PUBLICATION

Anatomy of a Provider Antitrust Merger Challenge (Part 4) [Ober|Kaler]

2015

This is the fourth in a six-part series discussing the Federal Trade Commission's challenges to provider mergers. Following the initial Introduction and Background (Part 1), the series discusses The Need for Early Legal Advice (Part 2), The Investigatory Process (Part 3), Analyzing the Merger's Likely Effect on Competition (Part 4), and Rebutting the Prima Facie Case (Part 5), then offers a Conclusion (Part 6) to summate the factors that must be considered in an informed approach to provider mergers.

The series is based on Mr. Miles' presentation at the American Health Law Association Physicians and Hospitals Law Institute on February 2 and 3, 2015.

Part 4: Analyzing the Merger's Likely Effect on Competition

How will an antitrust enforcement agency or a court analyze the merger's likely effect on competition and thus its lawfulness?

A merger is unlawful under section 7 of the Clayton Act if it *may* lessen competition substantially.1 The agency need not prove that the merger *will* substantially lessen competition, but only a "reasonable probability" of that effect in the future.2 If the parties have not consummated the transaction, the agency and court must *predict* its likely effect on competition3 based on circumstantial evidence. If the transaction has been consummated for a period of time, however, there may be post-acquisition direct evidence of its effect.4

Horizontal Merger Analysis

A merger between competing hospitals or between competing medical practices is a horizontal merger. The same is true of hospital acquisitions of physician practices when the hospital already controls physicians in the same specialty as the acquired physicians or when the hospital acquires competing practices.5 The FTC and Department of Justice *Horizontal Merger Guidelines* are the starting point for understanding how the agencies analyze the potential antitrust ramifications of a merger between competitors. The *Guidelines*, while not "binding on the courts and agency . . . are highly persuasive authorities as a 'benchmark of legality.'"6 They explain how the agencies go about analyzing the transaction's competitive effects, and every modern merger decision applies them. Of course, a review of recent merger decisions is also important.

The *Merger Guidelines* explain that "mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise."7 In general, a merger creates, enhances, or entrenches market power when it permits the merged firm, by itself, to exercise market power. The transaction facilitates the exercise of market power when it results in a sufficiently concentrated market that the merged firm and others are likely to engage in interdependent competitive actions, such as an oligopoly would, to exercise market power jointly. Market power results when the transaction permits "one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives."8 More specifically, market power is the ability of a firm, or a group of firms acting jointly, to significantly increase price above the competitive level for a significant period of time without losing so many sales that it or they must rescind the price increase—i.e., the ability to profitably raise price.9

To determine a merger's lawfulness, the agencies and courts apply a “burden-shifting” framework.10 The government bears the initial burden of proving reasonably probable anticompetitive effects, typically through quantitative proof of the merged firm's post-merger market share, level of market concentration, and increase in those variables from the merger. If it sustains this burden, it has proved a prima facie case—i.e., a rebuttable presumption arises that the merger is unlawful.11

The burden of going forward then shifts to the merging parties to show that the government's market-share and concentration statistics fail to accurately forecast the merger's likely effect on competition. The defendants can challenge the government's definition of the relevant market and its statistics, and present evidence of other factors indicating that the merger is not likely anticompetitive. If they fail, the government wins. If they successfully rebut the government's prima facie case, the burden of going forward shifts back to the government to rebut the defendants' proof or introduce additional evidence that, on balance, the transaction likely would have anticompetitive effects—with the ultimate burden of persuasion always on the government.12

Defining the relevant market

Merger analysis usually starts with definition of the relevant product and geographic markets in which competitive effects from the transaction will likely be felt—necessary for calculation of market shares and market concentration.13 The Merger Guidelines state clearly, however, that the competitive-effects analysis need not start with definition of the relevant market14 since market definition is merely one of several potential tools to aid in predicting the transaction's effect on competition.

Markets have buyers and sellers. In provider-merger cases, there are two sets of buyers: health plans or other third-party payors, who negotiate and pay for the services, and patients, who obtain the services. Assessment of the merger's effect on competition must examine the competitive impact on both. The agencies employ a two-stage model of competition among providers. In the first stage, hospitals compete against one another, based primarily on the reimbursement they're willing to accept to become participants in the health plan's network. Once the network is set, hospitals compete to attract members of the health plans with which they have contracts. This competition, to a large extent, is based on non-price variables such as the providers' location, reputation, and amenities.15 The competitive analysis of provider mergers has focused primarily on the first stage and whether the merger will likely lead to higher reimbursement. But the second stage cannot be overlooked, particularly because of its importance when reimbursement is fixed by government fiat, such as in the traditional Medicare program.

The relevant product market

Defining the relevant product market requires identifying those products or services (and the firms providing them) to which a firm's customers could turn if the firm were to attempt to raise its price by a significant amount—i.e., reasonably interchangeable substitutes for the firm's product. To define relevant product markets, the agencies, and more and more the courts, apply the “hypothetical monopolist” test.16 This is a relatively theoretical construct. The analyst chooses the narrowest product offered by both merging parties (call it the “candidate market”), assumes a true monopolist (a single present and future seller) of that product, and asks whether the hypothetical monopolist could *profitably* increase its price a small but significant amount (typically by five or ten percent) for a significant period of time. The price increase would be profitable if the profit the monopolist would lose from the price increase as customers substituted other products were less than the profit the monopolist would gain from customers continuing to purchase the product from it at the higher price.

Thus, the analysis focuses on identifying available substitute products for the monopolized product and the degree to which the monopolist's customers would divert to those substitutes as a result of the price increase. If the price increase would be profitable, the analysis stops and the relevant product market includes only that product. But if the price increase would not be profitable—because too many customers would switch to other

products to avoid the price increase—the product market must be expanded to include the next-best substitute. Substitute products are added to the candidate market until it includes the smallest number of products such that a price increase of all by a hypothetical monopolist would be profitable.

