ORIGINAL

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of **ProMedica Health System, Inc.** **a corporation**	**PUBLIC** **Docket No. 9346**

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I. INTRODUCTION

Section 7 of the Clayton Act was enacted to stop acquisitions where, for example, the due diligence team for one of the merging parties concludes that the transaction "could stick it employers, that is to continue forcing high rates on employers and insurance companies." Section 7 was enacted to stop acquisitions where the CEO of one the merging parties writes to members of the board of directors to say that the acquirer has "incredible access to outstanding pricing" and that "[t]aking advantage of these strengths may not be the best thing for the community in the long run." Section 7 was enacted to stop acquisitions where a board of directors presentation states that the merged firm would "have a lot of negotiating clout" and that an acquisition by the acquirer "has the greatest potential for higher [ ] rates." Section 7 was enacted to stop acquisitions where a board of directors presentation states that one of the "cons" of a deal with the acquirer is that it could "increase prices/costs to the community." In short, Section 7 was enacted to stop acquisitions like ProMedica Health System's acquisition of St. Luke's Hospital ("Acquisition").

Consummated on September 1, 2010, the Acquisition allowed ProMedica Health System ("ProMedica" or "PHS"), the self-described dominant hospital system in Lucas County, Ohio, to eliminate vigorous competition from St. Luke's Hospital ("St. Luke's" or "SLH"), an independent hospital providing high-quality, low-cost healthcare services to local residents. The Acquisition eliminated important competition for inpatient general acute-care services ("GAC"), reducing the number of competitors in Lucas County from four to three. The Acquisition also eliminated vital competition for inpatient obstetrical services ("OB"), reducing the number of competitors in Lucas County from three to two – a duopoly.

With the Acquisition, ProMedica garnered a post-Acquisition market share of 58.3% in GAC services and an 80.5% market share of OB services in Lucas County. These markets, which were already highly concentrated before the Acquisition, are now exceedingly so. Under the *Horizontal Merger Guidelines'* thresholds and case law, the Acquisition is presumed likely to enhance market power and is presumptively illegal.

The testimony, documentary evidence, and data analysis in the case confirm that the transaction will substantially lessen competition. Prior to the Acquisition, ProMedica and St. Luke's were vigorous competitors. Indeed, ProMedica was St. Luke's closest competitor. ProMedica made repeated efforts to snare St. Luke's business and sought to exclude St. Luke's from health plans' hospital networks. In one case, ProMedica succeeded in getting a contract with one of the largest health plans in Lucas County to exclude St. Luke's from its network and not add St. Luke's back into the network unless it paid ProMedica "for the privilege." In 2009, despite being targeted by the dominant hospital system in Lucas County, St. Luke's – not Mercy Health Partners ("Mercy") or the University of Toledo Medical Center ("UTMC") – took one-half of the market share lost by ProMedica.

By eliminating a close competitor, dominant ProMedica gains additional size, share, and, ultimately, negotiating leverage with health plans, which will enable it to become even more dominant. As a result, ProMedica – which is already the highest-priced hospital system in Lucas County and one of the most expensive in the entire state – can demand and extract higher reimbursement rates for St. Luke's *and* for ProMedica's legacy hospitals. Every health plan witness, based on their experience dealing with ProMedica's dominance (and some also based on their experience with hospital mergers in other parts of Ohio), testified that, as a result of the Acquisition, rates at St. Luke's will increase significantly. No witness – not even Respondent's

witnesses – say that rates will remain unchanged or decrease. St. Luke's own documents are explicit: by joining with ProMedica, St. Luke's expected to obtain significant negotiating clout with health plans and planned to exploit that clout to get higher rates. St. Luke's own documents are also explicit about the effects of this clout: St. Luke's rates would "skyrocket."

The Acquisition substantially lessens non-price competition. Prior to the joinder, St. Luke's was one of the highest-quality hospitals in Lucas County. By contrast, ProMedica's quality was lower and, on many rating scales, near the bottom. ProMedica's own Medical Director wrote that ProMedica's approach to quality was confusing and out of date. Despite its high prices, ProMedica's CEO said that its quality scores were "subpar."

ProMedica's acquisition of St. Luke's will harm consumers. With higher hospital rates at St. Luke's and other ProMedica hospitals, health plans will be forced to pass along those costs to their customers – employers and individuals in Lucas County. Self-insured employers in Lucas County will directly and immediately feel the impact of significantly-higher hospital rates. Employers themselves will be forced to pass along these increased healthcare costs to their employees in the form of higher deductibles, co-pays, or other, higher employee contributions. These are real and substantial out-of-pocket expenses for Lucas County employers and employees.

Respondent has no viable defense to the overwhelming weight of evidence. Respondent's first defense – that the two remaining GAC competitors and one OB competitor, combined with steering by health plans and physicians, will constrain Respondent – is so lacking in support as to not be credible. Even before the Acquisition, these competitors, health plans, and physicians did not constrain ProMedica or prevent it from maintaining the highest prices in Lucas County, by far, and among the highest prices in all of Ohio. They certainly will not be

able to constrain an even larger, more dominant ProMedica. Indeed, post-Acquisition, ProMedica is *two times* larger than the next largest GAC competitor, Mercy, more than *four times* larger than UTMC, and larger than *both combined*. Post-Acquisition, ProMedica is more than *four times* larger than the lone remaining OB competitor, Mercy, which does not even offer OB services at all of its Lucas County hospitals. The evidence does not support Respondent's steering argument. In fact, *no* health plan has ever had a program to steer its commercial customers in Lucas County from high-cost hospitals to low-cost hospitals, *none* currently has such a steering program for their commercial customers, and *none* has any plans to implement a steering program. The evidence also shows that patients – and the hospitals themselves – dislike and resist steering programs. Likewise, there is no evidence that physicians have ever steered Lucas County patients to hospitals based on the rates charged to health plans – rather, physicians make hospital-admission decisions based on patients' preferences and medical needs – and physicians have no ability or incentive to steer in the future.

Respondent's efficiencies defense withered as this case moved from the federal district court proceeding through this administrative trial. What essentially remain are flimsy claims of efficiencies from administrative cost savings, service "rationalization," and that ProMedica may, somehow, improve St. Luke's quality. Respondent's "efficiency" claims are not cognizable. They are not merger-specific. They are vague. They are speculative. They are not supported by the evidence in this proceeding and, even if they were, are insufficient to overcome the significant anticompetitive effects of the Acquisition.

Respondent does not put forth an entry defense, and for good reason. The evidence shows that entry is highly unlikely and would not be timely or sufficient to overcome the anticompetitive effects of the Acquisition. So Respondent resorts to a novel and wholly

unpersuasive quasi-entry story, claiming that { } to recruit physicians in southwest Lucas County (which Respondent in the same breath argues is not a geographic area of particular competitive significance) is equivalent to entry that could constrain ProMedica. This theory lacks support under the law and the facts.

Respondent admits that St. Luke's is not a "failing firm" and that Respondent, therefore, cannot meet its burden to establish a failing-firm defense. Yet, without specifically calling it a "*flailing*-firm defense," Respondent claims generally that St. Luke's financial condition in the past couple of years means that no competitive harm can result from the transaction. Such a "weak-firm" defense is among the weakest defenses in antitrust law. Regardless, Respondent's attempt to articulate such a defense ignores the voluminous and uncontroverted evidence that St. Luke's financial condition was *improving* in the time period leading up to the Acquisition. There is no evidence in the record whatsoever to support Respondent's claim that St. Luke's market shares would decrease so significantly as to eliminate the presumption of anticompetitive harm. To the contrary, prior to the Acquisition, St. Luke's was growing and so was its market share.

Finally, Respondent contests Complaint Counsel's econometric evidence regarding the effects of the transaction. But even Respondent's own economic expert, who is not an econometrician, puts forth an analysis that indicates that the transaction will lead to significant prices increases that will harm consumers.

A remedy is, therefore, justified and needed here to prevent the Acquisition's substantial lessening of competition. The traditional and proper remedy is a complete divestiture of St. Luke's by ProMedica in order to restore competition in Lucas County for GAC and OB services for the benefit of Lucas County employers, employees, and hospital patients.

II. RELEVANT SERVICE MARKETS

A. Relevant Product/Service Markets Generally

The relevant product or service market "identifies the product[s] and services with which the defendants' products compete." *FTC v. CCC Holdings Inc*., 605 F. Supp. 2d 26, 37 (D.D.C. 2009). Traditionally, courts have considered two factors in defining a relevant product market: (1) the reasonable interchangeability of use and (2) the cross-elasticity of demand between the product itself and substitutes for the product. *Id*. at 38 (*citing Brown Shoe Co., Inc. v. United States*, 370 U.S. 294, 325 (1962)). "Interchangeability of use and cross-elasticity of demand look to the availability of products that are similar in character or use to the product in question and the degree to which buyers are willing to substitute those similar products for the product." *FTC v. Swedish Match*, 131 F. Supp. 2d 151, 157 (D.D.C. 2000) (citing *United States v. E.I. du Pont de Nemours & Co.*, 366 U.S. 316, 393 (1961)); *In re Evanston Nw. Healthcare Corp*., No. 9315, 2007 FTC LEXIS 210, at *144, 2007-2 Trade Cas. (CCH) ¶ 75,814 (Aug. 6, 2007) (Comm'n Dec.).

The revised *Horizontal Merger Guidelines* ("*Merger Guidelines*") set forth a similar approach to defining the relevant product market – an approach used by the antitrust agencies and a number of courts. *In re Polypore Int'l, Inc*., No. 9327, 2010 FTC LEXIS 17 at *442-443 (March 1, 2010) (Initial Dec.) (Chappell, A.L.J.) (citations omitted). The *Merger Guidelines* define a relevant product market by assessing whether a hypothetical monopolist could profitably impose a small but significant and non-transitory increase in price ("SSNIP"). *See, e.g., FTC v. Whole Foods Mkt*., 548 F.3d 1028, 1038 (D.C. Cir. 2008); *FTC v. Butterworth Health Corp*., 946 F. Supp. 1285, 1290, 1294 (W.D. Mich. 1996), *aff'd*, 1997 U.S. App. LEXIS 17422, 1997-2 Trade Cas. (CCH) ¶ 71,863 (6th Cir. 1997).

Finally, courts continue to refer to "*Brown Shoe's* 'practical indicia' in determining the relevant market." *Polypore*, 2010 FTC LEXIS 17, at *447 (citations omitted); *see also CCC Holdings*, 605 F. Supp. 2d at 38 ("Courts have relied on several 'practical indicia' as aids in identifying the relevant product market[.]") (citations omitted). These indicia include industry or public recognition, the product's particular characteristics and uses, unique production facilities, distinct customers, distinct prices, and other factors. *CCC Holdings*, 605 F. Supp. 2d at 38.

Based on the foregoing principles and relevant case law, there are two relevant service markets in this case.

B. Inpatient General Acute-Care Services Sold to Commercial Health Plans

The first relevant service market is inpatient general acute-care services sold to commercial health plans. The GAC market includes a broad cluster of basic medical and surgical diagnostic and treatment services that include an overnight hospital stay, such as emergency services, internal medicine, and minor surgeries. Respondent admitted GAC is the relevant service market in its answer to Complaint Counsel's complaint and in the parties' Joint Stipulations of Law and Fact. Resp't ProMedica Health System, Inc.'s Answer to Compl. at 6 (¶ 12) [hereinafter "Answer"]; Joint Stipulations of Law and Fact, JX00002A at ¶ 3 ("General acute care inpatient services sold to commercial health plans constitutes a valid relevant service market for purposes of analyzing the likely competitive effects of the Acquisition.").

Nonetheless, for sake of completeness and to clarify what is included in the GAC cluster, Complaint Counsel will elaborate on this relevant services market. A cluster of products or services can constitute a relevant market, even if the individual components of the cluster may not all be – and likely are not – interchangeable or substitutable. *See United States v. Phila. Nat'l Bank*, 374 U.S. 321, 356 (1963) (cluster of products and services constituting "commercial

banking" constituted a relevant market). In a long line of antitrust cases analyzing hospital mergers, federal courts and the Federal Trade Commission ("Commission") consistently hold that inpatient general acute-care services constitute a relevant service market. *See, e.g., FTC v. Butterworth,* No. 96-2440, 1997 U.S. App. LEXIS 17422, at *5 (6th Cir. July 8, 1997); *United States v. Rockford Mem'l Hosp.,* 898 F.2d 1278, 1284 (7th Cir. 1990) (Posner, J.); *FTC v. Univ. Health Inc.*, 938 F.2d 1206, 1210-11 (11th Cir. 1991); *FTC v. ProMedica Health Sys., Inc.*, 2011 U.S. Dist. LEXIS 33434, at * 23-24, 2011-1 Trade Cas. (CCH) ¶ 77,395 (N.D. Ohio Mar. 29, 2011); *Evanston,* 2007 FTC LEXIS 210, at *146-148.

Inpatient GAC services constitute a relevant market even though the hundreds of individual services offered by inpatient general acute-care hospitals are not reasonably interchangeable or substitutable for one another.[1] (Joint Stipulations of Law and Fact, JX00002A at ¶ 57). It would be analytically appropriate – but quite burdensome – to define each service offered by both St. Luke's and ProMedica as an individual relevant service market. Because there are hundreds of inpatient medical and surgical services offered by general acute-care hospitals, it is analytically convenient, appropriate, and efficient to group these services in a single cluster market where "market shares and entry conditions are similar for each." *Emigra Group v. Fragomen*, 612 F. Supp. 2d 330, 353 (S.D.N.Y. 2009) (citing Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129, 157-59 (2007)); *see also ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *23, *146; PX01923 at 012 (Town, Dep. at 45), *in camera* ("the purpose of the cluster market is to formulate aggregates across products in order to

[1] Under the *Merger Guidelines*, market definition "focuses solely on demand substitution factors, *i.e*., on customers' ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service." *Merger Guidelines* § 4. But the *Merger Guidelines* must be applied carefully in hospital mergers because the *individual* GAC services offered by hospitals are not substitutable – e.g., knee surgery cannot be substituted for hip surgery in response to a price increase.

do the analysis in a practical way."); *cf*. *Butterworth*, 946 F. Supp. at 1290 (inpatient GAC "services [ ] represent a cluster of services and capabilities that are provided only by general acute care hospitals and for which there are no reasonable substitutes.").

In this case, rather than analyze the competitive effects of the Acquisition on each of the hundreds of distinct hospital services offered by both St. Luke's and ProMedica, the Court may simply analyze the GAC market as a whole. This may be done without creating inconsistent or distorted results because GAC services are offered under similar market conditions, by the same market participants, and within the same geographic market. *ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *146-48; *see also* Attachment A, Jonathan B. Baker, *The Antitrust Analysis of Hospital Mergers and the Transformation of the Hospital Industry*, 51 Law & Contemp. Probs. 93, 138-40 (1988) ("Baker Article") (explaining that, consistent with Supreme Court precedent, acute inpatient services cluster market is appropriate "solely for descriptive and analytic convenience in situations where it will not be misleading"). Generally, with the notable exception of OB services (discussed below), the GAC services offered by St. Luke's are also offered by ProMedica, Mercy, and UTMC in Lucas County. (*See* Joint Stipulations of Law and Fact, JX00002A at ¶¶ 7-8; Pugliese, Tr. 1540-1541; Pirc, Tr. 2279-2280). Thus, the cluster of GAC services provided by St. Luke's and ProMedica, in competition with one another, comprises a relevant service market.

Certain services, however, are not included in the relevant market.

1. Psychiatric and Substance Abuse Services

Complaint Counsel does not allege, and Respondent does not contend, that inpatient psychiatric and substance abuse services are in the relevant market. In fact, the economic experts for both parties excluded these services from their analyses. (*See* RX-71(A) at 158-

000159 (Guerin-Calvert Expert Report), *in camera*; Town, Tr. 3687-3688).[2] Those services generally are offered under different conditions, separately contracted for apart from GAC services, and excluded by courts from the GAC cluster market. (*See, e.g.,* Nolan, Tr. 6294, 6306, *in camera* (discussing current trend of larger, dedicated hospitals for psychiatric services); Guerin-Calvert, Tr. 7195-7196; Tr. Town, Tr. 3687-3688).

2. Outpatient Services

As Respondent admits, outpatient services are not included in the inpatient GAC market. (Response to RFA at ¶ 3; Answer at ¶ 13). Outpatient services are services that do not require an overnight stay in the hospital; typically, the patient is in the hospital for less than 24 hours. (Joint Stipulations of Law and Fact, JX00002A at ¶ 2; Korducki, Tr. 483-484). Prior case law excludes outpatient services from the inpatient GAC market. *Rockford*, 898 F.2d at 1284; *Butterworth*, 946 F. Supp. at 1290-1291; *Evanston*, 2007 FTC LEXIS 210, at *146-147. As Respondent's economic expert acknowledged, outpatient services are typically provided under different competitive conditions than inpatient services. (*See* Guerin-Calvert, Tr. 7640). Outpatient services also have been excluded from the inpatient GAC market because they generally are not substitutable for inpatient services, even if inpatient prices increase. *Butterworth*, 946 F. Supp. at 1290-1291; *see also Evanston*, 2007 FTC LEXIS 210, at *147-148. The testimony here indicates that patients would not substitute outpatient services for inpatient services, even in response to a price increase for inpatient services. (Radzialowski, Tr. 638-639;

[2] Complaint Counsel's economic expert, Professor Town, did not include (i.e., "filtered") diagnosis related groups ("DRGs") in the relevant service market for which St. Luke's did not have three or more annual patient admissions. This accounts for and eliminates potential DRG-coding and other errors in the data, as well as services where there are insignificant service overlaps between the merging parties. Even with the filtering, the GAC relevant service market still captures 91% of total admissions for St. Luke's and ProMedica; adding the filtered DRGs back into the relevant market does not meaningfully change Professor Town's results; and, notably, Respondent's own economic expert also used filters to analyze the transaction. (PX02148 at 022-023 (¶ 40 n.53) (Town Expert Report), *in camera*; RX-71(A) at 158-159 (Guerin-Calvert Expert Report), *in camera*).

Town, Tr. 3670; *see also* PX001914 at 007-008 (Pirc, IHT at 21-22), *in camera*; PX02148 at 022 (¶ 44) (Town Expert Report), *in camera*; Sandusky, Tr. 1329).

3. Services That St. Luke's Does Not Provide: Complex Tertiary and Quaternary Services

The relevant service market only includes the inpatient GAC services that St. Luke's and ProMedica provide in common. Hospital services are often categorized as primary, secondary, tertiary, and quaternary services. (FTC and DOJ, *Improving Health Care: A Dose of Competition*, at 126-127 (Ch. 3, pp. 3-4) (July 2004), *available at* www.ftc.gov/reports/healthcare/040723healthcarerpt.pdf; Radzialowski, Tr. 637; Gold, Tr. 193; PX01910 at 025-026 (Randolph, IHT at 92-95), *in camera*). Although definitions of those services do not have bright-line boundaries,[3] tertiary services generally involve highly-specialized treatments for higher-acuity conditions, such as neurosurgery. (Radzialowski, Tr. 637; Beck, Tr. 380; Pirc, Tr. 2180-2181; Shook, Tr. 893; PX02148 at 019 (¶ 40 n.52) (Town Expert Report), *in camera*). Quaternary services are even higher-level or experimental services for higher-acuity conditions, such as transplants. (Radzialowski, Tr. 637; Shook, Tr. 921; Sandusky, Tr. 1314).

Respondent admits that St. Luke's does not provide complex tertiary or quaternary services. (Resp't ProMedica Health System, Inc.'s Response to Compl. Counsel's Request for Admission at ¶ 2 [hereinafter Response to RFA] ("… ProMedica admits that St. Luke's currently does not perform complex tertiary and quaternary services."); Joint Stipulations of Law and Fact, JX00002A at ¶ 6 ("St. Luke's currently performs few, if any, tertiary services and no quaternary services.")). As such, those services do not belong in the relevant service market. In fact,

[3] FTC and DOJ, *Improving Health Care: A Dose of Competition*, at 127 (Ch. 3, p. 4) (July 2004), *available at* www ftc.gov/reports/healthcare/040723healthcarerpt.pdf.).

Respondent previously admitted that: "more sophisticated and specialized tertiary and quaternary services, such as major surgeries and organ transplants, also are properly excluded from the relevant market because they are not substitutes for general acute-care inpatient services." (Answer at ¶ 13) ("ProMedica admits the allegations in Paragraph 13 [of the Complaint].")).

Despite these prior admissions, Respondent changed its position at trial. Now, Respondent's position is ambiguous. On the one hand, Respondent contends in its pre-trial brief that the relevant market includes "*all* inpatient hospital services." (Resp. ProMedica Health System, Inc.'s Pre-Trial Brief at 26-27). Respondent's economic expert's report also states that "the appropriate product market is at least *all* general acute care services[.]" (RX-71(A) at 21 (¶ 31) (Guerin-Calvert Expert Report), *in camera* (emphasis added)). On the other hand, at trial, Respondent's expert testified that she *excluded* certain major diagnostic category ("MDC") codes – which means that she excluded several inpatient services – from her definition of the relevant service market. (Guerin-Calvert, Tr. 7642-7649; RX-71(A) at 158-159 (Guerin-Calvert Expert Report), *in camera*). Additionally, although her report makes no mention of it, Respondent's economic expert testified that she excluded quaternary services, which are undoubtedly inpatient services, from her relevant service market. (Guerin-Calvert, Tr. 7647-7648, 7651).

Regardless of Respondent's ambiguous and shifting position on market definition, what is clear is that relevant case law, the facts here, and logic demonstrate that the relevant service market consists only of those services that St. Luke's and ProMedica both provide and over which they compete against each other.

Courts have repeatedly excluded tertiary services and other non-overlapping services from a GAC cluster market. *FTC v. Tenet Healthcare Corp*., 17 F. Supp. 2d 937, 942 (E.D. Mo. 1998) (relevant market is general acute-care inpatient hospital services, "including primary and secondary services, but not including tertiary or quaternary care hospital services"), *rev'd on other grounds*, 186 F.3d 1045 (8th Cir. 1999); *ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *23-24; *see Butterworth*, 946 F. Supp. at 1291 (defining the relevant market as general acute care inpatient hospital services in part by rejecting "defendants' innovative effort to demonstrate that employers and third-party payors might respond to a price increase for primary and secondary acute care services by steering outpatients and tertiary care patients away from the merged entity so as to inhibit or reverse such a price increase[.]"); *United States v. Long Island Jewish Med. Ctr.*, 983 F. Supp. 121, 141-42 (E.D.N.Y. 1997); *United States v. Mercy Health Servs*., 902 F. Supp. 968, 976 (N.D. Iowa 1995) ("The parties have agreed that the relevant product market is acute care inpatient services *offered by both Mercy and Finley*. . . . This limits the product market to those *services for which Mercy and Finley currently compete* for inpatient services.") (emphasis added), *vacated as moot*, 107 F.3d 632 (8th Cir. 1997) (transaction abandoned prior to decision on appeal); *see also* Attachment A, Baker Article at n.228 ("[I]t would be inappropriate to place secondary inpatient care services and tertiary inpatient care services in the same cluster . . . This is evident from the observations that the geographic markets for tertiary care services are generally much larger . . . and some hospitals offering secondary care services are unable to offer tertiary care.")).

