payors would be willing to lose the merged firm from its network if the merged firm

¹⁴⁸ See id.

¹⁴⁹ See Argue & Shin, supra note 53, at 50.

¹⁵⁰ See Vistnes & Sarafidis, supra note 4, at 266–67.

¹⁵¹ See id.

¹⁵² See supra section II.A.2.

 $^{^{153}}$ To calculate the market share for a given provider, take the number of beds operated by that provider divided by the total number of beds in the market. *See supra* note 30 and accompanying text. Use the market shares for firms in the market to calculate the HHI market concentration. *See supra* note 31 and accompanying text.

An unconcentrated market has an HHI below 1500 while a highly concentrated market has an HHI above 2500. HORIZONTAL MERGER GUIDELINES, *supra* note 7, at 18; *see supra* note 31 and accompanying text.

¹⁵⁵ See Dafny, supra note 6, at 93.

¹⁵⁶ See id.

threatened a SSNIP.¹⁵⁷ If the payors will negotiate with the merged firm on a system-wide rather than a facility-by-facility basis, regulators should ask the payors whether they would be willing to pay the merged firm a higher price to keep coverage in the inelastic market. 158 Ultimately, if the merged firm would gain negotiating leverage because of its presence in the highly concentrated, inelastic market, the merger may result in significant anticompetitive effects due to cross-market price subsidization.

Proposed Analysis of Cross-Market Mergers by Courts

Under the current approach to granting preliminary injunctions in hospital merger cases, courts place great weight on market concentration. 159 However, market concentration may not paint a complete picture of the anticompetitive effects that may arise from cross-market mergers. As the economic analysis of cross-market mergers continues to improve, courts will give more weight to the antitrust regulators' arguments on potential anticompetitive effects. The amount of weight courts should give to the potential anticompetitive effects ultimately depends on the extent to which the conditions surrounding the merger suggest the potential for harm to consumers. 160 This section assumes that the evidence presented by the regulators is sufficient to establish a prima facie case that the merger will result in anticompetitive effects. In response, the merging parties may offer an improvement in care or a price efficiencies defense to argue that the merger is not in fact anticompetitive. This subpart examines how courts should evaluate these defenses in light of the goals of the ACA, the true motives behind the merger, and the unique aspects of cross-market mergers that present challenges to achieving efficiencies.

Courts should be wary of improvement in care defenses where the primary motivation behind the merger was to reduce costs or increase the bargaining power of the merged firm. The merging parties may allege that an increase in price following the merger does not reduce consumer surplus because it is offset by an improvement in quality. Courts should give great

The merged provider can exploit the payor's need to offer coverage in the inelastic market by charging a higher price for this market individually or for its system as a whole. See id.

¹⁵⁸ See id.

See Garza, supra note 38, at 4.

The court must evaluate whether the conditions surrounding the merger are such so as to give rise to the common consumer effect or cross-market price subsidization. See section III.C.1.

weight to this defense since the ACA expresses Congress' intent to encourage healthcare providers to improve quality of care. ¹⁶¹ The merging parties may use average reserve margin as a proxy for quality to argue that the merger improves quality of care by increasing the level of resources available per patient. ¹⁶² The merging parties may also claim that the merger will improve system-wide access to physicians. ¹⁶³ However, regulators and courts may be able to undermine the improvement in quality of care defense if correspondence between the merging parties indicates that a primary motivation behind the merger is to reduce costs or eliminate competition. Courts should be skeptical of alleged improvements in quality where the primary motivation of the merger is cost reduction, since effective clinical integration is typically not found where a merger was initiated to reduce costs or increase bargaining power with payors. ¹⁶⁴

The merging parties could also contend that the merger will produce price efficiencies that would enable the merged firm to lower costs and pass the savings on to consumers. This efficiencies defense contends that increasing the scale of production would allow the firm to allocate resources more efficiently, reducing the length of patient stays without compromising quality. Generally, however, to take advantage of economies of scale, the healthcare facilities in the merged firm must be able to effectively coordinate their operations. Thus, courts should discount this defense when the distance between the merging parties makes it unlikely that the merged firm will be able to effectively coordinate its operations to improve care. Because patients are so concerned with convenience when selecting healthcare providers, in some

 $^{^{161}}$ $\,$ See Patient Protection and Affordable Care Act \S 3025, supra note 72 and accompanying text.

See Pautler & Vita, supra note 115, at 124.

¹⁶³ Scott Baltic, Monopolizing Medicine: Why Hospitals' Quest to Control Healthcare Costs is a Losing Game, 91 Med. Econ., Feb. 25, 2014, at 20, 27 ("[C]onsolidation...undertaken 'primarily for the purpose of enhanced bargaining power with payers'... did not lead to true integration nor to enhanced performance." (quoting Martin Gaynor & Robert Town, The Impact of Hospital Consolidation-Update, Synthesis Project (2012))).

¹⁶⁴ See id.