Thus, importantly, the relevant product market does not usually include *all* products to which some customers of the firm attempting to raise price might switch to avoid the hypothetical price increase. Rather, under this "smallest market principle," it includes only those closest substitute products that, together, would prevent a profitable price increase because a sufficient amount of the monopolist's business would switch to them. So, for example, merely because some health-care services can be rendered on either an inpatient or outpatient basis does not mean that both are in the product market because, as numerous courts have found, they are not substitutable in the sense that health plans can sell plans covering outpatient, but not inpatient, services. The availability of outpatient services would not prevent a monopolist of inpatient services from profitably raising its price for inpatient services.17

Normally, in hospital-merger analysis, different hospital services (e.g., gall bladder and hip-replacement surgery) are clustered into a single *cluster market*, denominated as "inpatient general acute-care hospital services," even though the services are not substitutes for one another.18 Clustering different services substantially reduces the complexity of analyzing the transaction: instead of having to analyze the competitive effect of the transaction in a plethora of service markets, the analysis can focus on just one. The questions become the circumstances in which clustering services is appropriate and the services that should be clustered.

The FTC's position, and that accepted by the Sixth Circuit in *ProMedica*, is that services offered under "similar competitive conditions" whether substitutes or not, can be clustered into a single relevant product market. The Sixth Circuit explained that "there is no need to perform separate antitrust analyses for separate product markets when competitive conditions are similar for each."19 Thus, for example, to the extent that all the relevant firms sell the services in question and their market shares of those services, the geographic markets for the services, and entry barriers to providing the services are similar, those the services can be clustered into a single relevant product market because "the antitrust analysis should be similar for each of them."20 On the other hand, to the extent that different services are not provided under similar competitive conditions, they should be excluded from the product market and may require separate analysis. In *ProMedica*, for example, obstetrical services were broken out of the cluster of inpatient general acute-care hospital services into a separate product market because not all the relevant hospitals provided them and their geographic market was likely smaller than that for the cluster of other inpatient general acute-care hospital services.21

The product market includes only those services provided by both merging hospitals. For example, if only one of the merging hospitals provides tertiary services, those services are not part of the cluster. In addition, the product market does not include the services of Veterans Administration hospitals, or, typically, specialty hospitals. The former are excluded because they are not substitutes for the general population; if a monopoly non-VA hospital raised its prices, health plans and their members could not substitute VA hospitals. As to specialty hospitals, their limited services are rarely sufficient to constrain the market power, if any, of general acute-care hospitals. A health plan needing inpatient general acute-care services could not substitute a children's hospital. But if the competitive concern from a merger of general acute-care hospitals (or between a general acute-care hospital and specialty hospital) were limited to a single specialty service offered by both, e.g., pediatric hospital services, then the product market would include the services of a children's hospital and be limited to those services. Lastly, because prices of governmental programs are fixed by the government and not subject to any market power over price the merger might generate, the product market is usually limited to the sale of services to commercial payors.

In analyzing physician-practice mergers, relevant product markets are usually defined based on medical specialties—e.g., cardiology services.22 But the product market may be broader than a single specialty where the services provided by two specialties overlap to the extent that physicians in those specialties are highly substitutable for one another in the eyes of patients and thus health plans.23 For example, in an Antitrust Division Business Review Letter discussing the formation of a contracting network of colorectal surgeons, the Division indicated that the product market was not limited to colorectal surgeons, but would include general surgeons as well because they provided many of the same services as colorectal surgeons and thus were highly substitutable in the eyes of health plans. Similarly, internists, general practitioners, and family practitioners may be clustered into a single “primary-care physician services” market.24

The relevant geographic market

The agencies and, in more recent times, the courts also apply the hypothetical monopolist framework in defining the relevant geographic market.25 Thus, for a hospital merger, the analyst assumes, in effect, that the merger would result in a monopolist of inpatient acute-care hospital services, determines the smallest possible candidate geographic market, and asks whether the monopoly hospital could profitably raise prices or whether a sufficient amount of business would divert to other hospitals that the price increase would be unprofitable. Applying the smallest-market principle, if the price increase would be profitable, the relevant geographic market would consist of only the merged hospital; no other hospitals would constrain its ability to profitably raise prices.26 But if the hospital were unable to profitably raise price because health plans could exclude it from their networks it by diverting or “steering” sufficient numbers of their members to more distant hospitals, the candidate market would be too small and require expansion to include the next-best geographic alternative.27 Similar to product-market definition, more distant substitutes are added until the geographic market includes only those hospitals sufficient such that a price increase by them together would be profitable because too little additional business would divert to yet more distant hospitals.

The extent to which more distant alternatives are reasonable substitutes to health plans depends in large part on the extent to which the health plan's members are willing to travel to those hospitals for services. A health plan's forcing members to use more distant facilities may adversely affect its competitive viability; members may drop the plan if forced to travel significant distances. Patient-discharge data indicating from where providers obtain their patients and the locations to which area patients go for services can provide some indication of the willingness of area patients to use more distant providers and thus provide some insight into the scope of the geographic market, but it is, at most, only a starting point. While older hospital-merger cases relied heavily on “Elzinga-Hogarty” analysis,28 which bases geographic-market definition on patient in-migration and out-migration from a given candidate market, that methodology has been heavily criticized, even by one of its authors, in the context of hospital mergers, and the FTC rejects it.29 Patient in-migration and out-migration data, however, showing the areas to which patients travel for hospital services, remain relevant because they provide health plans with some indication of their members' hospital preferences and thus some indication of the value of particular hospitals to their networks.30 The ultimate task, however, is to identity the smallest area and smallest set of alternative providers, if any, that prevent the merged provider from profitably raising price because of the amount of business it would lose.