The facts in this case confirm that complex tertiary services and quaternary services are properly excluded from the GAC cluster market. In this case, complex tertiary and quaternary services are *not* offered under similar market conditions, by the same market participants, or

within the same geographic market as other general acute-care services. First, St. Luke's – as well as Flower, Bay Park, St. Anne, and St. Charles – does not provide complex tertiary and quaternary services. (Response to RFA at ¶ 2 ("… ProMedica admits that St. Luke's currently does not perform complex tertiary and quaternary services."); Joint Stipulations of Law and Fact, JX00002A at ¶ 6 ("St. Luke's currently performs few, if any, tertiary services and no quaternary services."); Sandusky, Tr. 1307-1308; Pirc, Tr. 2189-2190; Radzialowski, Tr. 631-632; Shook, Tr. 892, 903). Consequently, the hospitals that participate in the market for complex tertiary and quaternary services in Lucas County are not the same as those that participate in the market for the more basic inpatient general acute-care services defined in this case.

Second, patients are willing to travel farther for complex tertiary and quaternary services. Thus, the geographic market for those services is broader and may include more market participants than for more basic GAC services. *See Long Island Jewish*, 983 F. Supp. at 141-142 (finding one relevant geographic market for primary and second care and another relevant geographic market for tertiary care). The trial testimony here uniformly indicates that patients in the Toledo area (and patients generally) travel farther for tertiary and quaternary services than for primary and secondary GAC services. (Gold, Tr. 212-213, 218; Wakeman, Tr. 2708; Guerin-Calvert, Tr. 7650; Shook, Tr. 947-948; Radzialowski, Tr. 633-634, 637-638; Town, Tr. 3676; *see also* PX01900 at 009 (Mullins, IHT at 30), *in camera*; Sheridan, Tr. 6679; PX01914 at 007 (Pirc, IHT at 19-20), *in camera*)). So, in contrast to primary and secondary GAC services, Lucas County hospitals may compete with hospitals well outside of Lucas County for the most complex tertiary and quaternary services. (Gold, Tr. 212-213 ("For the tertiary and quaternary services, [UTMC] compete[s] with . . . the University of Michigan, the Cleveland Clinic, University Hospital in Cleveland, and the Ohio State University.")). Therefore, the competitive

conditions surrounding complex tertiary and quaternary services differ greatly from those for GAC services, so it is inappropriate and misleading to include those services in the GAC cluster.

Finally, logic alone mandates that the services St. Luke's does not offer should be excluded from the relevant service market. As the *Merger Guidelines* indicate, "market definition helps specify the line of commerce and section of the country in which the competitive concern arises." *Merger Guidelines* § 4. By definition, the Acquisition does not create or enhance market power for services that ProMedica provides but St. Luke's does not provide. It should be obvious that, if the merging parties do not compete to provide certain services, there can be no lessening of competition for such services. At trial, Respondent's expert conceded that, if two firms sell products that are not substitutes for each other, a merger between the two firms is unlikely to lessen competition. (Guerin-Calvert, Tr. 7657). To include services in the relevant service market that St. Luke's does not offer will lead to misleading results. *See Little Rock Cardiology Clinic v. Baptist Health*, 573 F. Supp. 2d 1125, 1146 (E.D. Ark. 2008) (excluding cardiologists' services from market definition because "[defendant] does not compete in the cardiologists' service market; it has no market share and therefore no market power in [that market]."); PX02148 at 021 (¶ 42) (Town Expert Report), *in camera*).

For these reasons, one relevant service market in which to analyze this transaction is inpatient general acute-care services sold to commercial health plans, which consists of those services provided by St. Luke's in competition with ProMedica.[4]

[4] It is important to define the relevant service market in this way to frame the antitrust analysis correctly, but even including *all* inpatient DRGs, even those that Respondent's economic expert excluded from her analysis, does not materially affect the market structure, market shares, or strength of the presumption of anticompetitive harm.

C. Inpatient Obstetrical Services Sold to Commercial Health Plans

The second relevant service market is inpatient obstetrical services sold to commercial health plans ("OB"). OB hospital services are a cluster of procedures relating to pregnancy, labor and delivery of newborns, and post-delivery ("post-partum") care. (Marlowe, Tr. 2388, 2431-2432; Read, Tr. 5275; Guerin-Calvert, Tr. 7665; *see also ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *24). OB services are delivered on an inpatient basis. (Korducki, Tr. 488; Marlowe, Tr. 2433 (specifying that childbirth, recovery, and postpartum services are provided on an inpatient basis)).

Respondent admits that ProMedica competed with St. Luke's for obstetric services. (Joint Stipulations of Law and Fact, JX00002A at ¶ 20). Yet Respondent argues that it is improper to define a separate OB market. Once again, however, legal precedent and the facts here clearly demonstrate that a separate relevant service market for OB services is well-founded and appropriate.

Consider first principles: In a basic merger of two competitors that sell a single, competing product, the product-market analysis would begin by analyzing whether the merging parties' products are substitutes with any other products. If not, those products constitute the relevant product market. Applied here, we assess whether OB services are substitutable with any other GAC services. They are not – just as other individual services in the GAC cluster are not substitutable for any other GAC service. Thus, OB is its own relevant services market like all the other individual GAC services would be if we did not put them in the cluster market for analytical convenience. So why not just include OB services in the GAC cluster market for analytical convenience, too? Because the market participants and market structure for OB services differ significantly from the other GAC services, which means that the transaction has a

significantly different effect in the OB services market. In the case of OB services, the Acquisition has an even more anticompetitive effect.

Section 7 of the Clayton Act prohibits acquisitions "where *in any line of commerce* … the effect of such acquisition may be substantially to lessen competition[.]" 15 U.S.C. § 18 (emphasis added). As such, the "impact of the challenged acquisition must [ ] be measured in *each economically significant market*." *FTC v. Bass Bros. Enters., Inc*., 1984 U.S. Dist. LEXIS 16122, at *61-62, 1984-1 Trade Cas. (CCH) ¶ 66,041 (N.D. Ohio 1984) (emphasis added). In doing so, multiple relevant product markets may be identified. *Merger Guidelines* § 4.1. Finally, "[w]here a seller 'could profitably target a subset of customers for price increases,' a relevant market can be based on a particular use or uses by groups of buyers of the product for which a hypothetical monopolist could profitably impose at least a 'small but significant and nontransitory' increase in price." *In re Polypore Int'l, Inc*., 2010 FTC LEXIS 97, at *32, 2010-2 Trade Cas. (CCH) ¶ 77,267 (Dec. 13, 2010) (Comm'n Dec.).

Indeed, in prior antitrust cases involving the healthcare industry, courts have found markets that were separate and narrower than all GAC services where competitive conditions differed for particular services. *ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *23-25 (finding inpatient general acute-care services market and a narrower inpatient obstetrics services market); *Butterworth*, 946 F. Supp. at 1291 (finding separate markets with different market participants for general acute care inpatient hospital services and for primary care inpatient hospital services); *see also Rockford*, 898 F.2d at 1284 (Posner, J.) ("services are not in the same product market merely because they have a common provider"); *cf.*, *Morgenstern v. Wilson*, 29 F.3d 1291, 1296 (8th Cir. 1994) (Section 2 case defining relevant market as "adult cardiac surgery"); *Defiance Hosp. v. Fauster-Cameron, Inc.*, 344 F. Supp. 2d 1097, 1109 (N.D. Ohio 2004) (finding

narrower market of anesthesia services in Section 2 case where, *inter alia*, only certain providers performed the service); *Little Rock Cardiology Clinic v. Baptist Health*, 573 F. Supp. 2d 1125, 1140-41 (E.D. Ark. 2008).

In this case, the competitive conditions for OB services differ significantly from the competitive conditions for GAC services and, thus, OB should be analyzed as a separate relevant service market and not be included in the GAC cluster market. Most significantly, two Lucas County hospitals, UTMC and Mercy St. Anne, that provide GAC services, do not provide obstetrical services. (Gold, Tr. 203; Shook, Tr. 901).[5] As such, the competitive environment for OB services differs substantially from the GAC market. (PX02148 at 020-021 (¶ 41) (Town Expert Report), *in camera*; *see* PX01016 at 003, *in camera* (showing significantly different market shares for OB services than GAC services); *see also ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *24).

Commercial realities also support a separate OB market. For example, market participants separately track GAC and OB market shares (and other OB data). (Response to RFA at ¶ 5 ("…ProMedica admits that it, and St. Luke's, analyze a variety of data for many different service lines both as a group and as separate services lines, including OB."); PX01016 at 003, *in camera* (GAC and OB market shares in St. Luke's core service area); PX01077 at 003, 005 (OB utilization and market shares); PX01235 at 003, 005 (GAC and OB market shares in St. Luke's core service area); PX01236 at 002, 054 (GAC, OB, and other market shares in St. Luke's primary service area)). For example, Mr. Wakeman gave a presentation to St. Luke's Board of Directors in connection with affiliation discussions that contained separate GAC and OB market shares. (PX01016, *in camera*). Scott Rupley, St. Luke's Marketing and Planning

[5] Additionally, St. Luke's offers some services, such as tubal ligation, that Mercy does not provide at any of its hospitals because it would violate Mercy's ethical and religious directives. (Shook, Tr. 1065-1066).

Director, who prepared these market shares, testified that OB was the only other service presented in this document because Mr. Wakeman {

} (Rupley, Tr. 1978-1981, *in camera*). Another presentation to the St. Luke's board about affiliation partners reported {

} and stated that {

} (PX01030 at 017, *in camera*). Mr. Wakeman testified that the presentation included this statement because ProMedica "already had a pretty significant market share of OB in the greater Northwest Ohio area." (Wakeman, Tr. 2695-2696, *in camera*).

Additionally, ProMedica's and St. Luke's contracts with health plans often specify different reimbursement rates for inpatient GAC services than for inpatient OB services. (*See, e.g.*, PX00365 at 030, *in camera*; PX00366 at 030, *in camera*; PX02520 at 003-005, *in camera*; PX00363 at 019, 022; PX00364 at 019, 022; PX01262 at 004, 027). For example, ProMedica's recent contract with { }, specifies a base rate of { } for { } but specifies separate { } rates for obstetrics services {( )}. (PX00365 at 030, *in camera*; PX00366 at 030, *in camera*). Besides the rates (i.e., prices) themselves, the rate *structure* – or payment methodology – for GAC and OB services often differ in these contracts. (*See, e.g.*, PX00365 at 030, *in camera*; PX00366 at 030, *in camera*; PX02520 at 003-005, *in camera*). For example, in { } contract with ProMedica, the rate for {

} is paid on a {

} basis, but the rate for obstetrics services is a {

}. (PX02520 at 003-005, *in camera*).

Separate OB rates and rate structures (sometimes called "carve-out" rates or case rates) are commonly negotiated by health plans and hospitals. (Sheridan, Tr. 6683; Radzialowski, Tr. 695, *in camera*, 752-753; Korducki, Tr. 529; *see also* PX01939 at 013 (Sheridan, Dep. at 48), *in camera*). In her expert report, Respondent's expert makes the confounding claim that separately listing OB rates in health-plan contracts does not mean that those rates were negotiated separately, although she seemed to retreat from this claim at trial. (Compare RX-71(A) at 43 (¶ 73) (Guerin-Calvert Expert Report), *in camera*, with Guerin-Calvert, Tr. 7677-7679). Common sense dictates that, if there is a different dollar figure or different rate structure for OB services than for other inpatient GAC services, that dollar figure and rate structure must have been "negotiated." In other words, the parties to the negotiation must have agreed to those particular, separate terms, even if there was no disagreement on what those terms would be. Indeed, the only health-plan witness Respondent called to testify said that, in the 2010 negotiation with ProMedica, the case rates and per diem rates for obstetrics services were an explicit subject of negotiation. (Sheridan, Tr. 6684; *cf.* Radzialowski, Tr. 752).

Additionally, applying the hypothetical-monopolist test of the *Merger Guidelines* shows that OB is a separate relevant service market. The evidence shows that no other services are reasonably interchangeable with, or substitutes for, inpatient obstetrical services. (PX01935 at 005 (Read, Dep. at 11); PX01914 at 018-019 (Pirc (MMO), IHT at 65-66), *in camera*; Guerin-Calvert, Tr. 7667-7668; PX02148 at 023-024 (¶ 41) (Town Expert Report), *in camera*; *see also* Response to RFA at ¶ 4 ("… ProMedica admits that inpatient OB services includes services such as obstetrics, newborn, neonatology, and gynecology, and states that patients seeking these types of services might not consider other services sufficient to meet their needs."); *ProMedica*, 2011 U.S. Dist. LEXIS 33434, at *24 (¶ 72)). Respondent's economic expert testified that if Mercy no

longer offered OB services – which would result in ProMedica having a monopoly for OB services in Lucas County – prices of OB services in Lucas County would likely increase. (Guerin-Calvert, Tr. at 7679-7680). As such, a hypothetical monopolist could, no doubt, profitably raise the price of inpatient OB services five percent and likely much more. (PX02148 at 023-024 (¶ 41) (Town Expert Report), *in camera*).

Analyzing inpatient obstetrical services under *Brown Shoe's* practical indicia also confirms a separate relevant service market for OB services. The healthcare industry and general public recognize obstetrics as a separate field of medicine; there are distinct providers of OB services (obstetricians); there are distinct customers (pregnant mothers and their partners); and there are distinct prices for OB services (as described above).

Finally, Complaint Counsel's economic expert also concluded that OB services constitute a separate market. (PX02148 at 023-024 (¶ 41) (Town Expert Report), *in camera*). Thus, based squarely on case law, the *Merger Guidelines'* analytical framework, the facts, practical indicia, and the conclusion of Complaint Counsel's economic expert, inpatient OB services are a second, distinct relevant service market.

III. RELEVANT GEOGRAPHIC MARKET

A. Relevant Geographic Markets Generally

The ultimate question for geographic market definition is "where, within the area of competitive overlap, the effect of the merger on competition will be direct and immediate." *Phila. Nat'l Bank*, 374 U.S. at 357; *Polypore*, 2010 FTC LEXIS 17, at *492. Courts consistently define the relevant geographic market by assessing the alternative sources of the relevant product or service to which consumers could practicably turn. *See, e.g., Phila. Nat'l Bank*, 374 U.S. at

359; *Butterworth,* 946 F. Supp. at 1291; *Polypore*, 2010 FTC LEXIS 97, at *48; *see also Merger Guidelines* § 4.2.

Under case law and the *Merger Guidelines*, courts define the geographic market as the region where a hypothetical monopolist that was the only supplier of the relevant product or service could profitably implement a small but significant non-transitory increase in price. *Butterworth,* 946 F. Supp. at 1292; *Polypore*, 2010 FTC LEXIS 97, at *48; *Merger Guidelines* § 4.2. Although the relevant geographic market must be "sufficiently delineated" to indicate the area where competition is threatened, the boundaries of the geographic market need not be delineated "by metes and bounds as a surveyor would lay off a plot of ground." *Polypore*, 2010 FTC LEXIS 17, at *492 (citing *Cardinal Health*, 12 F. Supp. 2d at 49 and *United States v. Pabst Brewing Co*., 384 U.S. 546, 549-50 (1966)).

B. Lucas County Is the Relevant Geographic Market

The relevant geographic market for inpatient general acute-care services and inpatient obstetrics services is Lucas County, Ohio. (*See* PX00900 (Attachment B) for map of Lucas County). Respondent concedes that Lucas County is the relevant geographic market for GAC services but denies it is for OB services. (Response to RFA at ¶¶ 7, 9). Undoubtedly, Respondent does so to avoid the overwhelming presumption of illegality that a merger-to-duopoly in OB creates. But Respondent's argument would mean that the relevant geographic market for OB services is *broader* than the relevant geographic market for GAC services. In other words, Respondent's position is that Lucas County residents would travel farther to deliver a baby than to attend a pre-scheduled, elective surgery. The evidence contradicts that claim and shows that Lucas County is the appropriate geographic market for GAC and OB services.

Critically, patient-flow data reveal that nearly all residents of Lucas County (97.9%) stay within Lucas County for GAC services. (PX02148 at 026 (¶ 46) (Town Expert Report), *in camera*). The data reveal that far *fewer* patients (0.6%) leave Lucas County for OB services than for GAC services (2.1%). (PX02148 at 026 (¶ 46) (Town Expert Report), *in camera*). In other words, 99.4 percent of patients residing in Lucas County stay in Lucas County for OB services – even *more* than stay for GAC services. (PX02148 at 026 (¶ 46) (Town Expert Report), *in camera*). So these data directly rebut the notion that any substantial number of patients travel outside Lucas County for OB services and rebuts the notion that more people travel outside Lucas County for OB services than for GAC services.

Additionally, the data show that 95 percent of Lucas County residents travel 24.5 minutes or less for GAC and OB services. (PX02148 at 140-141 (Exhibit 5) (Town Expert Report), *in camera*). Lucas County residents' *average* drive time for GAC services is 11.5 minutes and for OB services is 11.3 minutes. (PX02148 at 140 (Exhibit 5) (Town Expert Report), *in camera*). But Wood County Hospital, the nearest hospital outside Lucas County, is approximately 30 minutes from the center of Toledo – which is *three times* longer than Lucas County residents' average drive time for OB services.[6]

Voluminous evidence from health plans, third-party hospitals, physicians, employers, and Respondent confirm that Lucas County is the relevant geographic market for GAC and OB services. First, the evidence resoundingly indicates that for routine inpatient care, including OB services, patients generally and Lucas County residents in particular, prefer and use the hospital that is closest to their home.[7] (*See, e.g.,* Radzialowski, Tr. 634; Pugliese, Tr. 1450-1451; Pirc, Tr. 2183-2184; Shook, Tr. 878-879, 942; Korducki, Tr. 511, 558; Andreshak, Tr. 1773; Gbur, Tr.

[6] Google Maps calculation using directions function from WCH to Toledo, Ohio. (http://maps.google.com).
[7] Patients' preference for local care is also confirmed in the economics and health services research literature. (PX02148 at 026 (¶ 46 n.69) (Town Expert Report), *in camera*).

3109; Marlowe, Tr. 2406; Neal, Tr. 2103 ("We feel it's very important that our employees have access to hospitals, particularly acute care hospitals, within a *ten-mile radius*.[8] That's also an agreement that we [Chrysler] have with the [ ] UAW bargaining groups.") (emphasis added); Caumartin, Tr. 1855; Wakeman, Tr. 2510; Rupley, Tr. 1962). With respect to OB specifically, Aetna's trial testimony illustrates this dynamic of staying close to home: the witness said he would be hard-pressed to explain to his wife, if she was in labor, why he was driving past the local hospital to go an additional 15 miles or more for delivery. (Radzialowski, Tr. 634; *cf*. Shook, Tr. 942-945).

Not surprisingly, the trial testimony resoundingly confirms that Lucas County residents, with rare exception, do not travel outside of Lucas County for GAC or OB services. (Radzialowski, Tr. 648-649; Pugliese, Tr. 1450; Pirc, Tr. 2186; Sandusky, Tr. 1314-1315; Sheridan, Tr. 6682; Shook, Tr. 942-945; Korducki, Tr. 511). The President of WCH testified that, on average, only *one* Lucas County resident per month goes to WCH for inpatient OB services. (*See* Korducki, Tr. 512-513).

The predominant reason Lucas County residents do not travel outside Lucas County is distance. (Radzialowski, Tr. 649; *cf*. Sheridan, Tr. 6681). More specifically, Lucas County residents have hospital options that are much closer to home and offer more services than WCH and FCHC. (Radzialowski, Tr. 650-651, 739; Beck, Tr. 392-393; Andreshak, Tr. 1781-1782 (Patients "will not drive down to [WCH in] Bowling Green, a small community hospital, when they … have hospitals in the local community."; FCHC "is a small hospital. It's also too far away. They [Lucas County residents] won't drive [there]."); Marlowe, Tr. 2399-2400 (even for southwest Lucas County residents, WCH "is pretty far away … a small hospital, out in the

[8] Wood County Hospital, the nearest hospital to Lucas County, is 25 miles from Toledo and 15.6 to 18.9 miles from St. Luke's, depending on the route. (Google Maps direction function).

sticks"; Marlowe has "never had anybody ask me to go there or ask me if I go there [to deliver their baby]."); *see* PX01935 at 016 (Read, Dep. at 57) (obstetrician who practices at St. Luke's; has not performed any deliveries at WCH). In fact, Lucas County residents will not travel far *within* Lucas County for care, much less travel *outside* Lucas County. (Andreshak, Tr. 1768 (Toledo residents "don't want to leave their local community. To them, driving 10, 15 miles across town was an eternity. Literally, they would not leave their local area . . . . [P]eople on the east side of Toledo would not want to cross the river. They did not want to go across to St. Luke's. That was just an eternity away. Most people wanted to stay in the local area.")).

Hospitals in adjacent counties, therefore, are not acceptable alternatives for health plans' Lucas County members. (Pugliese, Tr. 1451). Indeed, health plans testified that it would not be commercially viable to market to Lucas County residents a hospital network that included only WCH and FCHC (i.e., excluded all Lucas County hospitals). (Pirc, Tr. 2193; Sheridan, Tr. 6682-6683; McGinty, Tr. 1193). Respondent's economic expert agreed with that assessment. (Guerin-Calvert, Tr. 7684-7685). The President of Paramount, Jack Randolph, testified that it would be "almost absurd," "unmarketable and highly unrealistic" to have a provider network consisting only of hospitals outside of Lucas County. (Randolph, Tr. 7064-7065).

Health plans and Respondent, moreover, specifically analyze GAC and OB competition in Lucas County in the ordinary course of business. (*See, e.g.*, PX02210 at 003, *in camera*; PX01016 at 003 (St. Luke's analysis of GAC and OB market shares in its core service area includes shares for Lucas County hospitals only), *in camera*; PX01018 at 006 (St. Luke's "Competitor Assumptions" slide refers only to ProMedica, Mercy, and UTMC), *in camera*; PX01077 at 002-003, 005-006 (analysis of medical/surgical and OB utilization in Lucas County,

and analysis of market shares in St. Luke's core service area and primary service area, which includes only Lucas County hospitals)).

The evidence resoundingly indicates that GAC and OB competition is limited to Lucas County and that Wood County Hospital and Fulton County Health Center are not competitors, or at least not meaningful competitors, to Lucas County hospitals. (*See, e.g.,* Radzialowski, Tr. 650-651; Pirc, Tr. 2191-2193; Sandusky, Tr. 1315; PX01933 at 047 (Oppenlander, Dep. at 178-179), *in camera*; PX01930 at 015 (Reiter, Dep. at 52-53) (the hospitals that compete in the metro Toledo area are ProMedica, St. Luke's, Mercy, and UTMC; the Ohio State and University of Michigan hospitals "are not considered to be competitors of the [Toledo] metro region hospitals…")). ProMedica's Chief Financial and Strategic Planning & Development Officer, Kathy Hanley, testified that, prior to the Acquisition, ProMedica competed with just St. Luke's, Mercy, and, to "a much lesser extent," UMTC. (Hanley, Tr. 4866; *see also* PX01903 at 020 (Hanley, IHT at 72-73), *in camera* (ProMedica does not compete with WCH or FCHC for GAC services)).