See Aileen Clarke, Why Are We Trying to Reduce Length of Stay? Evaluation of the Costs and Benefits of Reducing Time in Hospital Must Start from the Objectives that Govern the Change, 5 QUALITY IN HEALTH CARE 172 (1996) ("[R]eductions of time spent in hospital will reduce costs without compromising patient outcomes.").

¹⁶⁶ See Davis, supra note 5 ("Population health management means services must be coordinated This requires hospital systems to provide a full suite of services for their patient populations, warranting expansion through acquisitions of other hospitals").

cases they will be unwilling to travel to a distant facility, even if it is better suited for treating that patient than a nearby facility. 167 One estimate suggests that patients are willing to travel a maximum of seventy-five miles for healthcare. 168 This means that the ability of the merged firm to direct patients to the most efficient and highest quality treatment option is limited by the distance patients are willing to travel for healthcare. 169 Since the merging parties to a cross-market merger operate in separate geographic markets, any plan to improve quality of care would only be viable if the parties can show that patients would be willing to travel the distance between the separate geographic markets in order to receive healthcare. 170

CONCLUSION

Cross-market mergers between healthcare providers, until recently viewed as harmless by antitrust regulators and courts, may have anticompetitive effects that harm American consumers. The potential for anticompetitive effects from cross-market healthcare provider mergers is greatly enhanced by the fact that healthcare mergers are occurring more frequently now more than ever and being driven by the incentives of the ACA.¹⁷¹ Regulators have already shown a willingness to address this problem, but with relatively few sources of economic proof indicating price effects following cross-market mergers, the FTC and the DOJ are left with little ammunition to block a potentially anticompetitive cross-market merger in court. As economic analysis of cross-market mergers improves, regula-

See supra note 23 and accompanying text. Patients' willingness to travel for healthcare varies across different regions of the country. For example, data from the Washington State Office of Financial Management show that an average adult is willing to travel 20.4 miles for routine care and twenty-two miles for urgent care. Wei Yen, Wash. State Off. of Fin. Mgmt., How Long and How Far Do ADULTS TRAVEL AND WILL ADULTS TRAVEL FOR PRIMARY CARE? (2013), http://www .ofm.wa.gov/researchbriefs/2013/brief070.pdf [https://perma.cc/P6L2-J3DF].

See Lewis & Pflum, supra note 80, at 22.

Based on the Lewis-Pflum estimate, a patient living at the midpoint between the merging parties' facilities would be willing to travel seventy-five miles in either direction for care, meaning that the facilities must be a maximum of 150 miles apart in order to result in an improvement in quality of care. See id.

 $^{^{170}\,\,}$ For example, consider the hypothetical merger between North Shore and South Shore discussed in section II.A.1. Although North Shore and South Shore do not currently attract the same patients, the parties, by taking a survey from their current patients, may be able to show that their patients would be willing to travel thirty miles further to use the other facility, especially to receive specialized care.

¹⁷¹ See supra note 5 and accompanying text.

tors will be able to predict more accurately the conditions that cause cross-market mergers to increase prices.

By and large, price increases following cross-market mergers are due to the increase in bargaining power the merged firm gains over health insurance payors with whom the merging parties negotiated prior to the merger. Increased bargaining power following a cross-market merger may result from either the common consumer effect or cross-subsidization of prices. This Note sets forth tactics regulators may employ to identify conditions that lead to these effects so that regulators may block anticompetitive cross-market healthcare provider mergers before they are consummated. To assist in identifying the potential for the common consumer effect, this Note offers a threshold analysis whereby regulators may use both consumers' willingness to commute in an area and consumers' willingness to travel for healthcare to suggest the potential for a common consumer between two merging parties. In the future, regulators may improve upon this threshold analysis by accounting for population distribution in the area between the providers as well as workers that commute further than the typical commute distance for the relevant area. Furthermore, with more information on the actual economic effects of crossmarket mergers, regression analysis might be used to identify a causal relationship between the existence of common consumers or a differential in market elasticity between the merging firms and increases in price for healthcare following a merger.172

This Note advocates taking a more open approach to the traditional balancing of anticompetitive and procompetitive effects of mergers. Courts must consider both arguments from the regulators suggesting conditions surrounding the merger that indicate the potential for price increases and arguments from the merging parties that the merger will in fact result in higher quality care or efficiencies leading to lower prices. Advising courts on a general course of action is difficult because there is a broad range of ways in which modern courts analyze efficiencies defenses. The surthermore, courts must not place too much weight on potential anticompetitive effects so as to prevent or deter beneficial mergers that further Congress' in-

¹⁷² See Alan O. Sykes, An Introduction to Regression Analysis 3 (Univ. of Chi. Law Sch., Law & Econs., Paper No. 20, 1992), http://www.law.uchicago.edu/files/files/20.Sykes_.Regression_0.pdf [https://perma.cc/V79G-6ZGX] (explaining how regression analysis may be used to test hypotheses "about the relationship between the variables of interest").

¹⁷³ See supra section II.A.3.

tent of improving care embodied in the ACA.¹⁷⁴ This Note provides guidance on when courts should discount the merging parties' improvements in quality and price efficiencies defenses in light of the likelihood of anticompetitive effects.