A number of hospital-merger decisions in the 1980s and 1990s, relying primarily on patient-discharge data showing that *some* area residents used or could use distant hospitals if the merged hospital raised prices, delineated quite broad relevant geographic markets, resulting in relatively low post-merger market shares, low market concentration, and thus government losses. When the hypothetical monopolist framework is applied instead—including only those hospitals, if any, that would prevent the merged hospital from profitably increasing price, geographic markets for hospital mergers shrink considerably and normally are local—e.g., a city, a county,31 or parts of several counties at most.32 Because of strong patient preference for treatment close to home, most patients eschew more distant providers, meaning that health plans must include more

nearby providers to remain competitively viable. This shrinkage in the scope of relevant geographic markets has resulted in a sea change in the FTC's success in challenging provider mergers.

But just because other providers do not constrain the provider in question and thus are not “in” the relevant geographic market, they are still relevant to the merger analysis. To the extent they serve patients located in the geographic market, the *Merger Guidelines* deem them market participants, and, in calculating the merged provider's post-merger market share and the level of market concentration, they have shares.33 For example, although the merged hospitals in the *Evanston* hospital-merger case were the only hospitals in the geographic market because the merged hospital profitably raised prices post merger, it was not a monopoly in the sense of having a 100 percent market share. Rather, other hospitals, located outside the relevant geographic market served patients residing within the market and thus had market shares as well.

In general, the scope of relevant geographic markets in physician-merger cases depends to a large extent on the sophistication of the specialty involved in the transaction. The relevant geographic market for primary-care services is obviously smaller than that for more complicated medical services such as open-heart surgery. That patients may be willing to travel farther for more complicated services should mean that health plans can substitute more distant physicians, thus avoiding a price increase by the local merged practice. Still, however, given their choice, patients would prefer to use more local physicians. Typically, the relevant geographic market for primary-care physician services is quite local. For example, the district court in *St. Alphonsus* found the relevant geographic market for primary-care physician services limited to a single town, and the Ninth Circuit affirmed. The district court relied primarily on patient-flow data and health-plan testimony. About the former, the court noted that some 68 percent of the town's residents who obtained primary-care physician services obtained them from providers located in the town and that many of those obtaining services elsewhere did so only because they worked outside the area. And health-plan representatives testified that their plans could not construct marketable networks without primary-care physicians located in the town and thus that a hypothetical primary-care physician services monopoly in the town could profitably raise prices.34

In assessing the scope of relevant geographic markets, important types of evidence are the parties' own documents indicating their scope of coverage, the location of possible substitutes for the merging parties such as locations where patients in the candidate market obtain care or would be willing to travel for care, and the views of health plans about their ability to circumvent the hypothetical price increase from the merger. The last is particularly important. In essence, the agencies ask health plans to assume that the merged provider would attempt to raise prices by a certain amount and then ask whether the plans would have to accept the price increase to market a competitively viable network or whether they would have sufficient alternative providers to whom they could turn if they refused to contract with the merged entity.35 Regardless of the answer, the agencies would press for a detailed explanation for the plans' conclusions. If the plans indicated that they would not be forced to contract with the merged firm, the question would become to which providers they could turn if they excluded the merged firm from their networks. These providers would be added to the geographic market. If, however, the plans answered that they would have to accept the increase—that the merged provider would be a “must have” provider—and gave a detailed and convincing explanation why—the geographic market would include only the merging providers. And if the merger had been consummated for a significant period, economic evidence showing that the merged provider actually increased prices significantly *as a result of market power obtained through the merger* would constitute strong evidence that the geographic market is limited to the merged provider (and also that the merger was unlawful).

In defining relevant geographic markets, it's helpful to focus not so much on attempting to delineate a *geographic area* but rather on identifying those *firms*, if any, that, based on their locations, would prevent the merged firm from profitably raising prices.

Analyzing competitive effects from horizontal acquisitions

The ultimate question the agency and, if the transaction is challenged, the court must decide is whether the merger is likely to create, maintain, enhance, or facilitate the exercise of market power. These results might come about in one or both of two primary ways. First, the merger might permit the merged firm, *by itself*, to exercise market power and raise prices simply from the destruction of direct competition between the merging parties. The *Merger Guidelines* refer to this as "unilateral effects."36 Second, the increased level of market concentration from the merger may facilitate interdependent decision making among the merged firm and its competitors, easing their ability *jointly* to raise prices through an agreement (unlawful under section 1 of the Sherman Act) or tacit collusion (not unlawful under section 1 because an agreement is lacking). Even absent an agreement on prices, the merger might increase the probability of consciously parallel competitive actions. The *Merger Guidelines* refer to this as "coordinated effects." While provider mergers can raise both concerns, most challenges focus on unilateral effects.

Unilateral effects

Unilateral effects result from the loss of direct competition between the merging parties—i.e., the merger permits the merged firm to raise prices regardless of the actions of other competitors. The probability that the merger would yield this effect depends primarily on the degree of substitutability between the merging providers in the eyes of their customers compared to the degree of the merging parties' substitutability with other competitors. All providers are not perfect substitutes for one another in the eyes of patients and health plans. They offer "differentiated" rather than "homogeneous" services—i.e., customers have preferences among different providers and some are more substitutable than others.37 Their differentiation is based on factors such as location, available services, reputation, personality, and amenities. For example, a suburban hospital, for a patient living between two downtown hospitals, is not as substitutable for either downtown hospital as they are for each other, all else equal. In assessing the probability of unilateral effects from a merger, the greater the degree of direct competition between the merging providers, or the greater the degree of their substitutability for one another compared to the degree of substitutability between them and other area providers, the greater is the probability that the merged provider, by itself, can and will profitably raise price.38