With respect to OB specifically, ProMedica's President of Acute Care effectively admitted that OB competition is limited to Lucas County and outright stated that Flower Hospital faces essentially *no competition* post-Acquisition: In OB, "St. Vincent is Toledo[Hospitals]'s competition. St. Charles is Bay Park's competition. *Flower doesn't really have competition*" now that St. Luke's has been acquired. (PX01904 at 035 (Steele, IHT at 132-133), *in camera*) (emphasis added)).

Perhaps most telling of all is that *not once* during a day and a half of trial testimony did ProMedica's CEO, Mr. Oostra, even *mention* Wood County Hospital or Fulton County Health

Center, let alone assert that those hospitals competed, or would compete post-Acquisition, with Respondent for GAC or OB services. (Oostra, Tr. 5757-6245, *in camera*).

Applying the hypothetical-monopolist test, the relevant question here is whether a hypothetical monopolist controlling *all* Lucas County hospitals could profitably implement a small but significant non-transitory increase in price. *Butterworth,* 946 F. Supp. at 1292; *Polypore*, 2010 FTC LEXIS 97, at *48; *Merger Guidelines* § 4.2. In addition to the foregoing evidence, additional evidence indicates that patients would be unlikely to turn to hospitals outside of Lucas County, even if prices for inpatient GAC services in Lucas County increased. {According to }, if all of the hospitals in Lucas County raised their rates, { } would not be able to {

}. ({ }*in camera*)). United's and FrontPath's representatives testified that Lucas County residents would not travel outside the county for inpatient services. (Sheridan, Tr. 6681; Sandusky, Tr. 1314-1315). This is not surprising because patients have strong, personal attachments to their local hospitals. (Radzialowski, Tr. 634; Sheridan, Tr. 6680).

Both Complaint Counsel's and Respondent's economic experts agree that application of the hypothetical-monopolist test demonstrates that Lucas County is the relevant geographic market for GAC services. (PX02148 at 025-026 (¶ 45) (Town Expert Report), *in camera*[9]; Guerin-Calvert, Tr. 7681-7683 ("I think the market definition test is saying who do you identify as the suppliers that you should include in the relevant geographic market, so in terms of that, I think it [Lucas County] is a well-defined and appropriate geographic market.")). Similarly, Complaint Counsel's economic expert concluded that a hypothetical monopolist could profitably

[9] Complaint Counsel's expert also reached his conclusion on the relevant geographic market relying on the foregoing patient-discharge data, testimony, documentary evidence, and econometric analysis. (PX02148 at 025-032 (¶¶ 45-55) (Town Expert Report), *in camera*).

raise the price of OB services in Lucas County. (PX02148 at 025-026, 028-029 (¶¶ 45, 50) (Town Expert Report), *in camera*). Respondent's economic expert admitted that, if Mercy no longer offered OB services – i.e., ProMedica had a monopoly for OB services in Lucas County – prices of OB services in Lucas County could increase. (Guerin-Calvert, Tr. at 7679-7680).

The foregoing evidence from market participants and Respondent demonstrates that Lucas County is the area of effective competition and where the effects of the Acquisition will be felt. It is also the area to which consumers of inpatient GAC and OB services currently and would practicably turn for such services. Therefore, Lucas County is the relevant geographic market for GAC and for OB services.

IV. ANTICOMPETITIVE EFFECTS OF THE ACQUISITION

A. Legal Standard Under Clayton Act Section 7

Section 7 of the Clayton Act prohibits any acquisition "where in any line of commerce … the effect of such acquisition *may be* substantially to lessen competition, or tend to create a monopoly." 15 U.S.C. § 18 (emphasis added). "Congress used the words 'may be' . . . to indicate that its concern was with probabilities, not certainties" and to "arrest restraints of trade in their incipiency and before they develop into full-fledged restraints." *Brown Shoe*, 370 U.S. at 323 & n.39 ("requirement of certainty … of injury to competition is incompatible" with Congress' intent of "reaching incipient restraints."); *see also Phila. Nat'l Bank*, 374 U.S. at 355, 367 (a "fundamental purpose of amending § 7 was to arrest the trend toward concentration, the *tendency* to monopoly, before the consumer's alternatives disappeared through merger[.]"); *Chicago Bridge*, 534 F.3d at 423; *CCC Holdings*, 605 F. Supp. at 35. Thus, to establish a § 7 violation, "the FTC need not show that the challenged merger or acquisition *will* lessen

competition, but only that the loss of competition is a 'sufficiently probable and imminent' result of the merger or acquisition." *CCC Holdings*, 605 F. Supp. at 35.

Courts generally analyze Section 7 cases under a burden-shifting framework. *See, e.g.*, *Chicago Bridge*, 534 F.3d at 423; *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.D.C. 2001); *United States v. Baker Hughes Inc.*, 908 F.2d 981, 982-83 (D.C. Cir. 1990); *Polypore*, 2010 FTC LEXIS 97, at *25. Under this framework, Complaint Counsel can establish a *prima facie* case of a Section 7 violation by showing that the transaction will result in undue concentration in the relevant market(s). *Chicago Bridge*, 534 F.3d at 423; *Baker Hughes*, 908 F.2d at 982-83; *Polypore*, 2010 FTC LEXIS 97, at *25. Undue concentration in a relevant market leads to the presumption that the transaction substantially lessens competition. *Phila. Nat'l Bank*, 374 U.S. at 363; *Chicago Bridge*, 534 F.3d at 423; *United States v. Dairy Farmers of Am.,* 426 F.3d 850*,* 858 (6th Cir. 2005); *United States v. Citizens & S. Nat'l Bank*, 422 U.S. 86, 120-121 (1975). Complaint Counsel can establish a *prima facie* case quantitatively or qualitatively, and further support its *prima facie* case with additional evidence that anticompetitive effects are likely. *Butterworth,* 946 F. Supp. at 1289 (FTC may make *prima facie* case with statistical showing of post-merger control of "undue percentage" of relevant market and a "significant increase in [ ] concentration"); *Polypore*, 2010 FTC LEXIS 97, at *25-26 ("qualitative evidence regarding pre-acquisition competition between the merging parties can in some cases be sufficient to create a *prima facie* case[.]") (citing *In re Chicago Bridge & Iron Co.*, 138 F.T.C. 1024, 1053 (2005) (Comm'n Dec.) and *Merger Guidelines*).

Once a *prima facie* case is established, Respondent bears the burden of rebutting the presumption of illegality by producing sufficient evidence to show that Complaint Counsel's evidence inaccurately predicts the likely competitive effects of the transaction. *United States v.*

Marine Bancorporation, 418 U.S. 602, 631 (1974); *Chicago Bridge*, 534 F.3d at 423; *Univ. Health Inc.,* 938 F.2d at 1218-19; *Polypore*, 2010 FTC LEXIS 97, at *26. The stronger the *prima facie* case, the greater the Respondent's burden of production on rebuttal. *Polypore*, 2010 FTC LEXIS 97, at *26 (citing *Heinz*, 246 F.3d at 725; *Baker Hughes*, 908 F.2d at 991). If the Respondent carries its burden, the burden of production shifts back to Complaint Counsel, who at all times retains the ultimate burden of persuasion. *Chicago Bridge*, 534 F.3d at 423 (citations omitted); *Polypore*, 2010 FTC LEXIS 97, at *27.

In this case, the quantitative and qualitative evidence clearly demonstrates that the Acquisition will substantially lessen competition and harm consumers. In two relevant service markets, the Acquisition significantly increases concentration, results in undue market concentration and, therefore, is presumptively unlawful by wide margins. Additionally, a vast array of qualitative evidence from market participants and Respondent reinforces the presumption of illegality by demonstrating that the Acquisition eliminates vital competition and likely will lead to higher prices and lower quality for consumers.

B. Market Shares, Market Concentration, and Presumption of Illegality

ProMedica's acquisition of St. Luke's is presumptively unlawful because it results in tremendous concentration in the already highly-concentrated Lucas County markets for GAC and OB services.

Prior cases have found a presumption of illegality and enjoined transactions that caused undue concentration in a relevant market. *Phila. Nat'l Bank*, 374 U.S. at 364; (enjoining acquisition with 30 percent combined share and where many competitors remained); *Univ. Health*, 938 F.2d at 1211 n.12, 1219 (holding *prima facie* case established where merger reduced competitors from five to four, and resulted in a combined market share of 43 percent, HHI

increase of 630 points, and a post-merger HHI of 3200); *Bass Bros.*, 1984 U.S. Dist. LEXIS 16122, at *18, *20 (enjoining two mergers resulting in 200-point and 300-point HHI increases). Under the 2010 *Merger Guidelines*, markets with post-merger HHIs above 2500 are considered "highly concentrated"; transactions that increase concentration by 200 points or more and result in a highly-concentrated market are "presumed to be likely to enhance market power." *Merger Guidelines* § 5.3. In both the GAC and OB services markets here, the post-Acquisition market shares, HHIs, and the increase in concentration far exceed these levels and create an overwhelming presumption of illegality.

ProMedica's acquisition of St. Luke's reduced the number of inpatient GAC competitors in Lucas County from four to three. (*See* Joint Stipulations of Law and Fact, JX00002A at ¶¶ 7-8). Post-Acquisition, Respondent's share of the Lucas County GAC market is a commanding 58.3%. (*See* Table 1 below; PX02148 at 143 (Exhibit 6) (Town Expert Report), *in camera*). Post-Acquisition, ProMedica's market share is more than *double* that of the next largest competitor, Mercy, and more than *four times* that of UTMC.

Indeed, Mr. Oostra acknowledged at trial that ProMedica's market share already was significantly higher than Mercy's even before ProMedica's acquisition of St. Luke's. (Oostra, Tr. 5973 (referring to 2006 data reflected in PX00270)). A ProMedica presentation to Standard & Poor's included a slide with inpatient market shares that was titled "ProMedica Health System has market dominance in the Toledo MSA…" (PX00270 at 025).

The Acquisition increases concentration in the GAC market by 1078 points, resulting in a post-Acquisition HHI of 4391. (*See* Table 1 below; PX02148 at 034 (¶ 61), 143 (Exhibit 6) (Town Expert Report), *in camera*). This post-Acquisition HHI is more than *1.5 times* the level considered in the *Merger Guidelines* to be a highly-concentrated market, and the increase in

concentration is more than *five times* the level that leads to the presumption that the transaction will likely enhance market power.

Table 1

GAC Market Shares and HHIs

Inpatient General Acute-Care Services		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	46.8%	58.3%
St. Luke's	11.5%	--
Mercy	28.7%	28.7%
UTMC	13.0%	13.0%
Pre-Acquisition HHI	3312.5	
Post-Acquisition HHI		4390.7
HHI Increase		1078.2

Source: OHA Data; market shares based on patient days (7/09 – 3/10)

In OB services, ProMedica's acquisition of St. Luke's reduces the number of inpatient competitors in Lucas County from three to two – a duopoly. (*See* Response to RFA at ¶ 10). Post-Acquisition, Respondent's share of the Lucas County OB market is a dominant 80.5%. (*See* Table 2 below; PX02148 at 143 (Exhibit 6) (Town Expert Report), *in camera*). Post-Acquisition, ProMedica's market share is more than *four times* that of Mercy, the sole remaining competitor.[10]

Respondent's documents confirm its enormous OB market share. A presentation to the St. Luke's board about affiliation partners reported HHI measures with various partners and stated that "[a]ny obstetrics affiliation [with ProMedica] may need to be carefully reviewed. . . .

[10] Additionally, not all Mercy hospitals provide OB services (St. Anne does not), and Mercy does not provide certain OB services, such as tubal ligation, at any of its hospitals because it would violate Mercy's ethical and religious directives. (Shook, Tr. 1065-1066).

Note: Anything over 18% throws up a red flag." (PX01030 at 017, *in camera*). Mr. Wakeman testified that this was included because ProMedica "already had a pretty significant market share of OB in the greater Northwest Ohio area." (Wakeman, Tr. 2695-2696, *in camera*). In a presentation to Standard & Poor's, ProMedica presented market share information for its Women's Services and noted its "strong market position." (PX00270 at 026). Another ProMedica document, {

}, noted that ProMedica's Central Region, which covers Lucas County, was a "heavy market leader" in OB. (PX00214 at 170, *in camera*).

The Acquisition increases concentration in the OB market by 1323 points, resulting in a post-Acquisition HHI of 6854. (*See* Table 1 below; PX02148 at 034 (¶ 61), 143 (Exhibit 6) (Town Expert Report), *in camera*). This post-Acquisition HHI is more than *2.5 times* the level considered in the *Merger Guidelines* to constitute a highly-concentrated market, and the increase in concentration is more than *6.5 times* the amount giving rise to the presumption that the transaction will likely enhance market power.

Table 2

OB Market Shares and HHIs

Inpatient Obstetrical Services		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	71.2%	80.5%
St. Luke's	9.3%	--
Mercy	19.5%	19.5%
Pre-Acquisition HHI	5531.2	
Post-Acquisition HHI		6853.7
HHI Increase		1322.5

Source: OHA Data; market shares based on patient days (7/09 – 3/10)

Strikingly, even though Respondent's economic expert calculated market shares based on various alternative market definitions, neither Respondent nor its economic expert present HHIs for these alternative markets anywhere. (*See* Resp't ProMedica Health System, Inc.'s Pre-Trial Brief [*hereinafter* Resp't's Pre-Trial Br.]; Guerin-Calvert, Tr. 7723).[11] But what is more striking is that, even assuming the relevant geographic market is broader and even including Ms. Guerin-Calvert's fringe competitors in market concentration calculations, ProMedica's acquisition of St. Luke's still causes undue concentration and is presumptively illegal.

Hospitals outside of Lucas County are simply too far away to be practicable alternatives to which Lucas County consumers could turn for basic GAC or OB services. (*See* Appendix, Table 3). But even assuming the geographic market included Wood *and* Fulton counties, post-Acquisition in the GAC market, Respondent still commands a 55.8% market share, concentration increases by 989 points, and the resulting HHI is 4037. (*See* Appendix, Table 4 and Table 5). In this over-expansive geographic market for OB services, Respondent commands a dominant post-Acquisition market share of 75.3%, concentration increases by 1157 points, and the resulting HHI is 6020. (*See* Appendix, Table 4 and Table 5).

Even assuming the University of Michigan Medical Center and the Cleveland Clinic are fringe competitors[12] properly included within the product *and* geographic markets suggested by

[11] Interestingly, although she had trouble recalling at trial, Ms. Guerin-Calvert has presented HHI calculations in prior cases, including *Arch Coal*, *Long Island Jewish*, and *California v. Sutter Health Sys.*, 130 F. Supp. 2d 1109 (N.D. Cal. 2001), the latter two being hospital cases. (Guerin-Calvert, Tr. 7720-7722). Apparently, she has presented HHIs when it suited to show that a market was unconcentrated. (*See* Guerin-Calvert, Tr. 7720-7722).

[12] There is hardly any mention in the trial transcripts of these hospitals, let alone sufficient evidence to support the claim that they are fringe competitors for GAC and OB services.

Respondent's expert at trial,[13] the Acquisition still triggers the *Merger Guidelines* presumption of enhanced market power. (*See* Appendix, Table 6 and Table 7 (based on discharges[14])).

Even if concentration is calculated using Ms. Guerin-Calvert's beds-in-use[15] market shares and WCH, FCHC, Fremont Memorial Hospital, and H.B. Magruder Memorial are all assumed to be fringe competitors,[16] the Acquisition results in a post-Acquisition market share of 47.8%, concentration increases by 662 points, and the resulting HHI is 3413. (*See* Appendix, Table 8).

Even assuming that all inpatient DRGs are included in a single relevant service market – even those DRGs that Respondent's economic expert excluded from her analysis – the transaction would result in an enormous increase in concentration and a highly-concentrated market. Respondent has not shown otherwise. (*Cf.* PX01850 at 009-010 (¶ 11) (Town Expert Rebuttal Report), *in camera*).

Thus, regardless of how the relevant markets are defined, the Acquisition results in a tremendous increase in concentration in markets that already were highly concentrated. For the OB market, there exists, "by a wide margin, a presumption that [a three-to-two] merger will lessen competition[.]" *Heinz*, 246 F.3d at 716; *FTC v. PPG Indus., Inc.*, 798 F.2d 1500, 1505

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[13] Guerin-Calvert, Tr. 7729-7730 (referring to RX-71(A) at 0000165 (Exhibit 42d) (Guerin-Calvert Expert Report), *in camera*).

[14] Billed charges, essentially hospitals' list prices, are virtually irrelevant because health plans almost never pay that price. (Town, Tr. 3707-3708; Guerin-Calvert, Tr. 7732; Sandusky, Tr. 1321; *see also* Korducki, Tr. 534-535 (agreeing with Respondent's counsel that a hospital's chargemaster is akin to rates posted on the back of hotel doors, which "not many people pay")). As such, it is inappropriate to calculate market shares based on billed charges, though doing so does not materially impact the concentration analysis. (Town, Tr. 3708, 4078-4079).

[15] The number of registered (or licensed) beds is practically irrelevant because hospitals generally do not (or cannot) operate or staff the number of beds for which they are registered. (*See, e.g.,* Gold, Tr. 198-199; Korducki, Tr. 476-477; Shook, Tr. 900, 903). Indeed, ProMedica's CEO said staffed beds was an appropriate measure of a hospital's occupancy and called the number of licensed beds "irrelevant." (PX01906 at 026 (Oostra, IHT at 99-100), *in camera*). Another potential flaw of using beds-in-use is that it captures beds that may be used for tertiary and quaternary services, which are not in the relevant market. (*See* PX02148 at 080 (¶ 144 n.247) (Town Expert Report), *in camera*).

[16] (RX-71(A) at 000208 (Guerin-Calvert Expert Report), *in camera*). Notably, Ms. Guerin-Calvert's numbers are inaccurate. For example, Fulton County Health Center actually has 25 inpatient beds (and 10 (non-GAC) psychiatric beds) (Beck, Tr. 376-377), not 45, as indicated in Ms. Guerin-Calvert's expert report.

(D.C. Cir. 1986); *cf. Cardinal Health*, 12 F. Supp. 2d at 52-53. Indeed, there is an overwhelming presumption of illegality in both relevant markets.

C. The Acquisition Eliminated Close and Vigorous Competition Between ProMedica and St. Luke's

The close competition that existed between St. Luke's and ProMedica's hospitals before the Acquisition is apparent from every angle: Market shares, consumer preference surveys, ordinary-course analyses, testimony from market participants, and Professor Town's diversion analysis all underscore that a significant number of patients viewed St. Luke's and ProMedica as their top two choices for inpatient hospital care, especially in southwest Lucas County where St. Luke's is located. In addition, the record abounds with real-world examples of fierce competition between ProMedica and St. Luke's, including extensive efforts by ProMedica to keep St. Luke's out of health-plan networks. Thus, ProMedica has acquired a close substitute and a formerly-vigorous competitor in St. Luke's, greatly enhancing ProMedica's bargaining leverage with health plans such that consumers will inevitably face higher prices.

1. The Merger of Close Substitutes Leads to Greater Bargaining Leverage for the Merged Entity

Under a unilateral effects theory, the merger of close substitutes leads to increased bargaining leverage and higher prices. (Town, Tr. 3778-3779, *in camera*; PX02148 at 040-041 (¶¶ 74-75) (Town Expert Report), *in camera*; *Merger Guidelines* § 6.1). The closer that St. Luke's and one or more of the ProMedica hospitals were as substitutes, the greater the competitive harm that results from the Acquisition. (Town, Tr. 3772, *in camera*; PX02148 at 040 (¶ 75) (Town Expert Report), *in camera*). As the *Merger Guidelines* explain, "Unilateral price 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." (*Merger Guidelines* § 6.1).

The reason that a merger between close substitutes leads to higher rates in the context of hospitals is that ProMedica's bargaining leverage depends on how difficult it would be for health plans to market a viable network without ProMedica. This, in turn, depends on how highly the health plans' members value access to ProMedica hospitals. (PX02148 at 017 (¶ 29) (Town Expert Report), *in camera*).

Before the Acquisition, St. Luke's could independently add value to a health-plan network that did not include ProMedica because many health-plan members view St. Luke's as a close substitute to ProMedica's hospitals such as Flower and The Toledo Hospital. (Town, Tr. 3784-3785; *see* PX02148 at 017-018 (¶¶ 29-30) (Town Expert Report), *in camera*; *see also* Pirc, Tr. 2199). In other words, many health plan members could still have access to their first- or second-choice hospital – St. Luke's – even if a health plan failed to reach agreement with ProMedica. Similarly, many Lucas County residents view The Toledo Hospital and Flower as close substitutes for St. Luke's. For example, if residents of St. Luke's service area do not go to St. Luke's, they primarily go to TTH for GAC and OB services. (Rupley, Tr. 1945-1946; *see also* PX01169 at 009-010, 012-013, 017-019, 027-029, 042-044).

After the Acquisition, St. Luke's is no longer an independent alternative to provide the coverage that health plans need in southwest Lucas County. (Town, Tr. 3784-3785, *in camera*). The loss in value to a health plan's network without ProMedica *and* St. Luke's is now greater, leading to greater bargaining leverage and higher rates for ProMedica. (*See* Town, Tr. 3784-3785, *in camera*; PX02148 at 017-018 (¶¶ 29-30) (Town Expert Report), *in camera*; Pirc, Tr. 2261-2262, *in camera*; Radzialowski, Tr. 841-842, *in camera*; Pugliese, Tr. 1525, *in camera*; McGinty, Tr. 1209).

2. Overwhelming Evidence Demonstrates that ProMedica and St. Luke's Were Close Substitutes

The evidence is incontrovertible that St. Luke's was, in fact, a close substitute for ProMedica's nearby hospitals. The CEOs of both ProMedica and St. Luke's agree that, before the Acquisition, St. Luke's viewed ProMedica as its "most significant competitor." (Wakeman, Tr. 2511, 2523-2527; Oostra, Tr. 6040). Mr. Oostra also viewed ProMedica and St. Luke's as "strong competitors." (Oostra, Tr. 6038-6039). In contrast, Mercy did not consider itself to be "in any way, shape or form a primary competitor to [St. Luke's]." (Shook, Tr. 1038).

The testimony is borne out by documents and data. First, market shares, which reflect consumer preferences, show that St. Luke's and ProMedica were the most preferred hospitals for a significant number of consumers. (*See* PX02148 at 042 (¶¶ 78-79) (Town Expert Report), *in camera*; Town, Tr. 3753-3755, *in camera*). Because patients generally prefer to be treated at hospitals close to home, consumer preferences for specific hospitals will vary even within a geographic market. (*See* Randolph, Tr. 7101-7102, *in camera*; Pugliese, Tr. 1450; Sheridan, Tr. 6680-6681; Pirc, Tr. 2184; PX02148 at 041-042 (¶ 77) (Town Expert Report), *in camera*). Therefore, some hospitals within a geographic market will be closer substitutes than others. (PX02148 at 041-042 (¶77) (Town Expert Report), *in camera*; *see* Pirc, Tr. 2200). Accordingly, comparing market shares within a smaller geographic area, such as within individual zip codes or within southwest Lucas County, will reveal the closeness of competition between specific hospitals. The hospital with the second-highest market share in an area is likely to be the closest substitute for the hospital with the highest market share. (PX02148 at 041-042 (¶¶ 77-78) (Town Expert Report), *in camera*; *see* Wakeman, Tr. 2507).