The technical explanation of unilateral-effects analysis and the econometric tools that can be applied to assess its likelihood is rather complicated and beyond the scope of this article.39 But the logic is not. Through selective contacting resulting from bilateral bargaining with individual providers, health plans drive providers to compete to become participating providers in their networks by the threat of excluding those that demand, in the plan's view, excessive reimbursement. Assuming that the provider is popular, a plan's threat to exclude that provider from its network is credible only if close substitutes for it exist—substitutes to which the plan can turn if it excludes the provider from its network because the provider refuses to offer a competitive price. A merger between any competing providers decreases the alternatives available to the plan. This typically raises no antitrust problem if the merging parties are poor substitutes for one another and there are good substitutes to which the plan can turn if the merged provider attempts to raise price. But the merged provider may obtain market power where the merging hospitals are stronger substitutes, particularly if each is the other's closest substitute in the sense that they are the first and second choices of a significant number of patients.40

The ultimate contract price in provider-payor negotiations depends on the relative bargaining power of the parties. The provider's power is a function of its value to the plan. Its value to the plan depends in large part on its popularity with plan members and whether close substitutes for it would be available if it attempted to raise prices significantly. If close substitutes exist (and the plan can reach agreement with them), the provider likely has little power because it has lesser value to the plan—the plan can exclude it and turn to one of its highly substitutable competitors. But to the extent the plan must turn to a less substitutable provider to exclude the provider in question, its network becomes less attractive, its competitiveness suffers, and the value of the excluded provider to the plan increases—increasing that provider's leverage to successfully demand higher reimbursement.

In the example of the downtown hospitals above, their merger would be much more likely to result in unilateral effects than a merger between one of them and a suburban hospital because a significant number of health-plan patients residing downtown might strenuously object to the plans' attempting to force them to travel to the suburbs; to paraphrase the district court in *St. Alphonsus*, “After the Acquisition [between the two most substitutable competitors], if a health plan removed [the merged hospital] from its network in Nampa, patients would be forced to chose their third best option. That is not an attractive option for a health plan trying to market that network to patients who live in Nampa.”41

Before the merger, health plans could play the two most direct competitors (in *St. Alphonus*, the defendant hospital's physicians and the acquired physician group) off against each other; because of the close substitutability of the other, each had a relatively low value to the plans and thus the threat of excluding one or the other would induce both to offer competitive prices. After the merger, depending on how less substitutable the other hospitals are from the merged hospital, the threat to exclude the merged hospital loses some or all of its credibility. It becomes a must-have facility. The merged hospital recognizes the adverse effect its exclusion would have on the plan; the merger has increased its bargaining power in negotiations with health plans; and it can obtain significantly higher reimbursement than the merging hospitals could have obtained prior to the merger.

The degree of substitutability between the merging providers can be estimated or calculated by the “diversion ratio”—that is, assuming that one of the merging parties were to raise its price, the percentage of its customers diverting to other substitutes that diverted to the other merging party,42 or, assuming that one of the merging providers exited the market, the percentage of its patients that would divert to the other merging party rather than to their other competitors. The larger the diversion ratio, the greater is the likelihood of unilateral effects. Even more important is the “value of diverted sales,” i.e., the diversion ratio multiplied by the contribution margin of those sales. The higher the value of diverted sales, the more likely the merger will generate unilateral price effects.

The agencies have developed econometric models, using primarily claims data from health plans (to which the merging parties will lack access short of litigation), for estimating, based on patient preferences for different hospitals, the value of the various hospitals to health plans and then predicting the amount by which the merger would permit the merged hospital to raise price because of the change in its value from the merger. The primary model, known as “willingness to pay”43 or “upward pricing pressure” or “UPP,” has been criticized, however, because, absent consideration of efficiencies, it results in at least some unilateral effects from *any* merger between competitors regardless of their degree of substitutability.44 But the agencies have explained that these model results are not themselves determinative in agency decisions whether to challenge a transaction, but rather are used only in conjunction with other evidence indicating that the merger likely will have adverse unilateral effects.45

The post-merger level of market concentration is not particularly relevant in a unilateral-effects analysis. It says little, if anything, about the likely market power of the merged firm post merger,46 even though a number of courts, for unexplained reasons, have relied on market-concentration levels in finding that the FTC proved a prima facie case.47 The merged firm's post-merger market share, while not a crucial variable in the analysis, can, in limited circumstances, shed some light on the potential for a unilateral price increase because it can suggest the importance or value of the various hospitals to health plans.48 For example, a hospital with a 60 percent market share, all else equal, is likely more valuable to a health plan than one with a 10 percent share. Moreover, the Sixth Circuit in *ProMedica* relied on evidence showing a direct correlation between the market shares of area hospitals and the level of their reimbursement from health plans—the larger the share, the higher the reimbursement.49 But the key variable remains the strength of competition or degree of substitutability between the merging parties compared to that between them and other area providers—the value of diverted sales. Indeed, because unilateral-effects analysis does not rely on either market shares or

market concentration, it is not necessary, as a matter of logic, to define a relevant market, although the case law requires that such be done.

The discussion thus far relates primarily to unconsummated mergers where the agency and court must *predict* the merger's likely effect on competition based on circumstantial evidence. If the merger has been consummated for a significant period of time, it may be possible to determine its actual effect through direct evidence. In *Evanston*, for example, the merger was challenged four years after it closed. The FTC was able to examine the transaction's actual effect on prices by comparing the merged hospital's price increases post merger with those of control groups of similar hospitals facing similar economic conditions and, through regression analysis, controlling for a number of variables other than market power that could explain the merged hospital's greater price increases.50 An important point from the case is the recognition that many factors can result in post-merger price increases, and thus that the agency must prove that the cause was increased market power from the merger and not other factors.

Coordinated effects

The merger's effect on market concentration—that is, the number of firms in the market and their relative market shares—although not helpful in assessing unilateral effects—is crucial when the concern is the potential for coordinated effects. A merger raises coordinated effects concern when it "diminish[es] competition by . . . encouraging post-merger *coordinated interaction* among firms in the relevant market that harms customers."51 The *Merger Guidelines* explain that coordinated interaction "involves conduct by *multiple firms* that is profitable for each of them only as a result of the *accommodating reactions* of the others."52

The merger, of course, decreases the number of competitors. The concern is that this may result in sufficiently few competitors that it facilitates interdependent, consciously parallel competitive behavior among them. Each refuses to lower price because it knows (or at least predicts) that its competitors will do the same. It thus gains no market share and its price cut is unprofitable. If it raises its price, it anticipates that the others will follow, and it loses no market share. The number of firms matters because the fewer the firms in the market, the easier it is for them to coordinate competitive actions and reactions—and the easier it is to detect "cheating" by firms on the tacit arrangement to raise, or not lower, prices.53

Thus, the key variables in assessing the likelihood of coordinated effects are the level of post-merger market concentration and the effect of the merger on that level. To make such an assessment, the agencies and courts calculate the post-merger Herfindahl-Hirshman Index (HHI), an index of market concentration, and the amount by which the merger increases the index.54

The *Merger Guidelines* explain that if the post-merger HHI is less than 1,500 or the increase in the HHI from the merger is less than 100, the transaction "ordinarily requires[s] no further analysis."55 In essence, these are antitrust "safety zones." An HHI less than 1,500 signifies an unconcentrated market. If the HHI is between 1,500 and 2,500, the market is moderately concentrated. But still, the merger typically requires no further analysis if it increases the index by 100 or less; if more, further analysis is warranted, particularly examination of qualitative factors suggesting whether the market is susceptible to coordinated interaction and whether the merger would be profitable. If the HHI is above 2,500, the market is highly concentrated, but still no issue arises if the index increase from the merger is less than 100. But further analysis is warranted if the increase is between 100 and 200, and, if the index increase is more than 200, the Guidelines explain that the transaction "will be presumed to be likely to enhance market power" and thus is rebuttably presumed unlawful:56 The government has made a prima facie case.57

If the degree of post-merger market concentration is of concern, the agencies consider other, qualitative factors addressing the susceptibility of the market to coordinated interaction. These include whether the market has a history of collusion, whether the services offered by the competitors are homogeneous or differentiated,

the degree to which firms can identify the prices of their competitors (e.g., whether there are any agreements to exchange pricing information), and the like.58

Whether the concern is unilateral or coordinated effects, the agencies examine a plethora of variables in determining whether they can prove their case in chief. Indeed, the *Merger Guidelines* state, not surprisingly, that they "consider any reasonably available and reliable evidence to address the central question of whether a merger may substantially lessen competition."59 The "closeness" or substitutability of the merging parties compared to others, market share, and market concentration are obviously important. But the recent hospital and physician merger initiatives suggest that as important are (1) the intent and effect documents and statements of the parties and their consultants discussing the transaction's likely or actual effect on prices, (2) the testimony of health-plan representatives regarding whether the transaction will permit the merged provider to significantly increase prices and, related to that, the alternatives, if any, the plans have to circumvent any attempted price increase, and (3) the econometric work of experts predicting the effect of the merger on prices or, in the case of a consummated transaction, proving its actual effect on prices.

The post-merger market shares (and the HHIs) in hospital mergers challenged by the FTC have been quite high—e.g., about 58 percent in *ProMedica* (and 80 percent in the separate market for obstetric services) and 59 percent in *OSF*. In two proposed hospital mergers abandoned prior to trial after FTC challenges, the alleged shares were 73 percent (in the proposed Inova Health System/Prince William Medical Center acquisition in northern Virginia),60 and between 49 and 72 percent (in different product markets) in the Reading Health System/Surgical Institute of Reading transaction in Reading, Pennsylvania.)61 In the *St. Alphonsus* physician-acquisition decision, the court found the acquiring hospital would include some 80 percent of the market's primary-care physicians. And in the FTC's challenge to Renown Health's acquisition of two competing cardiology practices in Reno, Nevada, the FTC alleged that Renown would employ some 88 percent of the area's cardiologists.62 But in *OSF*, where the FTC challenged the merger of two Rockford, Illinois hospitals and the combination of their employed primary-care physicians, the alleged post-merger market of primary-care physician services would have been only 37 percent.63 In blocking the merger because of its effect in the market for hospital services, the court did not reach the claim involving physicians, although it noted that several factors made it "less likely that the FTC [would] prevail on its claim involving the PCP market" than its claim involving hospital services.64

Vertical acquisitions—analyzing competitive effects

A vertical merger results from the acquisition by a party at one level in the chain of distribution or production of a party at another level in that chain—a firm's merger with an upstream input supplier or a downstream customer, or a provider of a complementary product or service. Even where a hospital's acquisition of a physician practice raises no horizontal issue, it may raise vertical concern. The acquisition is vertical in the sense that physicians control an input for hospitals—patient admissions.

The *St. Alphonsus* case alleged both horizontal and vertical effects. The acquiring hospital already controlled a group of physicians that competed with the acquired group—a horizontal merger challenged by the FTC and the state. But in addition, two competing hospitals alleged that the acquired group previously admitted patients to them and the acquisition would foreclose them from the group's admissions because the group would admit only to the acquiring hospital—a vertical theory. The claims implicated different relevant product markets and different competitive effects—the horizontal claim affecting the market for physician services and the vertical affecting the market for hospital services. The district court did not reach the vertical claim, finding the acquisition unlawful under the FTC's horizontal theory.

Challenges to vertical mergers are relatively rare,65 and the appropriate analysis is much less developed and much less clear than that of horizontal mergers. But the usual primary concern is the merger's foreclosure effect on competitors of the acquiring entity and, more important, the effect on its market power. The plaintiff hospitals' claim in *St. Alphonsus*, for example, was that the defendant hospital's acquiring a large group of primary-care physicians that had been admitting patients to both the plaintiff hospitals and the defendant hospital would foreclose such a large amount of business from the plaintiffs that the defendant's market power in the market for hospital services would increase significantly.66

Although most courts focus on the percentage of the market foreclosed by the merger, there is no black-letter foreclosure percentage that raises concern. Rather, the question is the effect of the foreclosure on the ability of the acquiring firm's competitors to prevent the acquiring firm from obtaining, maintaining, or increasing its market power. Answering the question involves complicated factual examinations of the effect of the foreclosure on the competitors' costs, ability to achieve scale economies, and profits—basically whether enough competitors will remain viable, strong competitors to keep the acquiring firm's unilateral market power in check or whether the market may become so concentrated that coordinated effects can be expected.