Here, St. Luke's and ProMedica have the highest market shares in southwest Lucas County, for both general acute-care services and obstetrics. For example, a St. Luke's analysis

of market shares in the eight zip codes surrounding St. Luke's (its core service area) between 2007 and 2010 shows that St. Luke's and ProMedica consistently have the two largest market shares for general acute care services, distantly trailed by Mercy and UTMC.[17] (PX01235 at 003; *see also* PX01016 at 003, *in camera*; Rupley, Tr. 1978-1983, *in camera*). ProMedica and St. Luke's also have the two largest market shares for obstetrics, collectively accounting for over 80% of the market, in St. Luke's core service area. (PX01235 at 005). Mercy's internal assessment reached similar conclusions: In southwest Lucas County, Mercy determined that St. Luke's has a { } percent market share, ProMedica has { } percent, UTMC has { } percent, and Mercy has { } percent for inpatient services. (PX02290 at 002-003, *in camera*; Shook, Tr. 934-935, 980-981, 1012-1013, *in camera*).

Professor Town's analysis of market shares in St. Luke's core service area, using Ohio Hospital Association data, is consistent with St. Luke's and Mercy's internal assessments. Professor Town calculated that, for inpatient general acute-care services in St. Luke's core service area, ProMedica has a market share of { } and St. Luke's has a share of { } compared to shares of only { } for Mercy and { } for UTMC. (Town, Tr. 3764, *in camera*; PX02148 at 161 (Exhibit 11) (Town Expert Report), *in camera*). For inpatient obstetrics services in St. Luke's core service area, Professor Town determined that ProMedica has a market share of { }, St. Luke's has a share of { }, and Mercy has a share of { }. (Town, Tr. 3764-3765, *in camera*; PX02148 at 161 (Exhibit 11) (Town Expert Report), *in camera*). Professor Town also found that ProMedica and St. Luke's have the first- and second-largest market shares in a significant number of individual zip codes within Lucas

[17] St. Luke's defines its core service area in the ordinary course of business as the eight zip codes surrounding St. Luke's, where 55-60 percent of the admission base comes from. (Rupley, Tr. 1944; PX01418 at 005; PX01077 at 008). The primary service area is where approximately 80 percent of St. Luke's patients come from. (Rupley, Tr. 1949; PX01077 at 008).

County. (PX02148 at 155-159 (Exhibit 10) (Town Expert Report), *in camera*; *see also* RX-71A at 165 (Guerin-Calvert Expert Report), *in camera* (in "Top 10 Zips," ProMedica and St. Luke's have #1 and #2 market shares)).

Other evidence confirms that ProMedica and St. Luke's are close competitors. Consumer preference surveys commissioned by St. Luke's in 2006 and 2008 found that St. Luke's and TTH were the two most preferred hospitals in St. Luke's primary service area by large margins, including for OB. (PX01352 at 007; PX01077 at 013; Wakeman, Tr. 2521-2523; Rupley, Tr. 1958-1959). In 2008, 76 percent of patients in St. Luke's core service area preferred either St. Luke's or a ProMedica hospital. (PX01169 at 015; Rupley, Tr. 1954-1956). Furthermore, 42 percent of the 2008 survey respondents identified TTH as St. Luke's most direct competitor, and another eight percent identified Flower, compared to 16 percent who identified St. Vincent and eight percent who identified UTMC. (PX01169 at 042; Rupley, Tr. 1958-1959). Patient origin data also reflect that, for GAC and OB, patients in St. Luke's service area generally choose TTH the most if they do not go to St. Luke's. (Rupley, Tr. 1945-1946).

A diversion analysis, which uses health plan claims data to quantify the degree of substitutability between pairs of hospitals, provides further support that ProMedica and St. Luke's were close competitors. This analysis measures where patients would seek inpatient care if a given hospital were not available. (Town, Tr. 3771, *in camera*; *see also Merger Guidelines* § 6.1 ("Diversion ratios . . . can be very informative for assessing unilateral price effects, with higher diversion ratios indicating a greater likelihood of such effects.")). Professor Town performed this analysis for specific health plans and concluded that for the members of five of the six major health plans in Lucas County, ProMedica is St. Luke's next-best substitute. (Town, Tr. 3776-3777, *in camera*; PX02148 at 046-047 (¶ 88), 163 (Exhibit 12) (Town Expert Report),

in camera). That is, the highest share of those health plans' members would go to a ProMedica hospital if St. Luke's were unavailable.[18]

3. St. Luke's Was a Significant Competitor in Lucas County

In response to the overwhelming evidence that ProMedica and St. Luke's were close competitors, ProMedica argues that St. Luke's was too insignificant in Lucas County to matter. To the contrary, the evidence shows that St. Luke's was a very meaningful market participant in Lucas County, such that the loss of competition resulting from the Acquisition causes significant harm.

First, St. Luke's treated a large number of the commercial patients in Lucas County. (PX02148 at 171 (Exhibit 16) (Town Expert Report), *in camera*; *see* Wakeman, Tr. 2598-2600; PX01409 at 001). In fact, it is the third-largest individual hospital in the market based on commercial volume, exceeded only by St. Vincent and TTH. (PX02148 at 171 (Exhibit 16) (Town Expert Report), *in camera*). St. Luke's also was growing at the time of the Acquisition: by July 2010, St. Luke's had surpassed UTMC, Flower Hospital, and St. Charles Hospital to serve the third-largest number of patients in the market based on total (i.e., commercial, government, and self-pay) discharges and outpatient visits. (Wakeman, Tr. 2598-2600; PX01409 at 001).

Furthermore, St. Luke's is located in a geographically desirable and strategically important part of Lucas County. Southwest Lucas County is affluent and has a relatively high proportion of commercially-insured patients. (Wakeman, Tr. 2477, 2478-2481 (SLH is "in an optimal or better part of the community in the sense of growth and economic potential"); Shook,

[18] The sixth health plan is MMO. The fact that ProMedica was not the next-best substitute for St. Luke's for MMO members likely reflects that MMO was, until recently, aligned with Mercy. (PX02148 at 047 (¶ 88) (Town Expert Report), *in camera*).

Tr. 927-928; Oostra, Tr. 6037-6038 ("Good freeway access and a growing part of the city, so a good location."); PX00009 at 029 ("desirable section of the Toledo metro area where PHS lacks a physical presence")). The area around St. Luke's is one of the few around Toledo that is growing, with an increasing population and new construction starts. (Oostra, Tr. 6038; Wakeman, Tr. 2477; Sandusky, Tr. 1306). Given these attributes, in addition to patients' preference to use hospitals close to their homes, it is not surprising that health plans repeatedly testified that geographic coverage in southwest Lucas County is important for their networks. (Pirc, Tr. 2195-2196; Radzialowski, Tr. 712-714, *in camera*; Pugliese, Tr. 1442-1443, 1459; Sandusky, Tr. 1306-1307; Sheridan, Tr. 6672-6673, 6680-6681).

Specifically, health plans testified that having St. Luke's in their networks increased the marketability of their provider networks. (Pirc, Tr. 2195-2196, 2266-2267, 2201-2203; Pugliese, Tr. 1481-1483, *in camera*). Mr. Pirc, MMO's Vice President of Network Management, testified that { }. (Pirc, Tr. 2266-2267, *in camera*). An analysis prepared for Respondent projected that adding St. Luke's to the Paramount network could net Paramount as many as { } new members. (PX00040 at 008, *in camera*). Even Paramount's President, Jack Randolph, testified that the addition of St. Luke's to Paramount's network in late 2010 made Paramount more attractive to employers in southwestern Lucas County and had a positive impact on Paramount. (Randolph, Tr. 7007-7008, 7061-7062). Since St. Luke's joined Paramount, two significant employers – the City of Maumee Schools and Anthony Wayne Schools – switched to Paramount from other health plans. (Randolph, Tr. 7008-7010). Notably, no health plan has ever excluded ProMedica – *i.e.*, said no to their rate demands – without having St. Luke's in their network. Given St. Luke's

significance in the market and its desirable location, it is no wonder that ProMedica had wanted to acquire St. Luke's for almost fifteen years. (*See* Oostra, Tr. 6117).

4. St. Luke's Hurt ProMedica's Bottom Line By Successfully Competing for Patients

Prior to the Acquisition, St. Luke's was succeeding in attracting patients that otherwise would have sought care at ProMedica's hospitals, presenting a direct threat to ProMedica's bottom line. Testimony and evidence presented at trial showed that both ProMedica and St. Luke's were aware of the fierce competition between them and that St. Luke's was gaining ground.

Indeed, Mr. Wakeman testified that after he joined St. Luke's in 2008, his goal was to regain volume in St. Luke's core and primary service areas from ProMedica. (Wakeman, Tr. 2504-2505). St. Luke's was succeeding: its market share in its core service increased in 2008 and 2009 and St. Luke's ultimately met its goal of achieving a 40% market share in its core service area. (Wakeman, Tr. 2527; *see* PX01026 at 001 (setting out 40% goal); PX01235 at 003 (showing 43% market share by 1Q 2010); Response to IROG at ¶ 17 (admitting that St. Luke's achieved the goal)). The 2010 ProMedica Environmental Assessment – a document presented to the Board of Directors – highlighted the fact that ProMedica's {

} (PX00159 at 005, *in camera*; Oostra, Tr. 6175-6178, *in camera*). The report continued, {

}

(PX00159 at 012, *in camera*). One percent of ProMedica's 2009 gross revenue represents tens of millions of dollars. (PX00322 at 001 (PHS Gross Revenues 1Q 2009)).

Other internal assessments by ProMedica confirm that St. Luke's was capable of drawing patients away from ProMedica and hurting its revenues. ProMedica calculated that St. Luke's readmission to { } network in 2009, after being excluded since 2005, would cost ProMedica { } in gross margin annually, equating to approximately { } in revenues. (PX00333 at 002, *in camera*; Wachsman, Tr. 5204, *in camera*). Similarly, ProMedica knew that St. Luke's would draw Paramount patients away from ProMedica hospitals once it became part of Paramount's network after the Acquisition. (Randolph, Tr. 7099-7100, *in camera*). ProMedica estimated that St. Luke's readmission to Paramount's network would lead to a reduction of { } at ProMedica hospitals each year. (PX00040 at 007, *in camera*; *see also* PX00236 at 002).[19] The impact on Flower Hospital alone would be { } of lost margin annually. (PX00240 at 002, *in camera*; *see* PX00291 at 001, *in camera*).

Indeed, the loss of admissions and "the potential for the acute care impact (loss) to be bigger over time" concerned top ProMedica executives. (PX00236 at 001; Oostra, Tr. 6049-6051). And St. Luke's itself understood that, once readmitted to Paramount, it would gain patients that were otherwise going to TTH, especially for obstetrics. (Rupley, Tr. 2010, *in camera*). Thus, it is apparent that, before the Acquisition, St. Luke's was a close and important competitor to ProMedica, capable of drawing away millions of dollars in revenues and of capturing market share – and ProMedica knew it.

[19] The pre-Acquisition estimate reflected in PX00040 has not been updated and thus represents the best estimate in the record of actual volume shifts since St. Luke's joined Paramount's network on September 1, 2010. (*See* Randolph, Tr. 7010-7013).

5. ProMedica Took Aim at St. Luke's as a Significant Marketplace Competitor

In the years before the Acquisition, there are numerous examples of ProMedica's aggressive competition with St. Luke's. Notably, ProMedica sought to have third-party health plans exclude St. Luke's from their provider networks while ProMedica refused to admit St. Luke's into Paramount's provider network until after the Acquisition. ProMedica's actions serve to underscore the formerly-strong competition between ProMedica and St. Luke's.

For example, ProMedica used its leverage to have St. Luke's excluded from Anthem's network for four-and-a-half years, between 2005 and July 2009. (Pugliese, Tr. 1483, 1488-1489, 1491, *in camera* (referring to PX02245); *see* Rupley, Tr. 1962-1963). During contract negotiations in 2007 and 2008, Anthem informed ProMedica that it wanted to add St. Luke's back into its provider network, having determined that this was absolutely critical from a sales and marketing perspective. (Pugliese, Tr. 1482-1483, *in camera*; PX02296, *in camera*; PX02381 at 003 ("Key messages: Need St[.] Luke['s] in network ASAP…")). ProMedica resisted, knowing that its hospitals would lose volume to St. Luke's if it were competing for Anthem-insured patients as an in-network provider. (Pugliese, Tr. 1488-1489, *in camera*; Wachsman, Tr. 5153-5154, 5200-5201, *in camera*; PX00328 at 001, *in camera*). Anthem tried to negotiate a term that would allow it to at least add St. Luke's back into its network by { }, but ProMedica insisted that St. Luke's be excluded for { }. (PX02244 at 001, *in camera*; Pugliese, Tr. 1494-1496, *in camera*). Ultimately, ProMedica prevailed and the contract required Anthem to keep St. Luke's out of its network until July 1, 2009. (PX00231 at 015, *in camera*; Pugliese, Tr. 1493, 1497, *in camera*).

Not only did ProMedica succeed in excluding St. Luke's from Anthem's network for a longer period of time, ProMedica also contractually required Anthem to pay ProMedica {

} higher rates at *all* of its Lucas County hospitals if Anthem did in fact add St. Luke's to its network. (Pugliese, Tr. 1497-1498, *in camera*; PX00231 at 015, *in camera*). ProMedica demanded the { } to offset expected revenue losses of approximately { } at ProMedica's Lucas County hospitals from volume lost to St. Luke's. (Wachsman, Tr. 5203-5204, *in camera*; Pugliese, Tr. 1499-1500, *in camera*). This { } was so important that Ronald Wachsman, ProMedica's Director of Managed Care Contracting, wrote in an email to other high-ranking ProMedica executives that it was the { } for ProMedica in its negotiations with Anthem, requiring a { } to accomplish. (PX00295 at 001, *in camera*). Indeed, the issue was so important that ProMedica's then-CEO Alan Brass, who only rarely participated in managed care contracting issues, became involved. (PX00295 at 001, *in camera*; Wachsman, Tr. 4894, 5207-5209, *in camera*). To put the true import of this term in perspective, Mr. Wachsman stated that Anthem "*will have to pay PHS for the privilege*" of adding St. Luke's to its network. (PX00380 at 001) (emphasis added)).

ProMedica also sought to exclude St. Luke's from { } network and indicated to { } that this would be "an advantage to them [ProMedica]." (PX02267 at 001, *in camera*). ProMedica evaluated opportunities to exclude St. Luke's from { } network and { } network as well. (PX00407 at 001, *in camera*; *see* Wachsman, Tr. 5215-5216, *in camera*; *see also* PX00344 (email from former ProMedica CEO, Alan Brass, asking "[w]hat issues can be raised thru [sic] managed care" to retaliate against a St. Luke's effort to institute a cardiology program)). Unlike ProMedica, Mercy never took any actions to exclude St. Luke's from health plan provider networks. (*See* Wakeman, Tr. 2538). This is further evidence that ProMedica and St. Luke's were much closer competitors than Mercy and St. Luke's.

ProMedica also refused to allow Paramount to contract with St. Luke's, again because ProMedica viewed St. Luke's as a direct and close competitor to its hospitals and feared losing Paramount patients to it. St. Luke's was not an in-network Paramount provider from 2001 until the Acquisition, despite Paramount wanting to add St. Luke's back into its network at various times during that decade. (Oostra, Tr. 6045; Joint Stipulations of Law and Fact, JX00002A ¶ 46). Indeed, when the head of Paramount, Jack Randolph, learned that Anthem would be able to add St. Luke's to its network starting in 2009 (despite having to pay ProMedica "for the privilege" of doing so), he wrote to Mr. Oostra: "Since Anthem has been given this right to add St. Luke's within a year, *Paramount must have an ability to add them*. Strategically, we should be adding them first…" (PX00405 at 001) (emphasis added). But Mr. Brass, the former CEO of ProMedica, and Mr. Oostra both had concerns about St. Luke's participation in Paramount's network, including fears that St. Luke's would "cannibalize" existing ProMedica hospitals by drawing away patients. (Oostra, Tr. 6045-6046; Randolph, Tr. 7077).

In 2008, Mr. Wakeman, on behalf of St. Luke's, made serious attempts to rejoin Paramount's network but was unsuccessful. (Rupley, Tr. 1940-1941). ProMedica's concern that its hospitals would lose volume to St. Luke's trumped the desire of Paramount to add St. Luke's to its network and improve the health plan's marketability. (Rupley, Tr. 1940-1941; Randolph, Tr. 7077-7078; Oostra, Tr. 6045-6046; PX00405 at 001; PX01233 at 005, *in camera* (2009 St. Luke's document noting that {

})). Indeed, Mr. Randolph specifically testified that the ProMedica hospital presidents "who were direct competitors of St. Luke's" had concerns about St. Luke's joining Paramount. (Randolph, Tr. 7077). A contemporaneous St. Luke's document observed

that Paramount would { }

(PX01119 at 004, *in camera*).

These actions, combined with ProMedica's interest in acquiring St. Luke's, reveal ProMedica's longstanding and fundamental desire to eliminate competition with St. Luke's. (Oostra, Tr. 6116-6117; PX01152 at 001). They also undermine Respondent's defense in this case. Remarkably, for purposes of this case, Respondent now claims that St. Luke's is an insignificant competitor – despite that ProMedica has tried to keep St. Luke's out of health-plan networks for years and now wants to acquire St. Luke's so much that it is spending millions on antitrust lawyers and experts. And Respondent now claims that St. Luke's is in flailing financial condition – an audacious, if not galling, statement because even assuming – contrary to the evidence – St. Luke's was flailing, it would only be due to ProMedica's very efforts to put St. Luke's out of business.

6. St. Luke's Knew It Was a Target and Feared Retaliation by ProMedica If It Chose Another Affiliation Partner

St. Luke's knew that it was a target. Documents and testimony reflect concerns by St. Luke's executives that ProMedica was aggressively competing with St. Luke's over the southwest geography. St. Luke's even feared that if it did not affiliate with ProMedica, ProMedica would retaliate or try to put St. Luke's out of business.

A St. Luke's document from 2000 discussing negotiations with Paramount noted that ProMedica is "continuing an aggressive strategy to take over St. Luke's or put us out of business." (PX01152 at 001). In 2007, St. Luke's considered filing an antitrust suit against ProMedica, in response to perceived efforts by ProMedica to exclude or disadvantage St. Luke's in the marketplace. (Rupley, Tr. 1969; PX01144 at 003; PX01207 at 003).

Little had changed by the time Mr. Wakeman arrived in 2008. In a speech to the Perrysburg Chamber of Commerce, Mr. Wakeman stated that in order to "provide the best value to employers and consumers," hospitals should compete on "price, quality and service," but instead they (meaning ProMedica) were competing on "how well you can lock out hospitals and other healthcare providers [from] health insurance networks." (PX01380 at 001; Wakeman, Tr. 2531-2532, 2537 (confirming that St. Luke's was at the time excluded from Anthem and Paramount)). Internally, Mr. Wakeman described ProMedica as "[t]he organization that has taken the greatest resources from the community, made the best bottom line and perform[ed] poorly in terms of costs and outcomes." (PX01378 at 001; PX01920 at 027 (Wakeman, Dep. at 98), *in camera* (confirming that reference is to ProMedica)).

Nonetheless, St. Luke's increased its market share and continued to strengthen at ProMedica's expense. (Wakeman, Tr. 2519-2520, 2527; PX00159 at 005, 012, *in camera*). Yet St. Luke's feared retaliation by ProMedica as St. Luke's became an even-stronger competitor. An August/September 2009 presentation to St. Luke's Board of Directors noted that, if St. Luke's became stronger, ProMedica might {

}. (PX01018 at 009, *in camera*; Wakeman Tr. 2660-2661, *in camera*). The same presentation expressed concern that attempts would again be made to lock St. Luke's out of provider networks. (Wakeman, Tr. 2659-2660, *in camera*).

Rather than continue the vigorous competition with ProMedica at its own risk, St. Luke's decided to become part of the ProMedica system. St. Luke's was primarily motivated by the desire to access ProMedica's extraordinary health-plan rates. An October 2009 presentation to the St. Luke's Board of Directors stated that an "SLH affiliation with ProMedica has the greatest

potential for { }. A ProMedica-SLH partnership would have { }." (PX01030 at 020, *in camera*). That same month, Mr. Wakeman advised leaders of the St. Luke's Board that an affiliation with ProMedica would bring { } and { } to St. Luke's. (PX01125 at 002, *in camera*; Wakeman, Tr. 2685-2686, *in camera*). Mr. Wakeman concluded: "Taking advantage of [ProMedica's] strengths { } in the long run. Sure would make life easier right now though." (PX01125 at 002, *in camera*; Wakeman, Tr. 2687, *in camera*).

St. Luke's also feared that ProMedica would retaliate or respond aggressively if St. Luke's affiliated with { }. (Wakeman, Tr. 2701-2702, *in camera*; Rupley, Tr. 2000-2001, 2036, *in camera*; PX01030 at 021, *in camera*; PX01232 at 003, *in camera*; PX01130 at 006, *in camera*). St. Luke's determined that choosing ProMedica "[w]ould reduce or eliminate significant ProMedica actions that are bound to happen if St. Luke's partners with { }." (PX01030 at 016, *in camera*). If St. Luke's partnered with { }, St. Luke's expected a "Scorched Earth Response" from ProMedica and "the wrath of Alan [Brass, then-CEO of ProMedica]." (PX01030 at 021, *in camera*; Wakeman, Tr. 2701-2702, *in camera*; PX01232 at 003, *in camera*). St. Luke's also suspected that ProMedica was "threatening { }" in order to "keep St. Luke's Hospital out of potential affiliations[.]" (PX01130 at 006, *in camera*).

D. The Acquisition Allows ProMedica to Raise Prices at St. Luke's and at its Other Lucas County Hospitals

Because of the Acquisition, the competitive check that St. Luke's provided has vanished and ProMedica's dominance is now increased. As a result, ProMedica has vastly augmented its

bargaining leverage with health plans, enabling it to raise commercial health plan rates dramatically at all of its Lucas County hospitals, including St. Luke's.

1. ProMedica Was Already the Dominant and Highest-Priced Provider in Lucas County

Even without St. Luke's, ProMedica was the dominant provider and charged the highest prices in Lucas County. ProMedica touted its dominance in its own documents and externally to the credit-rating agency Standard and Poor's. (PX00270 at 025 ("ProMedica Health System has market dominance in the Toledo MSA"); PX00221 at 002 ("it is critical that ProMedica evolves to maintain its competitive dominance in the Region"); PX00319 ("Dominant market share position")).