The *St. Alphonsus* court did not reach the vertical claim or address any of the relevant economic variables. It did note, however, that although the acquired group retained full discretion to admit patients to any hospital its members chose, “in practice, that discretion has been exercised to favor the hospital where the physician was employed” and it was “virtually certain that this trend will continue and [the acquired group's] referrals to [the acquiring hospital] will increase.”67 But the court made no findings on the likely degree of foreclosure, or the effect of any foreclosure increase from the merger, on the acquiring hospital's market power or the plaintiff hospitals' ability to constrain it.

Competing hospitals are not the only parties with potential standing to challenge hospital acquisitions of primary-care physician practices. Since primary-care physicians are important referral sources to specialists, the acquisition may foreclose independent specialists from a significant number of patients, conferring market power on the competing specialists controlled by the hospital.

Neither the FTC nor Antitrust Division has challenged a hospital's acquisition of physicians under a vertical theory, although there is one district court opinion in a case filed by a competing hospital.68 But FTC representatives, while noting that merger challenges “based on vertical theories are rare,” have indicated they will bring vertical hospital-physician acquisition cases where warranted.69

---

1 15 U.S.C. § 18.

2 E.g., *United States v. E.I. du Pont de Nemours & Co.*, 353 U.S. 586, 607 (1957) (noting that “the test of a violation of § 7 is whether at the time of suit there is a reasonable probability that the acquisition is likely to result in the condemned restraints”); *ProMedica Health Sys. v. FTC,* 749 F.3d 559, 564 (6th Cir.) (ProMedica (6th Cir.)) (“Section 7 deals in 'probabilities, not certainties'”), petition for cert. filed, No. 14-762 (U.S. Dec. 12, 2014).

3 E.g., *St. Alphonsus Med. Ctr.—Nampa v. St. Luke's Health Sys.*, ___ F.3d ___, 2015 WL 525540 at *2 (9th Cir. Feb. 10, 2015) (St. Alphonsus (9th Cir)) (explaining that the analysis “'requires a prediction of [the merger's] impact upon competitive conditions in the future'”).

4 For an example, *see Evanston Northwestern Healthcare Corp.*, 2007-2 Trade Cas. (CCH) ¶ 75,814 (FTC 2007) (Evanston).

5 And worth keeping in mind is that when the FTC investigates a merger affecting the market for hospital services, it typically investigates the merger's effect in other markets as well, such as physician services and outpatient services. For example, in *FTC v. OSF Healthcare System*, 852 F. Supp. 2d 1069 (N.D. Ill. 2012) (OSF), the FTC challenged a Rockford, Illinois hospital merger, alleging a substantial lessening of competition in both a hospital-services market and a primary-care physicians services market.

6 *Chicago Bridge & Iron Co. v. FTC*, 534 F.3d 410, 434 (5th Cir. 2008) (Chicago Bridge); *see also ProMedica (6th Cir.)*, 749 F.3d at 565 (6th Cir.) (citing and relying on Merger Guidelines, noting that they are "useful but not binding upon us.").

7 *Merger Guidelines* § 1.

8 *Id*.

9 Richard A. Posner & William M. Landes, *Market Power in Antitrust Cases*, 94 Harv. L. Rev. 937, 937 (1980).

10 E.g., *St. Alphonsus (9th Cir.)*, 2015 WL 525540 at *3 ("Section 7 claims are typically assessed under a 'burden-shifting framework."); *ProMedica Health Sys.*, 2012-1 Trade Cas. (CCH) ¶ 77,840 (FTC 2012) (ProMedica (FTC)) at 123,240 (same), petition for review denied, 749 F.3d 559 (6th Cir.), petition for cert. filed, No. 14-762 (U.S. Dec. 12, 2012).

11 E.g., *United States v. Dairy Farmers of Am.*, 426 F.3d 850, 858 (6th Cir. 2005) (explaining that "where the government shows that the acquisition . . . would result in a firm controlling an undue percentage of the relevant market and a significant increase in concentration of firms in that market, a presumption of illegality arises because there is a presumption of anticompetitive effects"); *see also ProMedica (FTC)*, 2012-1 Trade Cas. (CCH) ¶ 77,840 at 123,240 ("Under this framework, the government can establish a presumption of liability by defining a relevant product and geographic market and showing that the transaction will lead to undue concentration in the relevant market.")

12 *See Chicago Bridge*, 534 F.3d at 424.

13 *Merger Guidelines* § 4. Numerous merger decisions mandate that the government define a relevant market. E.g., *United States v. Marine Bancorp.*, 418 U.S. 602, 618 (1974).

14 *Merger Guidelines* § 4 ("The Agencies' analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition.").

15 *See generally* Gregory Vistnes, *Hospitals, Mergers, and Two-Stage Competition*, 67 Antitrust L.J. 671 (2000).

16 *Evanston*, 2007-2 Trade Cas. (CCH) ¶ 75,814 at 208,583.

17 E.g., *Evanston*, 2007-2 Trade Cas. (CCH) at 108,583 through -84 (FTC 2007).

18 *See*, e.g., *ProMedica (6th Cir.)*, 749 F.3d at 565.

19 *Id*.

20 *Id*.

21 The defendants disagreed with this methodology, arguing that the product market should include the entire package of hospital services sold to health plans, regardless of whether their competitive conditions were similar, under what the court called the "package-deal theory." *ProMedica (6th Cir.)*, 749 F.3d at 567. Both theories are subject to a number of criticisms, but there is case law and commentary supporting both.

22 *See*, e.g., *Renown Health*, Dkt. No. C-4366 (FTC Nov. 30, 2012) (consent order) (adult cardiology services).

23 Letter from Anne K. Bingaman, Assistant Attorney General, Antitrust Division, to Randall S. Yavitz (Jul. 1, 1996) (Business Review Letter to Allied Colon and Rectal Specialists).

24 *See St. Alphonsus (9th Cir.)*, 2015 WL 525540 at *3 (noting that the parties agreed the product market was adult primary-care physician services).

25 *See id*. ("A common method to determine the relevant geographic market . . . is to find whether a hypothetical monopolist could impose a 'small but significant nontransitory increase in price' . . . in the proposed market.").

26 *Evanston*, 2007-2 Trade Cas. (CCH) at 108,586 ("Thus, if a merger enables the combined firm unilaterally to raise prices . . . due to the loss of competition between the merging parties, the merger is plainly anticompetitive, and the merging firms comprise the relevant antitrust market because the merged entity is considered to be a 'monopolist' under the Guidelines.")

27 *St. Alphonsus* (Dist. Ct.), 2014-1 Trade Cas. (CCH) at 129,251 ("If it is likely that the insurers would reject [the merged firm's price demand], drop those PCPs from their network, and depend on PCPs in adjacent regions to provide care for their insureds, the definition of the relevant market would need to be broadened to include those adjacent regions.").

28 For an explanation and criticism of the Elzinga-Hogarty geographic-market definition methodology, see Fed. Trade Comm'n & U.S. Dep't of Justice, *Improving Health Care: A Dose of Competition*, Ch. 4(II) at 5-21 (2004).

29 *See Evanston*, 2007-2 Trade Cas. (CCH) at 108,594 through -596 (noting that Professor Elzinga testified that the methodology is inappropriate for defining geographic markets in hospital-merger cases).

30 *Id*. at 108,596 ("[Health plan] demand for hospital services is a partially a derived demand based on patient preferences and the percentage of patients in a given area who use a hospital can, in certain circumstances, provide some rough indication of [health plan] preferences when they form a network. . . . [B]ut at best, we should use it as one potentially very rough benchmark in the context of evaluating other types of evidence.").

31 E.g., *ProMedica (6th Cir)*, 749 F.3d at 565 (parties agreed that relevant geographic market was limited to one county; evidence showed that market may have been even smaller).

32 E.g., *OSF*, 852 F. Supp. 2d at 1077 (accepting plaintiff's expert's testimony that the relevant geographic market was the area within 30 miles of the merging hospitals, which included parts of several counties).

33 *Merger Guidelines* § 5.1.

34 *St. Alphonsus (Dist. Ct.)*, 2014-1 Trade Cases (CCH) at 129,251 ("Because Nampa patients strongly prefer access to local PCPs, commercial health plans need to include Nampa PCPs in their networks to offer a competitive product. . . . Given this dynamic—that health plans must offer Nampa Adult PCP services to

Nampa residents to compete—Nampa PCPs could band together and successfully demand a 5 to 10% price increase . . . from health plans.")

35 *See St. Alphonsus (9th Cir.)*, 2015 WL 525540 at *4 (explaining that one network "testified that it could not market a health care network in Nampa that did not include Nampa PCPs").

36 *Merger Guidelines* § 6. ("The elimination of competition between two firms that results from their merger may alone constitute a substantial lessening of competition"). While unilateral effects refers to the ability of the merged firm, by itself, to raise price regardless of the competitive actions of other firms, worth noting is that this ability may permit other firms to raise price as well under the higher "price umbrella" established by the merged firm.

37 *See*, e.g., *ProMedica (6th Cir.)*, 749 F.3d at 569 (noting that hospital services are differentiated products: "hospitals have different doctors, facilities, and (perhaps above all) locations, which means that some patients prefer certain hospitals over others").

38 *See generally Merger Guidelines* § 6.1 ("The extent of direct competition between the products sold by the merging parties is central to the evaluation of unilateral price effects. Unilateral effects are greater, the more the buyers of products sold by one merging firm consider products sold by the other merging firm to be their next choice.").

39 *See ProMedica (6th Cir.)*, 749 F.3d at 568-70; *ProMedica (FTC)*, 2012-1 Trade Cas. (CCH) at 123,252-261; *St. Alphonsus (Dist. Ct.)*, 2014-1 Trade Cas. (CCH) at 129,253-54; *Evanston*, 2007-2 Trade Cas. (CCH) at 108,585-588.

See generally Keith Brand & Christopher Garmon, *Hospital Merger Simulation*, AHLA Antitrust Practice Group Member Briefing (Jan. 2014); David A. Argue & Richard T. Shin, *An Innovative Approach to an Old Problem: Hospital Merger Simulation*, Antitrust, Fall 2009, at 49; Carl Shapiro, *Mergers with Differentiated Products*, Antitrust, Spring 1996, at 23; Cory Capps, et al., *Antitrust Policy and Hospital Mergers: Recommendations for a New Approach*, Antitrust Bull, Winter 2002, at 677; Aviv Nevo, "Mergers that Increase Bargaining Leverage," Prepared Text Before the Stanford Institute for Economic Policy Research and Cornerstone Research Conference on Antitrust and Highly Innovative Industries (Jan. 22, 2014).

40 *See*, e.g., *ProMedica (6th Cir.)*, 749 F.3d at 569 (noting that the extent of direct competition between the merging firms is "central" to evaluating the potential for unilateral effects, explaining that "unilateral-effects analysis examines not only whether differentiated products are substitutes for one another, but close substitutes for some fraction of consumers" and that unilateral effects are greater the more the buyers of the services sold by one of the merging parties consider products sold by the other merging party to be their next-best choice."); *St. Alphonsus (Dist. Ct.)*, 2014-1 Trade Cas .(CCH) at 129,253; *Evanston*, 2007-1 Trade Cas. (CCH) at 108,585 ("A merger between firms in a differentiated products market can enable the merged firm to raise prices unilaterally if customers accounting for 'a significant share of sales' view the merging parties as their first and second choices for a particular need.").