Before the Acquisition, ProMedica's market share was already considerably higher than its competitors in Lucas County, whether calculated by registered beds, beds-in-use, or occupancy. (Joint Stipulations of Law and Fact, JX00002A ¶ 17). ProMedica accounted for almost 50 percent of patient days for general acute-care services in Lucas County from July 2009 through March 2010. (PX02148 at 143 (Ex. 6) (Town Expert Report), *in camera*; PX02150 at 001). ProMedica accounted for 71.2 percent of patient days for obstetrics services during the same period. (PX02148 at 143 (Ex. 6) (Town Expert Report), *in camera*; PX02150 at 002).

Market shares themselves can be an important indicator of market power. Here, Professor Town's examination of pre-Acquisition hospital prices in Lucas County reveals a strong correlation between market shares and prices. (PX02148 at 039 (¶ 71) (Town Expert Report), *in camera*). Accordingly, having the highest market share, ProMedica also receives the highest commercial reimbursement rates in Lucas County. (Radzialowski, Tr. 684, *in camera*; Pugliese, Tr. 1484-1485, 1513, 1656-1657, *in camera*; Pirc, Tr. 2238, *in camera*; Sandusky, Tr. 1340-1342, *in camera*; PX02296 at 001, *in camera*; PX02148 at 039, 052 (¶¶ 71, 92) (Town

Expert Report) (calculating that ProMedica's rates are { } percent higher than St. Luke's rates, as a volume-weighted average), *in camera*); *see also* Sheridan, Tr. 6658-6659, *in camera* (stating the { } rate with United "reflects an { }…")). Indeed, Mr. Oostra lamented in 2009 that "we hear from payors we are the most expensive in [O]hio." (PX00153 at 001).

2. The Acquisition Enables ProMedica to Significantly Raise Prices at All of its Lucas County Hospitals

ProMedica and St. Luke's both understood that the Acquisition would increase St. Luke's bargaining leverage and rates. ProMedica senior executives were well aware that one benefit that ProMedica could offer potential affiliation partners was its bargaining leverage with health plans. (PX00226 at 008 (ProMedica draft presentation to potential affiliation partners stating "Why ProMedica? . . . Payer System Leverage."); Oostra, Tr. 5983-5984). St. Luke's expected that ProMedica would increase St. Luke's leverage and enable it to obtain better rates. In fact, that was the very reason why St. Luke's chose to affiliate with ProMedica over others:

- A presentation to SLH's Board of Directors evaluating potential affiliation partners states: "An SLH affiliation with ProMedica has the { }. A ProMedica-SLH partnership would have a lot of { }." (PX01030 at 020, *in camera*).

- Formal due-diligence team notes, distributed among St. Luke's executives and assessing potential affiliation scenarios, point out that a "ProMedica [ ] affiliation could still { }." (PX01130 at 005,*in camera*).

- The same notes reflect "[c]oncern that { } does/may not have as high of [sic] reimbursement as ProMedica and/or { }." (PX01130 at 004, *in camera*).

- Another presentation evaluating options for St. Luke's in 2009 asks: "Option 3: Affiliate with ProMedica. What do they bring?" and lists as the top factor: "{ }." (PX01018 at 014, *in camera*).

- In an email to St. Luke's Board of Directors on October 11, 2009, Mr. Wakeman wrote that "incredible access to { }" is among the important "things Pro[M]edica brings to the table" as an affiliation partner, and that "[t]aking advantage" of this strength "{ } in the long run" but "[s]ure would make life much easier right now though." (PX01125 at 002, *in camera*).

By joining ProMedica, St. Luke's anticipated as much as { } in additional revenues from { }, and Paramount. (PX01231, *in camera* ("Yes we asked { } for { }, but if we go over to the dark green side [i.e., ProMedica] . . . we may pick up as much as { } in additional { } and Paramount fees")).

Internal documents also show that St. Luke's executives knew of the important competitive role that St. Luke's played in Lucas County as an independent hospital. Mr. Wakeman and Scott Rupley, St. Luke's Director of Marketing & Strategic Planning, both noted that an independent St. Luke's acted as a competitive constraint in the market and that St. Luke's merger with a larger system would lead to higher rates. In notes from a 2007 planning session, Mr. Rupley wrote that an independent "St. Luke's Hospital keeps the systems a little more honest. The [health plans] lose clout if St. Luke's is no longer independent." (PX01144 at 003). In 2009, Mr. Wakeman wrote that "we need to show { } that we intend to merge with another system, and all the value we produce will [be] diluted, as our payments skyrocket." (PX01229, *in camera*).

Indeed, third-party health plans were unequivocal in testifying that ProMedica will be able to increase rates due to its newly enhanced bargaining leverage, including at its other Lucas County hospitals. (Radzialowski, Tr. 712-713, 841-842, *in camera*; Pirc, Tr. 2261-2262, *in camera*; Pugliese, Tr. 1525, *in camera*; McGinty, Tr. 1209; *see also* Sheridan, Tr. 6693, *in camera* (testifying that { } Mr. Pirc, the Vice President of Network Management at

MMO, one of the largest health plans in Lucas County, testified that ProMedica's increased bargaining leverage enables ProMedica to {

} (Pirc, Tr. 2261-2262, *in camera*).

Before trial, indeed even before the FTC staff contacted health plans as part of its investigation of the Acquisition, Anthem internally analyzed the likely effects of the Acquisition: "History in most industries would tell us that 'no' competition leads to higher costs and quality that could be better if competitive forces were in play." (PX02379 at 001). An earlier email states: "Less competition and if [it] does happen, our low cost provider [St. Luke's] gets absorbed by the high cost provider [ProMedica] – costs in Toledo will go up!" (PX02377 at 001; Pugliese, Tr. 1519-1522, *in camera*). A subsequently Anthem analysis from November 2010 predicted that moving St. Luke's rates to ProMedica's rates would increase rates up to { }. (PX02380 at 001, *in camera*).

ProMedica now has unmatched geographic coverage in Lucas County, a powerful source of leverage in negotiations with the health plans. (Pirc, Tr. 2195, 2199; Pugliese, Tr. 1451-1452, 1459; Radzialowski, Tr. 663, 713-714, *in camera*). As Mr. Radzialowski of Aetna explained, {

}

(Radzialowski, Tr. 713, *in camera*).

To do without ProMedica today, a health plan would have to offer an unprecedented network that includes only Mercy and UTMC, leaving a "hole" in southwest Lucas County. (Pirc, Tr. 2195). At trial, Respondent's expert presented slides that showed all of the iterations of hospital-network configurations used in Lucas County in the last twelve years. (Guerin-

Calvert, Tr. 7323-7328, 7893-7895). There have been two-hospital-system configurations; three-hospital-system configurations; and four-hospital-system configurations. (Guerin-Calvert, Tr. 7895; *see also* Randolph, Tr. 7065-7066). But *never* in all that time – not in the last twenty years even – has the Mercy-UTMC network been used. (Guerin-Calvert, Tr. 7895). Third-party health plans were unanimous that such a network would be unmarketable. (Pirc, Tr. 2261-2262, *in camera*; Radzialowski, Tr. 715-716, *in camera*; Pugliese, Tr. 1478, *in camera*, 1577-1578; Sandusky, Tr. 1351, *in camera*; McGinty, Tr. 1200-1201; Sheridan, Tr. 6692-6693, *in camera*; *see* Guerin-Calvert, Tr. 7896; *see infra* at 68 (section V.A.1)). Yet, incredibly, this unprecedented network is the very basis of Respondent's defense.

Professor Town's economic analyses confirm what St. Luke's, ProMedica, and the health plans know: the Acquisition will lead to increased rates for health plans and patients. Professor Town first examined differences in the case-mix adjusted prices at St. Luke's and ProMedica's existing hospitals. ProMedica's case-mix adjusted prices are { } percent higher than St. Luke's rates, as a volume-weighted average. (PX02148 at 049 (¶ 92) (Town Expert Report), *in camera*). It is reasonable to expect – as St. Luke's board and executives did and as health plans do – that ProMedica would ultimately raise St. Luke's prices to the levels paid to ProMedica's other community hospitals in Lucas County, Flower and Bay Park. (PX02148 at 057-058 (¶ 101) (Town Expert Report), *in camera*; Black, Tr. 5718, *in camera*; Wakeman, Tr. 2653-2654, 2686; Pugliese, Tr. 1507-1508, 1517, *in camera*; Radzialowski, Tr. 824-825, 843, *in camera*). This alone represents a staggering rate increase in Lucas County. (*See, e.g.,* PX02380, *in camera*).

Professor Town also conducted an econometric analysis that ultimately measures the change in St. Luke's and ProMedica's bargaining power resulting from the Acquisition and the

effect on prices. Professor Town concluded that the Acquisition will increase the price of inpatient care by very large amounts: by 56.2 percent at St. Luke's and by 10.8 percent at ProMedica's other hospitals. (PX02148 at 058-060 (¶¶ 103-107) (Town Expert Report), *in camera*). To arrive at this conclusion, Professor Town modeled the bargaining relationship between hospitals and health plans in the relevant markets. The analysis uses Willingness-to-Pay ("WTP") as the measure of the value that a hospital brings to a health plan's network, as perceived by the health plan's members. (PX02148 at 058-060 (¶¶ 103-107) (Town Expert Report), *in camera*).

Although Ms. Guerin-Calvert lobbed several unfounded criticisms at Professor Town's conclusions, quite tellingly she performed no price analysis or affirmative econometric analysis whatsoever of her own to rebut Professor Town's results. However, Ms. Guerin-Calvert incorrectly added several variables to Professor Town's models, and even those additions resulted in a statistically significant price increase of 7.3 percent, which amounts to an 18 percent price increase at St. Luke's and a five percent increase at ProMedica's legacy hospitals. (Guerin-Calvert, Tr. at 7928-7929). In other words, *even Ms. Guerin-Calvert predicts significant price increases as a result of the Acquisition*.

Instead, Ms. Guerin-Calvert concludes generally that there are "negligible price changes arising from the joinder" by comparing the rates that ProMedica obtained for St. Luke's in post-Acquisition health-plan negotiations with the rates that St. Luke's *requested* in failed negotiations with MMO pre-Acquisition. (RX-71(A) at 50-56 (¶¶ 92-103) (Guerin-Calvert Expert Report), *in camera*). There are significant flaws inherent in this analysis. First, Ms. Guerin-Calvert relies on rates that were *proposed* by St. Luke's but *never agreed to* by MMO. (PX01850 at 048-049 (¶¶ 73-75) (Town Rebuttal Expert Report), *in camera*). These rejected

prices do not tell us anything meaningful about the level that St. Luke's prices would have been at absent the Acquisition; proper economic analysis requires the use of "observed prices in a rationally-defined period." (PX01850 at 049 (¶ 75) (Town Rebuttal Expert Report), *in camera*).

Equally suspect are the post-Acquisition rates that were negotiated by ProMedica for St. Luke's. ProMedica and Ms. Guerin-Calvert repeatedly rely on these rates as evidence of ProMedica's good intentions and limited bargaining power after the Acquisition. (RX-71A at 53-56 (¶¶ 97-103) (Guerin-Calvert Expert Report), *in camera*; Marx, Tr. at 94-95 (Opening Statement)). But it is well-settled that post-Acquisition evidence is entitled to little weight precisely because Respondent can "refrain[] from aggressive or anticompetitive behavior when [an antitrust] suit [is] threatened or pending," and then point to their post-Acquisition behavior as evidence. *Chicago Bridge*, 534 F.3d 410 at 434-35 (citing and quoting *United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 504-05 (1974)). As such, courts unambiguously hold that such evidence has little or no probative value. *Hospital Corp. of Am. v. FTC*, 807 F.2d 1381, 1384 (7th Cir. 1986) (Posner, J.) ("Post-acquisition evidence that is subject to manipulation by the party seeking to use it is entitled to little or no weight."); *Chicago Bridge*, 534 F.3d 410 at 435; *Polypore*, 2010 FTC LEXIS 17, at *620 (Chappell, A.L.J.). Here, the FTC investigation was ongoing throughout the fall of 2010 and litigation has been pending since January 2011. Moreover, the post-Acquisition contracts were negotiated under the auspices of the Hold-Separate Agreement between FTC staff and ProMedica that limited ProMedica's leverage by allowing health plans to extend their current contracts at existing rates. Thus, the rates that ProMedica has negotiated for St. Luke's – which, in any case, constitute substantial increases – are not credible or reliable evidence of the full market power that ProMedica ultimately will have and exercise as a result of the Acquisition.

Importantly, ProMedica will be able to exercise its increased market power for GAC and OB services in limitless ways during contract negotiations with health plans, across the entire bundle of services that it offers. ProMedica's ability to exercise the market power it gained in the relevant GAC and OB service markets is unaffected by the fact that health plans and hospitals generally negotiate for many services during contract negotiations. That contracting parties negotiate over several terms at once is not a credible antitrust defense. For example, ProMedica can easily exercise its bargaining leverage by insisting on higher rates for obstetrics services and contracting for these rates separately as a carve-out or case rate. (*See supra* at 16 (Section II.C)). Or ProMedica can use its increased market power to extract concessions on rate methodologies or to demand higher rates for other kinds of services. (PX02148 at 058 (¶ 109) (Town Expert Report), *in camera*). Simply put, ProMedica's market power has increased in the relevant service markets, and this can manifest itself in many ways during contract negotiations.

3. ProMedica Will Exercise its Increased Leverage to Extract Higher Rates

ProMedica has a notable history of aggressively seeking the highest rates possible from commercial health plans. ProMedica's documents demonstrate that, despite its nonprofit status, maximizing profits is one of its central goals. (PX00384 at 014; PX00270 at 054).[20] With respect to rates from health plans, Mr. Oostra testified that ProMedica "would always like more," and Mr. Wachsman testified that ProMedica always seeks the best rates it can get, notwithstanding that ProMedica is already the most expensive hospital system in Lucas County for many health plans. (PX01906 at 066 (Oostra, IHT at 259-260, *in camera*); Wachsman, Tr. 5145-5146, *in camera*; Radzialowski, Tr. 684, *in camera*; Pugliese, Tr. 1484-1485, 1513, 1656-1657, *in camera*; Pirc, Tr. 2238, *in camera*; Sandusky, Tr. 1340-1342, *in camera*).

[20] Moreover, as of the end of 2009, "nonprofit" ProMedica had total assets of $2.4 billion, $156 million in cash, revenues of $1.6 billion, and a billion dollars in reserves. (PX00015 at 004, 006; Oostra, Tr. 6126).

Indeed, although ProMedica claims that it attempts to obtain a cost-coverage ratio of only { } from unaligned health plans (that is, plans other than Paramount), Mr. Wachsman testified that this is a minimum and not a ceiling. (Wachsman, Tr. 5140, *in camera*).[21] ProMedica's documents show that the cost-coverage ratios for individual plans are consistently and sometimes dramatically higher than { }; for example, in June 2010, ProMedica had a cost coverage ratio of { } with MMO and { } with Cigna. (Wachsman, Tr. 5141-5142, *in camera*; PX00443, *in camera*; *see also* PX00233, *in camera* (showing ProMedica's cost coverage ratio with Cigna in 2009 was {)). As of mid-2010, the overall cost-coverage ratio for commercial payors exceeded { }, even including Paramount, which lowers the average. (Wachsman, Tr. 5141-5142, *in camera*; PX00233, *in camera*; PX00443, *in camera*). Notably, the yearly bonuses that Mr. Wachsman and his direct reports receive from ProMedica are based, in part, on the rates obtained in negotiations with commercial health plans. (Wachsman, Tr. 5097-5099, *in camera*).

4. ProMedica's Ownership of Paramount May Exacerbate the Competitive Harm

ProMedica's ownership of Paramount further increases its incentive to bargain more aggressively for higher rates. (PX02148 at 053-054 (¶ 99) (Town Expert Report), *in camera*; Radzialowski, Tr. 729). By virtue of being part of the ProMedica system, Paramount gets better rates from ProMedica than any other health plan even with an identical network composition. (Randolph, Tr. 7070-7071). If a health plan walks away from contract negotiations with ProMedica because of exorbitant rate demands, that health plan (without ProMedica in its network) will be less attractive to customers relative to Paramount, whose network always

[21] ProMedica calculates "cost-coverage ratios" that purport to compare the payments received from health plans with the operating costs attributed to the health plan. (Wachsman, Tr. 4947-4949, *in camera*).

includes ProMedica hospitals[22] at a price advantage. (PX02148 at 056-057 (¶ 99) (Town Expert Report), *in camera*; Radzialowski, Tr. 729). Any business lost by the health plan that walked away from ProMedica would thus be captured, at least in part, by Paramount. (PX02148 at 056-057 (¶ 99) (Town Expert Report), *in camera*; *see also* Randolph, Tr. 7109-7110). The health plan's other choice is to accept higher rates from ProMedica, in which case Paramount is again at a competitive advantage with an even greater price advantage. (Randolph, Tr. 7109-7110; Radzialowski, Tr. 729). Thus, owning Paramount "allows ProMedica to win either way," increasing its incentive to demand higher rates. (Radzialowski, Tr. 729).

E. The Acquisition Will Harm Hospital Quality

In addition to commercial reimbursement rates, hospitals compete on the basis of non-price factors such as clinical quality, amenities, and overall patient experience. (Joint Stipulations of Law and Fact, JX00002A ¶ 11; Response to RFA at ¶ 20). Even ProMedica executives and its economic expert acknowledge that hospital competition benefits the local community through better customer service, higher quality care, and better access for patients and improved facilities. (Oostra, Tr. 6039; Wachsman, Tr. 5115-5118; Guerin-Calvert, Tr. 7792). Here, the Acquisition has harmed non-price competition by eliminating a high-quality independent hospital that "challenged [other hospital] systems to keep service levels up." (Wakeman, Tr. 2540-2541; Rupley, Tr. 1935-1937; PX01170 at 020). Health plan executives testified that clinical quality is an important factor they consider when negotiating for a hospital's inclusion in the health plan's network. (Radzialowski, Tr. 655; Sheridan, Tr. 6622; McGinty, Tr. 1173; PX01944 at 006 (Pirc, Dep. at 18-19), *in camera*). ProMedica and the other Lucas County hospitals now have diminished incentives to provide better services and improve

[22] ProMedica will always be included Paramount's network. (*See* Randolph, Tr. 7070).

quality without St. Luke's as an independent, high-quality competitor. (Town, Tr. 3605-3606, 3630-3631, 3634-3635; PX02148 at 084-085 (¶ 155) (Town Expert Report), *in camera*).

Indeed, before the Acquisition, St. Luke's prided itself on providing benefits to the community through its high quality of care and patient satisfaction. (Wakeman, Tr. 2493; *see* Black, Tr. 5685, 5689-5690; Rupley, Tr. 1919, 1924-1925; PX01072 at 001). It enjoyed high clinical quality outcome measures and patient satisfaction scores. (*See, e.g.,* PX01072 at 001; PX00390 at 001; PX01018 at 012, *in camera*; PX01909 at 015-016 (Dewey, IHT at 56-58), *in camera*; *see also* PX01073). Health plans, doctors, employers, and even ProMedica witnesses all testified that they regarded St. Luke's as a high-quality hospital. (Sandusky, Tr. 1312; McGinty, Tr. 1190-1191; Radzialowski, Tr. 640; Pugliese, Tr. 1443-1445; Pirc, Tr. 2196; Wakeman, Tr. 2477-2478, 2481-2483, 2493; Oostra, Tr. 6027-6028; Hanley, Tr. 4723, *in camera*; PX01913 at 032 (Hammerling, IHT at 119), *in camera*; Shook, Tr. 1032; Gold, Tr. 225; Andreshak, Tr. 1786; Marlowe, Tr. 2417-2418; Read, Tr. 5294). And despite St. Luke's rapid growth in patient volume in 2010, patient satisfaction and quality remained at very high levels and several quality measures improved. (Wakeman, Tr. 2495-2498; Black, Tr. 5685, 5690).

ProMedica, on the other hand, has struggled with quality and patient satisfaction. ProMedica's flagship hospital, TTH, ranked last in the Toledo area and below the state average for quality. (Rupley, Tr. 1984-1985, 1992-1993, *in camera* (TTH showed a "dismal performance"); PX01016 at 006, *in camera*; PX01172, *in camera* ("[I]n the Commonwealth scoring on quality, SLH was the best, just a hair shy of the top 10% nationally, with Toledo Hospital dead last and well below the state average."); PX01030 at 018-019, *in camera*). Flower ranked sixth in Lucas County for overall quality. (PX01172 at 008, *in camera*; PX01030 at 018-019, *in camera*). Writing to senior ProMedica executives, Mr. Oostra stated, "we can rationalize

things but we continue to: [ ] see subpar quality scores when we look at published comparisons." (PX00153). Just recently, all three of ProMedica's Lucas County hospitals missed quality targets needed to obtain a reimbursement bonus under Anthem's quality-scoring program. (PX02453). Toledo Hospital ranked in the 6^{th} percentile and *second to last* on the overall score. (PX02453 at 001). Upon learning of these results in October 2010 – one month after acquiring St. Luke's – ProMedica's CEO wrote to senior ProMedica executives, "Not good … We need to take major action." (PX00915 at 001, *in camera*).

In light of the disparity in quality between St. Luke's and ProMedica, St. Luke's management and Board of Directors feared that ProMedica might "bring poor quality to St. Luke's" after the Acquisition. (PX01130 at 002, *in camera*; Wakeman, Tr. 2675-2676, *in camera*; Black, Tr. 5720, *in camera*; Rupley, Tr. 2011, *in camera*; PX01016 at 023, *in camera*). ProMedica knew it needed to improve, and Mr. Oostra acknowledged as much to Mr. Wakeman before the Acquisition. (PX01030 at 018, *in camera*; Oostra, Tr. 5998-5999; PX00153).

St. Luke's concerns appear to have been well-founded. In January 2011, ProMedica's Chief Medical Officer, Lee Hammerling, acknowledged internally that ProMedica's approach to quality was not keeping pace and "needed to catch up." (PX00527 at 001; Oostra, Tr. 6015-6019). Mr. Hammerling described ProMedica's quality program as involving "too much discussion, process, pages/documents, reporting structures, committees, charts, [and] meetings," and Mr. Oostra agrees. (PX00527 at 001; Oostra, Tr. 6024-6025). Employees at ProMedica find the quality program to be confusing. Mr. Hammerling noted that few employees "can fully explain the PHS approach to quality much less feel compelled to follow." (PX00527 at 001;

Oostra, Tr. 6025-6026). It is even less likely that the "PHS approach to quality" will have a positive impact at St. Luke's.[23]

F. Higher Prices and Lower Quality Will Impact Consumers Directly

The higher rates that ProMedica can extract from health plans will directly harm the employers and employees who use Lucas County hospitals. Employers and employees face a grim list of consequences: higher premiums, higher direct health care costs, fewer benefits and provider choices, and lower quality.