41 *St. Alphonsus (Dist. Ct.)*, 2014-1 Trade Cas. (CCH) at 129,253.

42 For a helpful explanations of unilateral-effects/differentiated-products analysis, the diversion ratio, and its importance in the analysis, *see* Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 Antitrust L.J. 49, 60-81 (2010); Carl Shapiro, *Mergers with Differentiated Products*, Antitrust, Spring 1996, at 23.

43 For an excellent discussion that even an attorney can understand, *see* Keith Brand & Christopher Garmon, *Hospital Merger Simulation*, AHLA Antitrust Practice Group Member Briefing (Jan. 2014); *see also* Serge Moresi, *The Use of Upward Pricing Pressure Indices in Merger Analysis*, Antitrust Source (ABA Section of Antitrust Law), Feb. 2010.

44 *See*, e.g., David Scheffman & Joseph Simons, *Unilateral Effects for Differentiated Product: Theory, Assumptions, and Research*, Antitrust Source (ABA Section of Antitrust Law), Apr. 2010.

45 *See Merger Guidelines* § 6.1 (“The Agencies d not treat merger simulation evidence as conclusive in itself.”).

46 For a discussion, *see*, e.g., Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 Antitrust L.J. 49, 63, 63 n.53, 68-69 (2010) (“Shapiro”).

47 *ProMedica (6th Cir.)*, 749 F.3d at 568.

48 Shapiro at 63, 66.

49 *ProMedica (6th Cir.)*, 749 F.3d at 569-70.

50 *Evanston*, 2007-2 Trade Cas. (CCH) at 108,568-574.

51 *Merger Guidelines* § 7 (emphasis added).

52 *Id*. (emphasis added).

53 *See*, e.g., *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001) (“Merger law 'rests upon the theory that, where rivals are few, firms will be able to coordinate their behavior, either by overt collusion or implicit understanding . . . .' Increases in concentration above certain levels are thought to 'raise[] a likelihood of “interdependent anticompetitive conduct.”'”).

54 *Merger Guidelines* § 5.3. To calculate the post-merger HHI, add the market shares of the merging firms, square that figure and the market shares of each other market participant, and sum the squares. To calculate the amount by which the transaction increases the HHI, multiply the shares of the merging firms by each other and multiply that product by 2.

55 *Id*.

56 *Id*.

57 Assuming firms of equal size (and admittedly this is rarely the case), a market with four firms results in an HHI of 2,500. And a merger between firms with shares as small as 10 percent each increases the HHI by 200. Thus, given that many, if not most, hospital markets are highly concentrated, the *Merger Guidelines'* rebuttable presumption, if strictly applied, renders many, if not most, horizontal hospital mergers problematic—a four to three, three to two, and two to one. *ProMedica* was a four to three, and*OSF* was a three to two.

58 For example, in *OSF*, court blocked a merger between two of the three hospitals in Rockford, Illinois. In sustaining the FTC's coordinated-effects challenge, the court relied on “some history of coordinated efforts among the Rockford hospitals and a very high post-merger HHI (5,179 with an increase of 1,767), which it

believed would result in a “risk of coordinated activity . . ., especially once 'communication becomes easier and more effective' with only two competitors.” *OSF*, 852 F. Supp. 2d at 1086-87.

59 *Merger Guidelines* § 2.

60 Administrative Complaint, *Inova Health System Found.*, Dkt. No. 9326 (FTC May 9, 2008).

61 Administrative Complaint, *Reading Health Sys.*, Dkt. No. 9353 (FTC Nov. 16, 2002).

62 Administrative Complaint, *Renown Health*, Dkt. No. C-4366 (FTC Aug. 6, 2012).

63 Complaint, *FTC v. OSF Health Care Sys.*, No. 3:11-cv-50344 (N.D. Ill. Nov. 11, 2011).

64 *OSF*, 852 F. Supp. 2d at 1076.

65 *See generally* J. Thomas Rosch, Comm'r, FTC, “The Challenge of Non-Horizontal Mergers,” Prepared Remarks Before the Fordham Competition Law Institute's 34th Annual Conference on International Antitrust Law & Policy (Sept. 27-28, 2007) (“The reality is that in the past three-plus decades there have been very few challenges to non-horizontal mergers in the United States. The federal antitrust enforcement agencies have not litigated to conclusion a single merger challenge on a vertical theory since 1979.”).

66 The plaintiff hospitals alleged that, post merger, the acquired practice would “stop or significantly decrease admissions to St. Alphonsus,” potentially “forc[ing]” it “to reduce . . . output and, assuming scale economies, incur higher average costs . . . most likely result[ing] in higher prices for general acute care inpatient services.” According to the complaint, the merger would foreclose the plaintiff from referrals from some 84 percent of the primary-care physician referrals in the area. Complaint for Preliminary and Permanent Injunction and Damages at 53, 54, 55, *St. Alphonsus Med. Ctr.-Nampa v. St.Luke's Health Sys.*, No. 1:12cv00560 CWD (Nov. 12, 2012).

67 *St. Alphonsus*, 2014-1 Trade Cas. (CCH) at 129,255.

68 *HTI Health Servs., Inc. v. Quorum Health Group, Inc.*, 960 F. Supp. 1104 (S.D. Miss. 1997).

69 *See* Deborah L. Feinstein, Director, Bureau of Competition, FTC, “Antitrust Enforcement in Health Care: Proscription, Not Prescription,” Prepared Remarks Before the Fifth Annual National Accountable Care Organization Summit (June 19, 2014); *see also* Christine A. Varney, Commissioner, FTC, “New Directions at the FTC: Efficiency Justifications in Hospital Mergers and Vertical Integration Concerns,” Prepared Remarks Before the Health Care Antitrust Forum (May 2, 1995).