First, employers will face higher costs. Self-insured employers, accounting for approximately 70 percent of commercial business in Lucas County, directly pay the full cost of their employees' healthcare claims to healthcare providers. (Neal, Tr. 2097 ("As a self-insured company, any increases in the cost of healthcare is a direct impact on our bottom line."); Caumartin, Tr. 1836-1837; Radzialowski, Tr. 622, 625-626; Town, Tr. 3612-3614). Thus, when hospital reimbursement rates increase, self-insured employers immediately and directly pay the higher costs. (Radzialowski, Tr. 625-626, 840-841, *in camera* ("Local employers receiving – having their members receive services at St. Luke's, especially the self-insured employers, would feel a direct impact from unexpected [rate] increases."); Sandusky, Tr. 1296; Town, Tr. 3612-3613). Fully-insured employers, meanwhile, will face higher premiums from their health plans in response to rate increases. (Radzialowski, Tr. 779; PX01938 at 030 (Radzialowski, Dep. at 114), *in camera* ("With the fully insured, I can't see any circumstance where we would not { }"); Pugliese, Tr.

[23] ProMedica's economic expert relied on the testimony of a single former ProMedica employee, ProMedica's Senior Vice President of Quality, as the source of her quality claims. (*See* RX-71(A) at 000084 (¶ 156) (Guerin-Calvert Expert Report), *in camera*). As of early 2011, ProMedica's CEO had been critical of this same employee's performance as head of quality and was similarly critical at trial. (PX00526 at 001; PX00527 at 001; Oostra, Tr. 5936-5939, *in camera*).

1558, 1560; McGinty, Tr. 1245; Pirc, Tr. 2174; Sheridan, Tr. 6701-6702, *in camera*; Town, Tr. 3614).

Second, given that health care costs are a highly-significant expense for businesses, employers in turn will have to pass on increased costs to their employees. (Caumartin, Tr. 1846-1847; Neal, Tr. 2118; Buehrer, Tr. 3073; Lortz, Tr. 1707-1708). This means increasing employees' premiums, co-payments, deductibles, and out-of-pocket costs, or eliminating benefits. (Caumartin, Tr. 1837; Neal, Tr. 2114-2117, 2158; Buehrer, Tr. 3065-3066, 3072; Pugliese, Tr. 1559-1560; Town, Tr. 3615). And when healthcare costs increase for self-insured employers with unionized employees, employers must offset these higher costs through reduced wages or other trade-offs. (Neal, Tr. 2118). In some cases, higher healthcare costs may lead employees to delay or forego routine physical check-ups or minor medical treatment. (Caumartin, Tr. 1838; Town, Tr. 3614-3615).

Indeed, large and small local employers testified that they are concerned that the Acquisition will lead to higher rates at St. Luke's and ProMedica's other Lucas County hospitals, resulting in higher healthcare costs for employers and their employees. (Caumartin, Tr. 1862; Neal, Tr. 2111). In notable contrast, ProMedica did not call a single employer to testify at trial in favor of the Acquisition.

V. RESPONDENT'S DEFENSES

Faced with overwhelming evidence – from extraordinarily high HHIs, to the many documents predicting enormous rate increases, to the parade of third-party witnesses at trial who testified that competitive harm was very likely – ProMedica asks the Court to ignore the facts and have faith that some purportedly-unique attributes of the Lucas County market and of St. Luke's warrant an exception to the well-settled economic and legal principles condemning the

Acquisition. Many of Respondent's defenses find no support in the law; to adopt them would be to immunize virtually all hospital transactions from antitrust scrutiny. Respondent also failed to offer sufficient evidence to support its arguments. Indeed, in many instances the record explicitly contradicts Respondent's arguments. In short, Respondent's defense of the transaction cannot withstand scrutiny.

A. Market Dynamics Will Not Constrain Respondent or Defeat Rate Increases

There is nothing unique about the Toledo hospital market that exempts it from the antitrust laws. ProMedica first argues, incorrectly, that Toledo has an unusually large number of hospitals and excess capacity that combine to make substitution easy and, further, that Lucas County is characterized by strong competition between two purportedly equivalent hospital systems, Mercy and ProMedica.

First, the record shows that the number of hospitals in the Toledo area is in fact "about right." (Radzialowski, Tr. 651-652 ("Some cities of similar size would have fewer bigger hospitals. Toledo happens to have smaller, more distributed hospitals . . . it's not way out of line, in my opinion.")). Ms. Guerin-Calvert's own analysis of populations of similar size to the Toledo area shows that Toledo is not an outlier in terms of the number of beds or the number of hospital competitors. (Guerin-Calvert, Tr. 7758-7760). ProMedica elicited no credible trial testimony to support the notion that the number of beds in Toledo is unusual.

Second, although ProMedica repeatedly asserts that the Lucas County market is "characterized by the presence of two large hospital systems" that are "similar in size," it is obvious that Mercy was no match for ProMedica before the Acquisition and is even less of one

now. (Respondent's Pre-Trial Br. at 4-5).[24] As an initial matter, despite the assertion by ProMedica's executives that Mercy alone is a sufficient competitive check, it is not the case that acquisitions pass muster under the antitrust laws so long as two competitors remain; this is obvious from the HHI thresholds described in the *Merger Guidelines* as well as case law. (*Compare* Wachsman, Tr. 5136, *in camera* ("As long as there's an alternative to ProMedica, another major health system, then ProMedica does not have any increased bargaining power.") *with Heinz*, 246 F.3d at 717 (condemning three-to-two merger among second- and third-largest firms, despite argument that it would create a stronger rival to the largest firm)). No case has held that mergers are immune from the antitrust laws as long as there is at least one other competitor to the merging parties. But that is essentially ProMedica's argument. To accept ProMedica's view, as articulated by Mr. Wachsman, would be to immunize virtually all hospital transactions – other than mergers-to-monopoly – from the antitrust laws.

In any case, it is obvious that Mercy cannot constrain price increases by ProMedica after the Acquisition because it was not able to do so beforehand. Mercy's existence did not prevent ProMedica from achieving the highest market shares and obtaining the highest prices in Lucas County even before it bought St. Luke's. (PX02148 at 063-064 (¶ 114) (Town Expert Report), *in camera* (ProMedica's market share for inpatient GAC services was 63 percent larger than that of Mercy and 266 percent larger for obstetrics and ProMedica's case-mix adjusted prices are **{32}** percent higher than Mercy's)). The Acquisition, of course, only increases this disparity.

[24] To support the assertion that Mercy and ProMedica are "similar in size," ProMedica relies on a comparison of billed charges. (Respondent's Pre-Trial Brief at 5). This metric is not appropriate for comparing the size or competitive significance of two hospital systems. Billed charges, which correspond to the rates on a hospital's chargemaster, are a "sticker price" that virtually no health plan or patient actually pays. (Korducki, Tr. 533-534; Sandusky, Tr. 1321; Radzialowski, Tr. 761-762; McGinty, Tr. 1195; Town, Tr. 3707-3708; PX01850 at 010 (¶12) (Town Rebuttal Expert Report), *in camera*).

ProMedica also now has a clear advantage over Mercy with respect to geographic coverage. Mercy offers no direct counterpart to St. Luke's in southwest Lucas County. (PX02148 at 064-065 (¶ 116) (Town Expert Report), *in camera*; Sheridan, Tr. 6698, *in camera*). Greg Radzialowski, Senior Network Manager of Aetna, testified that Mercy is simply unable to provide the network coverage Aetna needs in southwest Lucas County, and that the location of St. Luke's alone increases ProMedica's leverage with Aetna. (Radzialowski, Tr. at 713-714, *in camera*; *see also* Pirc, Tr. 2195). Not surprisingly, Mercy draws very few patients from southwest Lucas County and has considerably smaller market share there than either ProMedica or St. Luke's. (PX02290 at 002-003, *in camera*; PX01235 at 003, 005; PX02148 at 161 (Exhibit 11) (Town Expert Report), *in camera*).

Professor Town's econometric analysis regarding consumers' willingness-to-pay underscores that Mercy is not a sufficient competitive restraint on ProMedica. Before the Acquisition, commercially-insured patients placed 22 percent more value on having in-network access to ProMedica than on having in-network access to Mercy. (PX02148 at 066, 165 (¶ 118, Exhibit 11) (Town Expert Report), *in camera*). That is, ProMedica had 22% more bargaining leverage than Mercy. (Town, Tr. 3802, *in camera*).

As a result of the Acquisition, consumers now value in-network access to ProMedica nearly twice as much as they value in-network access to Mercy. (*See* PX02148 at 165 (Exhibit 11) (Town Expert Report), *in camera*)). Thus, ProMedica's acquisition of St. Luke's dramatically increases the value to health plans of contracting with ProMedica. (Town, Tr. 3802-3803, *in camera*); *see* PX02148 at 165 (Exhibit 11) (Town Expert Report), *in camera*). And Mercy is now a significantly more distant substitute for ProMedica in the eyes of health plans and their members. (PX02148 at 064-065 (¶¶ 116-117) (Town Expert Report), *in camera*).

The inevitable result is increased commercial health plan rates at ProMedica's Lucas County hospitals.

1. A Mercy-UTMC Network is Not a Viable Alternative to ProMedica and St. Luke's

ProMedica has the formidable task of convincing the Court that health plans can simply walk away from any anticompetitive rate demands by ProMedica and instead offer a provider network consisting of only Mercy and UTMC. Indeed, ProMedica's argument that the Acquisition has not increased its bargaining leverage depends entirely on the truth of this claim. Yet, ProMedica has adduced no credible evidence to support it. On the contrary, of the many network combinations that have been offered in Lucas County for decades, no health plan has ever offered a network comprised only of Mercy and UTMC. Third-party health plans repeatedly testified that a Mercy-UTMC network is not marketable. Employers testified that neither they nor their employees want such a network. Indeed, the only witnesses who believe that a Mercy-UTMC network is a viable alternative in Lucas County are on ProMedica's payroll.

First, no health plan in at least the last twenty years has offered a network comprised of only UTMC and Mercy. (Joint Stipulations of Law and Fact, JX00002A ¶ 9; Response to RFA at ¶ 14; Randolph, Tr. 7054-7055, 7065; Guerin-Calvert, Tr. 7895, *in camera*; Radzialowski, Tr. 672). Yet health plans have offered provider networks composed of virtually every other combination of hospitals in Lucas County at various times. (*See* Randolph, Tr. 7069-7070; Pirc, Tr. 2204; Pugliese, Tr. 1474, 1476-1477, *in camera*; Radzialowski, Tr. 670-671; Sandusky, Tr. 1288-1289; McGinty, Tr. 1194, 1199; Sheridan, Tr. 6690-6692, 6694, *in camera*; PX02065 at 003 (¶ 10) (Szymanski Decl.)). The fact that it has never been offered is powerful evidence that a Mercy-UTMC combination by itself is not regarded as a competitive network, nor one that meets the needs of Lucas County residents. In other words, St. Luke's was essential to the

ability of health plans to market a network without ProMedica. (PX02148 at 062 (¶112) (Town Expert Report), *in camera*).

Consistent with this undisputed history, the third-party health plans unanimously testified that { }:

- Don Pirc, the Vice President of Network Management at MMO, declared that { } (Pirc, Tr. 2313, 2261-2262, *in camera*).
- Aetna has (Radzialowski, Tr. 716, *in camera*).
- Anthem's Regional Vice President testified that (Pugliese, Tr. 1478, *in camera*, 1577-1578).
- FrontPath of their current Lucas County utilization. (Sandusky, Tr. 1351, *in camera*).
- Humana's Director of Network Development testified that a Mercy-UTMC network would not allow it to be competitive versus other health plans. (McGinty, Tr. 1200-1201).
- United (Sheridan, Tr. 6692-6694, *in camera*). Post-joinder, { } (*See* Sheridan, Tr. 6692-6693, *in camera*).

Health plans, of course, respond to the demands of their customers, the employers. And employers also testified that a Mercy-UTMC network would not be an attractive option in Lucas County. (Neal, Tr. 2113 (network "would be very detrimental to our employees"); Buehrer, Tr. 3068, 3091). ProMedica conspicuously failed to produce any Lucas County employers – other than ProMedica itself – to contradict this testimony at trial.

The disparity between a Mercy-UTMC network and a ProMedica-St. Luke's network is evident in the market share statistics, as well. Post-Acquisition, the combined market share of Mercy and UTMC is 42 percent for general acute-care services, significantly less than the 58 percent share for ProMedica and St. Luke's. (Town, Tr. 3805, *in camera*). In St. Luke's core service area, the combined market share for Mercy and UTMC is about 25 percent for general acute-care services, compared to a 72 percent share for ProMedica and St. Luke's. (Town, Tr. 3805, *in camera*). Mercy and UTMC alone simply cannot provide the geographic coverage in southwest Lucas County that employers and employees want to have. Indeed, Professor Town's willingness-to-pay analysis confirms that a network of ProMedica and St. Luke's is significantly more valuable than a network of Mercy and UTMC. (Town, Tr. 3808, *in camera*).

B. Respondent's Reliance on Health Plans and Physicians to Defeat ProMedica's Price Increases Through Steering is Unfounded

1. Health Plans Cannot Defeat ProMedica's Price Increases by Steering Patients to Less Expensive Hospitals

ProMedica assures the Court that if rates at ProMedica were to increase exorbitantly, health plans can simply steer their members to other lower-cost hospitals within the same network using a combination of incentives and price transparency directed at their members. Yet again, these claims find no persuasive support in the record. There is an especially glaring lack of testimony from the health plans themselves that such initiatives would be effective to constrain ProMedica's rates in Lucas County.

In theory, the in-network steering that Respondent relies on involves providing financial incentives to members to seek care at cheaper hospitals, such as by charging different co-pays, or by creating different tiers with different benefits within a network. (PX02533 at 004-005, *in camera*; Town, Tr. 3810, *in camera*; Radzialowski, Tr. 723). This can be referred to as "hard

steering." (Radzialowski, Tr. 723-724). Alternatively, health plans might provide general information to members or physicians regarding treatments costs at different providers, in the hopes that they will seek treatment elsewhere; this is sometimes known as "soft steering." (Radzialowski, Tr. 723-724). Neither is a practical or viable means of constraining ProMedica's considerable market power in Lucas County.

Astoundingly, ProMedica overlooks the fact that its own contracts forbid health plans from using the very same steering programs that it now claims will be a solution to the Acquisition's ill effects. ProMedica has used its leverage to insist on anti-steering provisions in its contracts with {

} (Wachsman, Tr. 5162-5163, *in camera*; Pirc, Tr. 2259-2260, *in camera*; *see*, Pugliese, Tr. 1466). The provisions {

} (PX02533 at 017-018, *in camera* ({ } contract requiring that ProMedica be {

} and forbidding any {

}); Wachsman, Tr. 5162-5164, *in camera*; Pirc, Tr. 2259-2260, *in camera*). ProMedica also contractually restricts { } (Wachsman, Tr. 5244-5246, *in camera*).

In fact, Mr. Wachsman testified that one of ProMedica's goals is to ensure that health plans do not engage in steering. (Wachsman, Tr. 5162-64, *in camera*). Because ProMedica is the dominant provider, it is easily able to achieve that goal. Indeed, ProMedica {

} (*See* Pirc, Tr. 2260, *in camera*).

Even without these contractual restrictions, health plans' members resist efforts by health plans to restrict where they can seek care. Health plans' members increasingly prefer open-access networks with as much flexibility in the choice of providers as possible. (PX02148 at 067-069 (¶¶ 122-123) (Town Expert Report), *in camera*; Sheridan, Tr. 6680-6681; Pugliese, Tr. 1465 ("Our customers don't want to be told where to go.")). Employers testified that their employees prefer health plan networks that include all Lucas County hospitals. (Lortz, Tr. 1700-1701, 1706; Neal, Tr. 2102-2103, 2113; Buehrer, Tr. 3074; *see* Caumartin, Tr. 1860-1861, 1864). Members simply do not want to be told where they can and cannot seek care. (Pugliese, Tr. 1465; *see* Radzialowski, Tr. 725-726; PX01917 at 018 (Radzialowski, Dep. at 68, *in camera*)). As a result, in-network steering devalues a health plan's product and makes it less marketable. (Town, Tr. 3810, *in camera*).

In fact, Complaint Counsel's economic expert – uncontested by Respondent's economic expert – found that, of the thousands employers in Lucas County, he was aware of only *two* employers that "hard steer" to particular in-network hospital providers based on price. (Town, Tr. 4383-4384, 4460-4461, *in camera* (one employer is { }, which steers its employees { }[25], and the other is { } (Radzialowski, Tr. 724)); Guerin-Calvert, Tr. 7901-7902 (noting that FrontPath may offer a third employer "the equivalent" of a tiered network but not indicating that such tiering was based on price differences among hospitals)).

[25] It is common for a hospital system to encourage employees in its health insurance program to use its own hospital or hospitals. (Randolph, Tr. 7006-7007). The president of Paramount likened such programs to employee discounts in other industries. (Randolph, Tr. 7006-7007) ("if you work for Ford, they're not giving you a discount on a Chrysler car; they're giving you a discount on a Ford car.")).

Moreover, it is clear from the current competitive landscape in Lucas County that steering is not considered viable. There are already considerable price differences between ProMedica and the other Lucas County hospitals. (PX02148 at 037, 145 (¶ 68, Exhibit 7) (Town Expert Report), *in camera*). As such, health plans already had a strong incentive to steer patients in Lucas County away from ProMedica, if it were possible. Yet they have not done so, demonstrating that this is not a legitimate option that health plans can use, either because it is impractical or because it significantly devalues their products. (*See* Town, Tr. 3811-3812, *in camera*; *see also* Pugliese, Tr. 1465-1466).

The health plan testimony confirms that in-network steering programs are not viable options. {

} (Pirc, Tr. 2213-2216).[26] { } marketing department indicated that customers would not welcome such a steering program because of the general preference among members for broad access to providers. ({ } at 022 ({ }, Dep. at 82-83), *in camera*). Similarly, Anthem has never used steering programs to encourage the use of lower-cost hospitals and testified that customers would not want it. (Pugliese, Tr. 1465). { } and Humana do not have steering mechanisms or tiered benefits in place, and there is no testimony that indicates any plans to implement them in Lucas County. ({ } at 006, 029 ({ }, Dep. at 21, 112-113), *in camera*; McGinty, Tr. 1184-1185).

ProMedica hangs its hopes on the fact that Aetna has a tiny pilot steering program involving fewer than 100 Aetna employees in Toledo. (Radzialowski, Tr. 724-725). But

[26] Six to seven years ago, MMO implemented a pilot physician steering program in Canton, Ohio to steer members to low-cost physicians. (Pirc, Tr. 2215-16). However, the physicians who were not placed in the preferred tier opposed the program, causing MMO to end it. (Pirc, Tr. 2215-2216). This was the last time MMO attempted such a steering program. (Pirc, Tr. 2216-2217).

there are no results showing whether the limited program has worked, and Aetna does not know whether it will be expanded; the only conclusion that can be drawn with certainty is that Aetna has received "a good number of complaints from the members not liking to have steerage imposed on them[.]" (Radzialowski, Tr. 725). Hospitals, including ProMedica, have also complained about the program. (Radzialowski, Tr. 726). And Mr. Radzialowski testified that it is probable that hospital systems like ProMedica, with substantial bargaining leverage, can

{

}. (PX01917 at 017-018 (Radzialowski, Dep. at 65-68), *in camera*; *see also* Pugliese, Tr. 1465-1466).

Soft steering is even less likely to have a discernible impact on ProMedica's ability to increase rates. Mr. Pugliese, Anthem's Regional Vice President, testified that although Anthem provides online tools that allow members to access quality and cost information about hospitals, these tools have not resulted in any shifts in the hospitals Anthem's members use. (PX01919 at 004 (Pugliese, Dep. at 12-13), *in camera*). Similarly, Aetna's Senior Network Manager Greg Radzialowski testified that "soft steering" efforts have not been effective at steering members to low-cost hospitals because informational and transparency measures "don't have teeth, they haven't had an impact[.]" (PX01938 at 004 (Radzialowski, Dep. at 12), *in camera*); *see also* Radzialowski, Tr. 723-724). And although ProMedica claims to accept price transparency, it is "okay with that type of sharing of information" as long as it does not come with financial incentives that actually steer significant business away from ProMedica hospitals (Wachsman, Tr. 4879-4881) – in other words, only to the extent that it is not effective.

2. Physicians Cannot Constrain Price Increases by ProMedica

ProMedica also asserts that physicians will be able to redirect their patients to lower cost hospitals because many of them have admitting privileges at more than one provider. This is misleading in several respects. First, it is implausible that physicians will change their medical judgment and admitting practices based on the reimbursement rates that hospitals charge health plans. Second, the fact that physicians have admitting privileges at more than one hospital ignores critical limitations on physicians' ability or desire to actually shift significant numbers of patients to other hospitals.

First, it strains credibility to argue that physicians decide where to admit a patient based on the rates that hospitals charge health plans or employers. (Town, Tr. 3819, *in camera*). There is no evidence that a single physician has admitted a patient to a hospital on this basis. While it is clear that physicians play a role in their patients' admission decisions, testimony at trial was unanimous that physicians do not admit patients to hospitals based on the rates hospitals charge the patients' health plans. (Marlowe, Tr. 2416-2417; Read, Tr. 5293; Andreshak, Tr. 1782-1783; Gold, Tr. 206-207; Pugliese, Tr. 1467-1468; *cf*. PX01932 at 033 (Bazeley, Dep. at 127), *in camera*; PX01948 at 044-045 (Peron, Dep. at 166-167, 169-170)). Indeed, physicians are not even *aware* of the rates that hospitals charge health plans. (Gold, Tr. 206-207; Pirc, Tr. 2378-2379, *in camera*; Pugliese, Tr. 1467-1468; Sandusky, Tr. 1325). Not one physician who testified at trial had ever seen the rates in a contract between a hospital and a health plan. (Andreshak, Tr. 1782; Gbur, Tr. 3109; Marlowe, Tr. 2417; Read, Tr. 5293; *see also* Gold, Tr. 206-207; Pirc, Tr. 2378-2379, *in camera*).

Furthermore, ProMedica ignores significant limitations on the ability or desire of physicians to actually shift their admission patterns. As an initial matter, admitting privileges are

a misleading measure of where physicians actually admit their patients, or where they would actually shift in response to a price increase. (PX01850 at 011-012 (¶ 14) (Town Rebuttal Expert Report), *in camera*). Market shares are a much better measure of physician (and patient) preferences and admission patterns and tell us much more about the likely competitive effects of the Acquisition. (PX02148 at 032 (¶ 62) (Town Expert Report), *in camera*; PX01850 at 011-012 (¶ 14) (Town Rebuttal Expert Report), *in camera*). For example, it is not uncommon for physicians to maintain admitting privileges at hospitals where they rarely admit patients. (*See* PX02056 at 001 (Korducki, Decl. at ¶ 3) ("WCH has a total of approximately 180 physicians on its staff. However, many of these physicians visit WCH only three to four times per year."); PX01932 at 022 (Bazeley, Dep. at 81), *in camera*). Dr. Gbur testified that he has admitting privileges at TTH, St. Vincent, St. Anne, St. Charles, Bay Park, Flower, and St. Luke's, yet he admits 60-70% of his patients to St. Luke's. (Gbur, Tr. 3105-3106; *see also* Marlowe, Tr. 2397-2399; Read, Tr. 5268, 5291).

ProMedica's reliance on admitting privileges ignores the role of patient preferences in making choices about hospitals, including the preference by patients to be treated at hospitals that are close to home. (Town, Tr. 3818, *in camera*). Indeed, the very reason that physicians maintain privileges at multiple hospitals is to accommodate patient preferences for inpatient care. (Andreshak, Tr. 1754-1755; Marlowe, Tr. 2429; Read, Tr. 5284 ("gives patients a choice"); Shook, Tr. 940-941; Pugliese, Tr. 1467). Accordingly, patient preference plays a major role in where a patient is ultimately admitted. (Marlowe, Tr. 2457; Gold, Tr. 205). If price, rather than patient preference, drove the choice of hospital, ProMedica would not have sustained such high pre-Acquisition market shares in light of its incredibly high rates.

Respondent's argument also ignores the significant costs that changing admitting patterns would impose on both patients and physicians. Physicians would prefer to limit the hospitals to which they admit patients. (Gbur, Tr. 3109 ("In a perfect world, it would be incredibly convenient to be able to practice at one hospital."); PX01932 at 022 (Bazeley, Dep. at 81-82), *in camera*). There are costs to physicians for having patients admitted to multiple hospitals, including making rounds and maintaining call coverage at the hospitals, in addition to the time it takes the physician to travel to multiple hospitals. (Andreshak, Tr. 1759; Marlowe, Tr. 2402; Gbur, Tr. 3109; *see also* Andreshak, Tr. 1824 (noting that Mercy St. Charles is 25-30 minutes further from his office than St. Luke's)).

Finally, widespread physician employment in Lucas County – in particular by ProMedica – further limits the ability of physicians to steer patients. (Town, Tr. 3819-3820, *in camera*; PX01850 at 012-013 (¶ 16) (Town Rebuttal Expert Report), *in camera*). Physicians employed by a hospital system generally admit to the hospital system that employs them. (Marlowe, Tr. 2393-2394; *see also* PX01949 at 015, 027 (Riordan, Dep. at 50, 98); Oostra, Tr. 5978-5979; Gold, Tr. 204-205). ProMedica is the largest employer of physicians in Lucas County, with over 300 employed physicians. (Joint Stipulations of Law and Fact, JX00002A ¶ 26; Oostra, Tr. 5795). Nearly ninety-five percent of the patients of ProMedica's employed physicians go to ProMedica hospitals for inpatient admissions. (Oostra, Tr. 5979). It is almost preposterous to think that substantial numbers of ProMedica-employed physicians, who depend on ProMedica for their salaries and jobs, would start steering their patients to Mercy or any other hospital if ProMedica raised its rates. Respondent has provided no evidence to support its unfounded claim that this would happen in the future at all, let alone in sufficient numbers to discipline ProMedica's prices.

The bottom line on steering is this: health plans and physicians have not steered Lucas County patients away from ProMedica to lower-cost hospitals to date, even before the Acquisition, when ProMedica already was the highest priced hospital in Lucas County and among the most expensive in Ohio. The Acquisition only makes ProMedica larger and more dominant, which enables it to increase its prices and further resist any (theoretical) efforts by health plans and physicians to steer patients away from its hospitals. Steering, even if it was feasible, would not eliminate the competitive harm because of this and because patients do not pay most hospital costs out-of-pocket, a number of patients would continue to use Respondent's hospitals anyway. (Town, Tr. 3809-3814, 3818-3823, 4463, *in camera*).

C. Efficiencies Defense Fails

Respondent's efficiency claims are not cognizable or sufficient to overcome the Acquisition's significant anticompetitive harm. To overcome the overwhelming presumption of anticompetitive harm, bolstered by voluminous additional evidence, Respondent must prove the Acquisition results in "*significant* economies and that these economies ultimately would *benefit competition and, hence, consumers*." *Univ. Health*, 938 F.2d at 1223 (emphasis added); *see also Butterworth*, 946 F. Supp. at 1300. Respondent's "proof of *extraordinary efficiencies*" must be "more than mere speculation and promises about post-merger behavior." *Heinz*, 246 F.3d at 720-21 (emphasis added); *see also Univ. Health*, 938 F.2d at 1223 ("defendant [cannot] overcome a presumption of illegality based solely on speculative, self-serving assertions"); *FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1089 (D.D.C. 1997). Under the *Merger Guidelines*, efficiencies must be merger-specific (*i.e.*, likely to be achievable only by *this* transaction), substantiated, and of such a character and magnitude that the transaction is not likely to be anticompetitive. *Merger Guidelines* § 10; *see also* IVA Phillip E. Areeda and Herbert

Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application, at ¶ 976d.3.c (3d ed. 2010). Respondent's claimed efficiencies do not come close to meeting this high burden.

The support for Respondent's efficiency claims is remarkably thin. Neither of Respondent's experts even conducted an efficiencies analysis. (Guerin-Calvert, Tr. 7580; PX01925 at 012-013 (Guerin-Calvert, Dep. at 41-42); Den Uyl, Tr. 6515-6516). Notably (but not surprisingly), Ms. Guerin-Calvert did not even once cite in her Part III or federal-proceeding expert reports the efficiencies presentation her colleagues at Compass Lexecon prepared for Respondent. (*See* RX71-(A) (Guerin-Calvert Expert Report), *in camera*; PX02122 (Guerin-Calvert Decl. in Prelim. Inj. Proceeding); PX02136 (Guerin-Calvert Supplemental Decl. in Prelim. Inj. Proceeding), *in camera*). Some of Respondent's key personnel had little or no involvement in developing many of the claimed efficiencies; in some instances, St. Luke's executives – now employed by ProMedica – actually dispute the efficiencies claimed by their own lawyers. (*See* Hanley, Tr. 4728-4729, *in camera*; Johnston, Tr. 5428-5429; PX01915 at 045, 051-052, 054 (Wagner, IHT at 173, 198-200, 202-204, 209), *in camera*; PX01908 at 050-052 (Deacon, IHT at 191-194), *in camera*; *see also* PX01905 at 050 (Wachsman, IHT at 194-195), *in camera*; PX02147 at 054, 067-069, 072 (¶¶ 99, 125-128, 133 n. 229) (Dagen Expert Report)).

Most, if not all, of Respondent's claims are not merger-specific. All or most of Respondent's claimed efficiencies could be achieved without the Acquisition or could be achieved with other affiliation partners. (*See, e.g.,* PX01918 at 021-023 (Oostra, Dep. at 76-83), *in camera* (potential for ProMedica-St. Luke's efficiencies without Acquisition); PX02205 at 001 (St. Luke's-UTMC affiliation intended to create significant efficiencies); PX02203 at 003-

004 (goals of an "enhanced affiliation" between UTMC and St. Luke's); Gold, Tr. 238-239; Wakeman, Tr. 2555; Shook, Tr. 1003-1004, *in camera*; PX02147 at 077, 079-084 (¶¶ 149, 155, 158, 161, 162, 164) (Dagen Expert Report)). For example, the first "financial benefit" Respondent notes in its pre-trial brief is the cash ProMedica is giving to St. Luke's over three years as Acquisition consideration, which is intended to fund capital projects. (Resp't's Pre-Trial Br. at 47, 48). But other affiliation partners could have funded those projects. The same is true of the other "financial benefits" Respondent claims, including assumption of St. Luke's pension liabilities and combining medical malpractice insurance. (Resp't's Pre-Trial Br. at 47). Condoning this particular anticompetitive acquisition on the basis of efficiencies that could be achieved by other acquisition partners simply rewards the acquirer with the deepest pockets and the one with most to gain from eliminating a competitor.

Respondent also claims St. Luke's inclusion in Paramount's network is a benefit of the Acquisition. (Resp't's Pre-Trial Br. at 47). But that could have been achieved without the Acquisition. Indeed, prior to the Acquisition, Paramount wanted to include St. Luke's in its network – and St. Luke's wanted to be included – but ProMedica refused to permit this because its Lucas County hospitals would have lost patient volume to St. Luke's. (Randolph, Tr. 7077-7076-7078; Oostra, Tr. 6053; Wakeman, Tr. 2584-2585; Rupley, Tr. 1940-1941; PX00405 at 001; PX01233 at 005, *in camera*).

With respect to merger-specificity of efficiency claims, the bottom line is that, although Respondent bears the burden of proving merger-specific efficiencies, neither of Respondent's experts even opined on whether Respondent's efficiency claims are merger specific. The only person who opined on the merger-specificity of Respondent's claims is Complaint Counsel's financial expert, Mr. Dagen, and he concluded that most of Respondent's claims were not merger

specific. (PX02147 at 004-005, 047, 049-050, 058-059, 061-062 & n.198, 065-068, 070-072 n.229, 075-077, 079-081, 083-084 (¶¶ 9-10, 87, 91, 94, 108, 112, 114 & n.198, 121, 125, 130, 132-133 n.229, 144, 147, 149, 152-153, 155, 158-159, 163-164) (Dagen Expert Report)).

Moreover, Respondent's efficiency claims are not adequately substantiated. (*See, e.g.,* Resp't's Pre-Trial Br. at 47-48). The claims are also speculative. Under the *Merger Guidelines*, "[e]fficiency claims will not be considered if they are vague, speculative, or otherwise cannot be verified by reasonable means." *Merger Guidelines* § 10. In its pre-trial brief, Respondent claims that the Acquisition will allow it to "rationalize health care delivery across its system of hospitals," which will allow it to be more efficient and cost effective, but then provides no substantiation, quantification, or timeline for achieving any of those claims. (Resp't's Pre-Trial Br. at 48).

Further, as noted above, Respondent's experts did not prepare an efficiencies analysis, and some of Respondent's key personnel did not participate in – while some disagreed with – the alleged efficiencies. Mr. Gary Akenberger, ProMedica's Senior Vice President of Finance, submitted an affidavit that discussed Respondent's alleged efficiencies, but Respondent never put Mr. Akenberger on the stand at trial to substantiate his claims. Mr. Den Uyl, Respondent's financial expert, was qualified to opine on efficiencies, and has done so in other cases, but was not asked to do so here and did not do so. (Den Uyl, Tr. 6515-6516). According to Mr. Nolan, many of the recommendations in Navigant's clinical-integration study relate to relocating existing ProMedica services to existing ProMedica facilities, and thus have nothing at all to do with the Acquisition. (PX00396 at 008-010, *in camera*; PX01946 at 014-015, 019-021 (Nolan, Dep. at 49-50, 67-75)).

Respondent appears to be abandoning the efficiency claims in a presentation by Compass Lexecon, most of which were attributable to dubious { }. (*See generally* PX00020, *in camera*). To the extent that Respondent still clings to those claims, they are not cognizable, largely because they are unsubstantiated, vague, and speculative. (PX00020 at 003, *in camera* (preamble to Compass Lexecon report, stating that { .”}); Johnston, Tr. 5428-5429 (did not see or validate Compass Lexecon efficiencies report); Oostra, Tr. 6145 (efficiencies identified in Compass Lexecon Report were “preliminary” and a “first plan”); PX01906 at 074, 076 (Oostra, IHT at 291, 299), *in camera* (efficiency analysis was “initial plan” and “first pass”); Hanley, Tr. 4727-4728, *in camera* (describing efficiencies study as containing “estimates”); PX01903 at 054 (Hanley, IHT at 206-207), *in camera* (based on a “gut feeling” about efficiencies); *see generally* PX02147 at 043-084 (¶¶ 80-164) (Dagen Expert Report)). ProMedica’s CEO even said in his investigation hearing, “So, if we don’t find those efficiencies, we will find other efficiencies.” (PX01906 at 075 (Oostra, IHT at 294), *in camera*).

Respondent’s claimed efficiencies do not outweigh the competitive harm from the transaction. Even assuming that some cognizable efficiencies exist, there is no evidence that any of the claimed efficiencies are “of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market.” *Merger Guidelines* § 10. Respondent’s experts did not provide such an opinion. Navigant testified that the cost to implement its clinical-integration recommendations, { }, greatly exceeds the anticipated savings from the proposed integration related *and unrelated* to St. Luke’s being in the ProMedica system, { } per year. (Nolan, Tr. 6353-6355, *in camera*; *see also* PX00479 at 14, *in camera*). On the other hand, Complaint Counsel’s economic expert concluded that Respondent’s efficiency claims did

not outweigh the competitive harm. (Town, Tr. 3607, *in camera* ("any merger-specific efficiencies are going to be insufficient to outweigh the rather large impact on prices that this acquisition will lead to"); PX02148 at 093-094 (¶ 171) (Town Expert Report), *in camera*).

Notably, the efficiency claims also appear to have been designed and inflated for litigation purposes. ProMedica executives testified that the decision to hire Compass Lexecon was motivated, in part, by the need to present an efficiencies analysis to the FTC. (Oostra, Tr. 6150; PX01906 at 072-073 (Oostra, IHT at 284-285), *in camera*; PX01903 at 058 (Hanley, IHT at 225), *in camera*). The evidence shows that ProMedica hired Compass Lexecon, in particular, because it had extensive experience in dealing with the FTC. (Oostra, Tr. 6150-6151; PX00077 at 001). One document indicates that the size of efficiencies and time in which to achieve them was deliberately revised upward in anticipation of the FTC's likely reaction. (PX01136 at 001, *in camera* ("Haven't accomplished enough in savings. . . . We will need to be more aggressive with a timeline of the first 3-5 years. FTC discounts the value of each year the farther out you go.")). Even the clinical-integration materials prepared by Navigant were reviewed by Respondent's antitrust counsel prior to being shared with Respondent's business people. (Nolan, Tr. 6324, *in camera*).

Finally, the Merger Guidelines caution that "[e]fficiencies almost never justify a merger to monopoly or near-monopoly." *Merger Guidelines* § 10. Respondent's efficiency claims – which are neither merger-specific, nor adequately substantiated, nor sufficient to overcome the anticompetitive harm resulting from the Acquisition – do not justify this Acquisition to near monopoly in GAC and OB services.

D. No Entry Defense; Quasi-Entry Defense Fails

Respondent does not put forth a valid entry defense. As the basis for such a defense, entry or expansion must be timely, likely, and sufficient in magnitude and scope to deter or counteract the competitive harm from an acquisition. *United States v. Visa U.S.A.*, *Inc.,* 163 F. Supp. 2d 322, 342 (S.D.N.Y. 2001), *aff'd*, 344 F.3d 229, 240 (2d Cir. 2003); *Cardinal Health*, 12 F. Supp. 2d at 55-58; *Merger Guidelines* § 9. Respondent must show that entry is likely – meaning both technically possible and economically sensible – and that it will replace the competition that existed prior to the merger. *See Cardinal Health*, 12 F. Supp. 2d at 56-57; *Chicago Bridge*, 138 F.T.C. at 1071 (noting "new entrants and fringe firms" might not replace lost competition). The higher the barriers to entry, as are present here, the less likely it is that the "timely, likely, and sufficient" test can be met. *Visa U.S.A.*, 163 F. Supp. 2d at 342.

The evidence shows that entry and expansion are unlikely. St. Luke's documents indicate that it did not anticipate any entry. (PX01016 at 024, *in camera* ("Systems, outside of Toledo, have shown reluctance of entering our market."); PX01018 at 006, *in camera*
({

}}). UTMC currently has no plans to build a new hospital in Lucas County or expand overall capacity, even in response to the Acquisition. (Gold, Tr. 223-224). In the mid-2000s, Mercy considered building a small, limited-service hospital in Monclova, but "those plans have been scrapped." (Shook, Tr. 963-964). And there is "very little" likelihood that Mercy would build a new hospital in southwest Lucas County – indeed, it currently has no plans to do so, even in response to the Acquisition. (Shook, Tr. 968). Mercy was unaware of any other potential entrant. (Shook, Tr. 968).

With respect to OB, UTMC does not have plans to begin offering OB services. (Gold, Tr. 220-221). Mercy testified that it was "highly unlikely" that it would reinstitute OB services at St. Anne or otherwise expand OB services anywhere in Lucas County, even if OB rates increased. (Shook, Tr. 958-960). Mercy was also unaware of any other Lucas County hospital that was seeking to begin offering OB services. (Shook, Tr. 960). The only evidence about potential entry or expansion by hospitals outside Lucas County is testimony that no such plans exist. (Korducki, Tr. 519, 525-526; Beck, Tr. 408-409).

Further, the high cost of entry or expansion also makes it unlikely. Mr. Oostra testified that it costs approximately $1 million per bed to construct a new hospital *plus* more for equipment and other ancillary expenses. (Oostra, Tr. 5899, *in camera*; *see also* PX01906 at 023 (Oostra, IHT at 86), *in camera* (it would cost { } or more today to build a 300-bed hospital similar to St. Luke's.)). Charles Kanthak, St. Luke's Facilities Services Director, estimated that to build a new hospital identical to St. Luke's in northwest Ohio in 2009 would cost { } (PX01257 at 001). It cost Mercy approximately $75 million to build and equip 72-bed St. Anne Hospital in the early 2000s plus another $2.6 million to $3 million for the land. (Shook, Tr. 960-961). It would cost more to build such a hospital today. (Shook, Tr. 962). According to UTMC, to start providing low-risk and high-risk obstetrics would cost "tens of millions of dollars." (Gold, Tr. 222; *see also* Shook, Tr. 956-957 (regarding expense of operating an OB unit)).

The history of entry "is a central factor in assessing the likelihood of entry in the future." *Cardinal Health*, 12 F. Supp. 2d at 56; *Polypore*, 2010 FTC LEXIS 97, at *86; *Merger Guidelines* § 9. Notably, Respondent cannot point to any entry in Lucas County by out-of-market firms in decades.

Entry or expansion, moreover, would not be timely. Mr. Oostra testified that ProMedica has been planning its new 36-bed orthopedic hospital since 2002 and that it took a year or two to plan and 18 months to build. (Oostra, Tr. 5780-5782). It took Mercy approximately four to four and a half years to plan and open 72-bed St. Anne Hospital, including 20 months of construction. (Shook, Tr. 962). St. Luke's assessment was that entry was unlikely in the near future. (PX01120 at 002 ("Nobody is going to be able to build anything for a while. Can't borrow money."). {

}, despite having owned land to do so for many years, demonstrates that timely entry is unlikely. Additionally, because hospitals are highly regulated, building a new hospital requires several significant regulatory approvals and licenses. (Shook, Tr. 963). These represent barriers to timely entry.

Even if entry or expansion occurred, it would not be sufficient to overcome the anticompetitive effects of the transaction. Here, there is no evidence that any GAC or OB entry or expansion is on the horizon, much less entry sufficient to replicate St. Luke's offerings. Even if, contrary to its trial testimony, Mercy reversed course and built a new hospital in Monclova, it would only be a small, 34-bed medical/surgical facility with no intensive care unit. (Shook, Tr. 965; *see also* PX02068 at 006 (Shook, Decl. at ¶ 24), *in camera* (services would {

})). This is not sufficient to replace St. Luke's 222 staffed-bed, full-service hospital in the marketplace. (Resp't's Pre-Trial Br. at 6-7 (St. Luke's staffs 222 of 302 registered beds)).

Unable to put forth an entry defense, Respondent resorts to a novel "quasi-entry" argument. Respondent's economic expert suggestion that {

} constitutes entry sufficient to replace St. Luke's as a provider of GAC and OB services lacks factual and legal support. (RX-71(A) at 63-65 (¶¶ 116-121) (Guerin-Calvert

Expert Report), *in camera*). The { } is a plan by { } to add { } Lucas County. (Shook, Tr. 971, 981-982, *in camera*). As part of the { } has no plans to add { } Lucas County. (Shook, Tr. 971, *in camera*).

So far, the strategy does not show promise. { } failed to meet its { } goals in 2010 and 2011. (Shook, Tr. 983-984, *in camera*). { } has not { }. (Shook, Tr. 986, *in camera*). And { } has not seen any measurable change in its { } as a result of the { }. (Shook, Tr. 988, *in camera*).

Consequently, Respondent's quasi-entry/expansion defense, based on { }, clearly falls far short of what the case law and the *Merger Guidelines* require Respondent to prove. *Polypore*; 2010 FTC LEXIS 97, at *86 ("For entry to constrain the likely harm from a merger that enhances market power, the scale must be large enough to constrain prices post-acquisition.") (citing *Chicago Bridge*, 534 F.2d at 429); *Merger Guidelines* at § 9.3 (entry or expansion must be of the scale and strength of one of the merging firms).

Based on the evidence, Complaint Counsel's expert concluded that entry would not deter or constrain competitive harm caused by the Acquisition. (PX02148 at 088-090 (¶¶ 162-169) (Town Expert Report), *in camera*). In short, entry or expansion will not ameliorate the Acquisition's competitive harm.

E. "Flailing Firm" Defense Fails

Respondent concedes that, as defined in the *Merger Guidelines* and Supreme Court precedent, St. Luke's was not a failing firm. (Joint Stipulations of Law and Fact, JX00002A

¶ 21; Response to RFA at ¶ 42). So Respondent is left to argue that St. Luke's was a "flailing firm," that is, a firm whose financial condition is so compromised that its future competitive significance is overstated by current market shares. *See Gen. Dynamics*, 415 U.S. at 506-08; *FTC v. Arch Coal, Inc.*, 329 F. Supp. 2d 109, 153 (D.D.C. 2004).[27] Although ProMedica positions St. Luke's financial condition as one of the central arguments in defense of the Acquisition, "[f]inancial weakness . . . is probably the weakest ground of all for justifying a merger [and it] certainly *cannot be the primary justification* of a merger."[28] *Kaiser Aluminum & Chem. Corp. v. FTC*, 652 F.2d 1324, 1339, 1341 (7th Cir. 1981) (emphasis added); *see also FTC v. Warner Commc'ns Inc*., 742 F.2d 1156, 1165 (9th Cir. 1984). Courts strongly disfavor "a weak company defense" because it "would expand the failing company doctrine, a defense which has strict limits." *Warner Commc'ns*, 742 F.2d at 1164 (internal quotations omitted).

The flailing-firm defense requires a "*substantial showing* that the acquired firm's weakness, *which cannot be resolved by any competitive means*, would cause that firm's market share to reduce to a level that would undermine the government's *prima facie* case." *Univ. Health*, 938 F.2d at 1221 (emphasis added). To undermine the presumption of competitive harm established in Complaint Counsel's *prima facie* case here, Respondent would have had to show that St. Luke's market share would imminently and precipitously drop from 11.5 percent to 2 percent or less in GAC, and from 9.3 percent to 1.3 percent or less in OB. Respondent has not done so.

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[27] Notably, both *General Dynamics* and *Arch Coal* involved the coal industry and are distinguishable. In *Arch Coal*, for example, the transaction did not reduce the number of competitors, there were more competitors post-merger there than there are here, the flailing firm's competitive fate was dependent on a finite natural resource (coal reserves) with no chance of recovery, and the *prima facie* statistical case "just barely" raised competitive concerns. 329 F. Supp. 2d at 128-30, 155-56.

[28] Respondent claims the Acquisition was motivated by a benevolent effort to save a purportedly-flailing St. Luke's, but ProMedica's CEO admits that ProMedica has been interested in acquiring or affiliating with St. Luke's for at least fifteen years. (Oostra, Tr. 6116-6117).

Instead, the facts show that, prior to the Acquisition, St. Luke's was *gaining* market share, apparently at ProMedica's expense. (*See* PX01235 at 003 (even assuming that St. Luke's garnered all of the inpatient market share that was lost by hospitals other than ProMedica from 2008 to 2009, St. Luke's still took 0.6 percent of ProMedica's inpatient market share in that same period)). A report to ProMedica's Board of Directors specifically states that acquiring St. Luke's "would 'recapture' a substantial portion of recent [market share] losses," half of which had gone to St. Luke's. (PX00159 at 005, 012, *in camera*; Oostra, Tr. 6177-6178, *in camera*). By contrast, Respondent has not introduced a single ordinary-course document that projects declines in St. Luke's market share, much less drastic declines in its market share that would be needed to rebut the presumption of anticompetitive harm. As such, St. Luke's market shares likely understate, rather than overstate, its future competitiveness. A closer look at various aspects of St. Luke's financial condition confirms it is not flailing.

1. St. Luke's Financial Condition Prior to the Acquisition

Respondent's flailing-firm claim is all the more incredible because, leading up to the Acquisition, St. Luke's financial condition was *improving*. (*See, e.g.,* Den Uyl, Tr. 6562, 6593-6594, *in camera*; RX-56 at 11 (¶ 30) (Den Uyl Expert Report), *in camera*; Dagen, Tr. 3187; PX02147 at 026-030 (¶¶ 49-55) (Dagen Expert Report); Wakeman, Tr. 2594, 2597). Indeed, Respondent admits all of the following:

- St. Luke's Earnings Before Interest, Taxes, Depreciation, and Amortization ("EBITDA") for the period January 1, 2010 through August 31, 2010 was higher than its EBITA in calendar year 2009. (Joint Stipulations of Law and Fact, JX00002A ¶ 27).

- St. Luke's operating cash flow margin for the period January 1, 2010 through August 31, 2010 was higher than its operating cash flow margin for calendar year 2009. (Joint Stipulations of Law and Fact, JX00002A ¶ 28).

- St. Luke's operating income for the period January 1, 2010 through August 31, 2010 was higher than its operating income for calendar year 2009. (Joint Stipulations of Law and Fact, JX00002A ¶ 29).

- St. Luke's operating margin for the period January 1, 2010 through August 31, 2010 as higher than its operating margin for calendar year 2009. (Joint Stipulations of Law and Fact, JX00002A ¶ 30).

- St. Luke's outpatient net revenue increased in each calendar year from 2008 through 2010. (Joint Stipulations of Law and Fact, JX00002A ¶ 31).

- St. Luke's inpatient net revenues increased in each calendar year from 2008 through 2010. (Joint Stipulations of Law and Fact, JX00002A ¶ 32).

- St. Luke's "assets limited as to use" (i.e., reserve funds) increased from December 31, 2009 through August 31, 2010. (Joint Stipulations of Law and Fact, JX00002A ¶ 36).

St. Luke's financial turnaround is largely attributable to a "Three-Year Plan" instituted by Mr. Wakeman in June 2008, which consisted of five strategic pillars, including pillars for "Growth" and "Finance/Corporate." (PX01026 at 001; Joint Stipulations of Law and Fact, JX00002A ¶ 39). These pillars each encompassed several goals for turning St. Luke's finances around, including, for example, increasing inpatient and outpatient net revenues and growing St. Luke's market share to 40 percent within its "core service area." (PX01026 at 001-002; RX-56 at 20 (¶ 50) (Den Uyl Expert Report), *in camera*). By the time of the Acquisition – a little over two years into the Three-Year Plan – St. Luke's had achieved four of the five pillars in the Three-Year Plan. (Wakeman, Tr. 2593-2594; PX01326 at 001 (Wakeman: "guess that growth thing worked . . . we did a great job in 4 of the 5 pillars.")). And within the pillars, St. Luke's achieved several significant strategic goals prior to the Acquisition, including:

- St. Luke's achieved its goal to increase net inpatient revenue growth by $3.5 million per year, within three years. (PX01026 at 001; Joint Stipulations of Law and Fact, JX00002A ¶ 40; Response to IROG at ¶ 17).

- St. Luke's achieved its goal to increase outpatient net revenue by $5 million per year, within three years. (PX01026 at 001; Joint Stipulations of Law and Fact, JX00002A ¶ 41; Response to IROG at ¶ 17).

- St. Luke's achieved its goal to attain a 40% inpatient market share in core service area, within three years. (PX01026 at 001; Response to IROG at ¶ 17).

Prior to the Acquisition, St. Luke's patient volume increased significantly:

- St. Luke's total acute inpatient admissions were on pace to reach 11,725 for the full 2010 year, an 18 percent increase from 9,905 in 2007. (PX02129 at 002 (Hanley, Decl. Ex. 1); Hanley, Tr. 4698-4699 (based on annualizing results as of August 31, 2010)).

- Inpatient volume increased { } percent in 2010 from 2009. (PX00511 at 010, *in camera*).

- In the first eight months of 2010, St. Luke's outpatient visits increased { } over the previous year. (PX01199 at 001, *in camera*; *see also* Hanley, Tr. 4698-4700 (outpatient visits increasing since 2008)).

- St. Luke's patient days were on pace to reach 45,342 for the full 2010 year, a 21 percent increase from 37,589 in 2007. (PX02129 at 002 (Hanley, Decl. Ex. 1); Hanley, Tr. 4699 (based on annualizing results as of August 31, 2010)).

- The number of cases treated at St. Luke's ambulatory surgery center, Surgi-Care, increased from 2,507 in 2007 to 3,179 as of August 31, 2010 (which would annualize to 4,769 cases for all of 2010). (PX01214 at 001, 003, 006).

- St. Luke's overall occupancy rate in the twelve months prior to the Acquisition increased by approximately { } percent. (PX01920 at 010 (Wakeman, Dep. at 31), *in camera*).

Further, St. Luke's increased its profitability. St. Luke's operating cash flow margin improved from -2.5 percent in 2009 to positive 3.8 percent as of August 31, 2010, and its operating income margin improved from -10.3 percent to -2.6 percent during the same time period. (PX02129 at 002 (Hanley, Decl. Ex. 1); Hanley, Tr. 4702-4703; *see also* Wakeman, Tr. 2594-2595; Den Uyl, Tr. 6479; RX-56 at 6-7 (Tables 2, 4) (Den Uyl Expert Report), *in camera*). In other words, during the first eight months of 2010, St. Luke's "produced [positive] cash from the operating revenue on operations." (Hanley, Tr. 4703).

Finally, St. Luke's financial reserves increased. Mr. Wakeman testified that St. Luke's reserves increased significantly from 2009 to 2010. (Wakeman, Tr. 2571-2572). As of August

31, 2010, the consummation date of the Acquisition, St. Luke's held at least $65 million in cash and investments. (Joint Stipulations of Law and Fact, JX00002A ¶ 34).

Respondent's own words confirm the improvement shown by the numbers. According to James Black, Chairman of St. Luke's Board of Directors, by August 2010, St. Luke's was a profitable and well-performing hospital that was near its capacity. (Black, Tr. 5687). He testified that St. Luke's financial indicators were "looking up" in August 2010. (Black, Tr. 5684-5685). Theresa Konwinski, St. Luke's Vice President for Patient Care Services, wrote in August 2010 that St. Luke's was "growing, not downsizing." (PX01582 at 003, *in camera*). Respondent's expert witness, Bruce Den Uyl, testified that in the six months leading up to the consummation of the Acquisition, St. Luke's financial performance has improved. (Den Uyl, Tr. 6562). Kathleen Hanley, ProMedica's CFO, testified that St. Luke's has experienced a positive trend in patient revenues since 2008. (Hanley, Tr. 4701-4702).

Most vividly, on September 24, 2010, St. Luke's CEO sent a "Monthly Report" to the St. Luke's Board of Directors that contained the very last assessment of St. Luke's performance as an independent hospital. (PX00170). Mr. Wakeman advised the Board that:

- "[I]n the past three years . . . [w]e went from an organization with declining activity to near capacity." (PX00170 at 007).
- "Our leadership status in quality, service and low cost stayed firmly in place." (PX00170 at 007).
- "In the past six months our financial performance has improved significantly. The volume increase and awareness of expense control were key." (PX00170 at 007).
- "Inpatient, (up 7.5%) and outpatient, (up 6.1%), activity was running hot all month . . . [I]npatient capacity is limited except for weekends." (PX00170 at 001).
- "[A] positive margin confirms that we can run in the black if activity stays high. After much work, we have built our volume up to a point where we can produce an operating margin and keep our variable expenses under control." (PX00170 at 001).

- "Even with our increased activity, the patient satisfaction scores improved . . . ." (PX00170 at 004).

- "If there was one pillar we attained a high level of success in our strategic plan in the past two years, it would be growth. The hard numbers prove that out, and almost every service." (PX000170 at 006).

These are the hallmarks of a resurgent hospital, *not* a flailing firm. Rather a "*substantial showing*" that St. Luke's weakness "*cannot be resolved by any competitive means*," the evidence clearly shows that St. Luke's finances were improving significantly *as a result of* competitive means that St. Luke's implement under the Three-Year Plan.

Further, Respondent's unsupportable claims that St. Luke's is a flailing firm are contradicted by the evidence and are woefully insufficient to defend this unlawful acquisition.

2. Defined Benefit Pension Plan Funding Levels

St. Luke's defined benefit pension fund assets, which are partially invested in equities markets, have consistently tracked stock market performance over the past decade. (Dagen, Tr. 3162-3164). As a result, the 2008 stock market decline had a negative impact on St. Luke's pension plan funding levels. (*See* PX00923 at 001, *in camera*). But the stock market recovered and so, too, did the funding levels in St. Luke's pension plan. (Black, Tr. 5698-5700; Dagen, Tr. 3165, 3166, 3171; PX02147 at 023-024 (¶¶ 44-45) (Dagen Expert Report); *see also* Arjani, Tr. 6755-6756, *in camera*). In fact, prior to the Acquisition, St. Luke's pension plan funding levels had rebounded to levels on par with major corporations like Exxon Mobil and CBS. (PX02147 at 023-024 (¶ 45) (Dagen Expert Report); PX01006 at 023, *in camera*).

Respondent's claim also ignores several important facts. First, at no time were payments to pensioners at risk. (Dagen, Tr. 3164-3165). Indeed, St. Luke's has never missed – or even been late on – a payment to a pension recipient. (Den Uyl, Tr. 6551). Second, St. Luke's switched from a defined benefit plan to a defined contribution plan, which mitigates the risk of

future funding problems and which St. Luke's expects will reduce its pension costs. (PX02147 at 025 (¶ 46) (Dagen Expert Report); *see also* PX02146 at 009 (¶ 14 n.18) (Brick Expert Report)). Finally, St. Luke's is not unique in having seen a drop in pension plan funding or having experienced periods of underfunding. In the last few years, it was very common to see pension plans underfunded. (Arjani, Tr. 6753, *in camera*). Indeed, ProMedica's financial statements show that ProMedica's own pension was underfunded in 2008 by $84.8 million and in 2009 and $65.3 million. (PX00015 at 32; Oostra, Tr. 6129-6130).

As such, funding levels of St. Luke's defined benefit plan do not make St. Luke's a flailing firm.

3. Outstanding Bond Debt and Covenant Compliance

St. Luke's bond debt and "technical default" on a covenant does not bear on St. Luke's competitive significance. As of the August 31, 2010 consummation date of the Acquisition, St. Luke's owed less than $11 million in total outstanding debt and held at least $65 million in cash and investments. (Joint Stipulations of Law and Fact, JX00002A ¶¶ 33-34). In other words, St. Luke's had enough cash and investments on hand to easily pay off all of its outstanding debt. (Joint Stipulations of Law and Fact, JX00002A ¶ 24; Response to RFA at ¶ 48). Notes from a St. Luke's February 2010 Finance Committee meeting described the bond payments as "a car payment" and not a risk to St. Luke's because "we have [] enough cash to completely defease these." (PX01204 at 011, *in camera*).

Moreover, this is not a large debt. Mr. Wakeman stated that the debt "wasn't a large bond issue for a hospital our size." (PX01920 at 029 (Wakeman, Dep. at 107), *in camera*). Mr. Den Uyl, Respondent's expert witness, concluded that St. Luke's had a "relatively small outstanding balance of bonds" at the time of the Acquisition. (RX-56 at 19 (¶ 48) (Den Uyl

Expert Report), *in camera*; *see also* Dagen, Tr. 3153 (St. Luke's debt is small relative to the typical hospital)). Even the former analyst who oversaw St. Luke's outstanding bonds until the Acquisition for Ambac, the insurer of these bonds, believed that St. Luke's has a "very modest debt position." (Gordon, Tr. 6858, *in camera*).

Although St. Luke's experienced a "technical default" when its debt service coverage ratio fell below 1.3, as required by a bond covenant, this was a non-event. First, St. Luke's had not missed a payment on its bond debt or been late in making payments. (Joint Stipulations of Law and Fact, JX00002A at ¶¶ 22-23; Response to RFA at ¶ 47; Black, Tr. 5700-5701). Second, by the time of the Acquisition, St. Luke's debt service coverage ratio was 3.7, well above the 1.3 level required by the bond covenant. (PX02129 at 002 (Hanley, Decl. Ex. 1); Hanley, Tr. 4708-4710). Third, technical bond defaults were common from 2008 to 2010. As Mr. Gordon of Ambac testified, from 2008 through 2010, { } that he oversaw experienced technical defaults. (Gordon, Tr. 6851-6852, *in camera*). In fact, Mercy's parent, Catholic Health Partners, experienced a technical default in 2009. (PX01318 at 001; PX01920 at 028 (Wakeman, Dep. at 103), *in camera*). Fourth, an { } performed internally by Ambac concluded that St. Luke's was { } (Gordon, Tr. 6864, *in camera*). Finally, to reiterate the most important point, St. Luke's had enough cash and investments on hand – $65 million in cash and investments – to pay off all of its outstanding debt. (Joint Stipulations of Law and Fact, JX00002A ¶ 24; Response to RFA at ¶ 48).

ProMedica's claims about the bond debt are equivalent to someone claiming that they need to declare bankruptcy when they are, and have always been, current on their mortgage

payments and have six dollars in the bank for every dollar they owe. St. Luke's bond debt does not make St. Luke's a flailing firm.

4. St. Luke's Credit Rating

Prior to the Acquisition, Moody's revised St. Luke's credit rating to Baa2 (moderate rating). (Brick, Tr. 3474-3475; PX02146 at 005 (¶ 9) (Brick Expert Report)). The Moody's credit-rating adjustment bears little import in this case for several reasons. First, Moody's credit-rating adjustment had no actual effect on St. Luke's because St. Luke's did not need to – nor did it intend to – borrow money for the foreseeable future. (PX02147 at 18 (¶ 35) (Dagen Expert Report); Hanley, Tr. 4706-4707). Indeed, Ms. Hanley, ProMedica's CFO, testified that Moody's rating had "no practical effect" on St. Luke's in early 2010 because St. Luke's had no intention to borrow money. (Hanley, Tr. 4706-4707). Respondent admits that St. Luke's did not attempt to issue new bond debt any time from 2009 through to the time of the Joinder. (Joint Stipulations of Law and Fact, JX00002A ¶¶ 37-38).

Second, even if St. Luke's had intended to borrow money, its bond rating would not have prevented it from accessing the debt markets. (Brick, Tr. 3480-3490; PX02146 at 005-006 (¶¶ 9-10) (Brick Expert Report)). In fact, 28 percent of Moody's-rated not-for-profit freestanding hospitals and single-state healthcare systems have the same Moody's rating as St. Luke's and, from January 2010 to January 2011, during difficult economic times, those hospitals successfully borrowed $2.6 billion. (PX02146 at 005 (¶ 9) (Brick Expert Report); Brick, Tr. 3476). In other words, a Baa2 rating is investment grade, and investors and the capital markets have an appetite for debt that carries a medium-grade rating like St. Luke's debt. (PX02146 at 005 (¶ 9) (Brick Expert Report); Brick, Tr. 3480-3483).

Finally, St. Luke's financial improvements may well have resulted in a higher credit rating absent the Acquisition. (Brick, Tr. 3490-3491; PX02146 at 011-012 (¶ 18) (Brick, Expert Report)). In its last ratings update for an independent St. Luke's, Moody's identified certain factors that could increase its credit rating, including: "[c]ontinued growth and stability of inpatient and outpatient volume trends; significantly improved and sustainable operating performance for multiple years; strengthening of debt coverage measures and liquidity balance; improved market share." (PX01372 at 003). By the time of the Acquisition, St. Luke's already had met several of the factors that could lead to a ratings upgrade referenced by Moody's. (Wakeman, Tr. 3034-3036).

Therefore, St. Luke's credit rating does not make St. Luke's a flailing firm.

5. Health Care Reform and Electronic Medical Records

The evidence rebuts the claim that, absent the Joinder, St. Luke's would not have been able to survive under the requirements of health care reform, which encourages implementation of electronic medical records ("EMR"). St. Luke's, as a low-cost and high-quality provider, was already well-positioned, even "*uniquely positioned*," to take advantage of pending healthcare reform. (PX01072 at 001 (St. Luke's is "uniquely positioned for a smooth transition to expected health care reform. The hospital already focuses on quality and cost – key components of reform.") (emphasis added); Wakeman, Tr. 2620-2621). Prior to the Acquisition, Mr. Wakeman believed that St. Luke's was in a better position than other organizations in the Toledo community to get its cost structure in line with the expectations of health reform. (*See* PX01408 at 001; Wakeman, Tr. 2845-2847).

Moreover, what will ultimately be expected of hospitals under healthcare reform is still undetermined. (PX00597 at 026 ("The impact of the Health Care Reform Act on [ProMedica

Health System] cannot be predicted at this time, and the uncertainty of that impact is likely to continue for the foreseeable future…"); Wakeman, Tr. 2621 (rules "haven't been finalized"); Oostra, Tr. 6154 (regulations "still in draft form"); *see also* PX01920 at 030-031 (Wakeman, Dep. at 111-112, 114), *in camera*). Indeed, some federal courts have struck down parts or all of the new law. (PX00597 at 027). Although ProMedica now claims that healthcare reform can only hurt St. Luke's, a ProMedica bond disclosure statement refers to the potential "long-term benefits" of health care reform for hospitals, including "a large pool of newly insured individuals" and a "possible reduction of charity care and bad debt write-offs." (PX00597 at 025, 026). Therefore, ProMedica's claims about St. Luke's ability to meet healthcare reform requirements are highly speculative at best.

The evidence also shows that St. Luke's had the financial resources necessary to implement an EMR system prior to the Acquisition, and the intention and ability to do so in time to receive approximately $6.3 million in federal subsidies. (PX01281 at 012; Black, Tr. 5701-5702; PX02147 at 015 (¶ 29) (Dagen Expert Report); PX01933 at 039 (Oppenlander, Dep. at 147-148), *in camera*; PX01908 at 055 (Deacon, IHT at 213), *in camera;* PX01503 at 001 (EMR vendor bid in mid-2010 indicating that a standalone SLH was still "capable of qualifying for meaningful use incentives"), *in camera*). Prior to the Acquisition, St. Luke's already had budgeted { } for EMR. (PX01908 at 049-050 (Deacon, IHT at 189-190), *in camera*). In fact, St. Luke's had negotiated with a vendor to start a complete overhaul of its IT infrastructure and install an EMR system for $20 million over a seven year period. (PX02147 at 051 (¶ 96) (Dagen Expert Report); PX01496 at 003). Current and former St. Luke's executives testified that St. Luke's intended to begin implementing the EMR system at the start of 2010, but delayed these plans due to the Acquisition. (PX01933 at 038-039 (Oppenlander, Dep. at 144-

148), *in camera*; PX01928 at 021, 023, 030 (Perron, Dep. at 75-76, 84-85, 113), *in camera*; PX01908 at 055 (Deacon, IHT at 213), *in camera*; *see also* Den Uyl, Tr. 6575-6576, *in camera* (St. Luke's fully intended to start implementing EMR in 2010 absent the Acquisition), *in camera*).

In sum, Respondent has offered little to no evidence that St. Luke's would have been unable to comply with health care reform or implement EMR absent the Acquisition, much less that it is a flailing firm because of the potential need to comply with the uncertain requirements of health care reform.

6. Capital Spending, Hiring, and Wage "Freeze"

To support its claim that St. Luke's was flailing, ProMedica claims that St. Luke's froze capital spending, hiring, and wages during the recent recession, but its claims are inaccurate, not particularly noteworthy, and ignore the more drastic measures that ProMedica implemented during this same time period.

Respondent's claim that St. Luke's is flailing in part because St. Luke's "restricted its capital expenditures and delayed a number of capital projects" is undermined by its admission that St. Luke's "made at least $7 million of capital expenditures in calendar year 2009." (*Compare* Resp't's Pre-Trial Br. at 14 *with* Joint Stipulations of Law and Fact, JX00002A ¶ 43). St. Luke's spent $14 million on capital expenditures in 2008. (PX01006 at 007; PX01951 at 069 (Den Uyl Dep. at 269), *in camera*). The evidence shows that the capital freeze "melted down quickly" as St. Luke's continued to make capital investments in "big ticket" items and equipment. (Wakeman, Tr. 2575; PX01920 at 007-008 (Wakeman, Dep. at 18-22), *in camera*; PX01361 at 001 ("its [sic] not really a freeze, more like a delay"); PX00397 at 023-025; PX02147 at 035 (¶ 63) (Dagen Expert Report)).

Respondent's claim that St. Luke's is flailing in part because St. Luke's implemented "a freeze on employee salaries and on hiring of non-essential employees" is undermined by its admission that St. Luke's hired additional full-time employees in both 2009 and 2010. (*Compare* Resp't's Pre-Trial Br. at 14 *with* Joint Stipulations of Law and Fact, JX00002A ¶¶ 44-45; Wakeman, Tr. 2843-2844; PX01384 at 008, *in camera*; PX01386 at 003, *in camera*). In fact, St. Luke's was the only hospital in Lucas County not to lay off any employees from 2008 to 2010. (Wakeman, Tr. 2572; PX01274 at 001, *in camera* ("we are the only hospital in town that has not pink slipped anyone.")).

To the extent that St. Luke's slowed capital spending, hiring, and wage increases, that simply reflects prudent and responsible expense reductions during challenging economic conditions, as was widespread in the hospital industry. (Brick, Tr. 3561-6352; Wakeman, Tr. 2573-2574; PX01368 at 004-005, 013 (Moody's 2009 Median Report showing industry trend reducing expenses and capital expenditures)). For example, Mercy also cut costs during the period. (PX02293 at 005, *in camera*; PX01922 at 023 (Shook, Dep. at 86-88), *in camera*). Indeed, Complaint Counsel's financial expert concluded that St. Luke's cost-cutting measures were "sound business practices" that are commonly instituted by well-run businesses. (PX02147 at 034 (¶ 61) (Dagen Expert Report)). Mr. Wakeman testified that many other businesses, including non-profit hospitals, carefully evaluated whether to replace employees who left voluntarily as a cost-saving measure. (Wakeman, Tr. 2573-2574). He also testified that any employee who left St. Luke's would be replaced if the position had a direct impact on the quality of patient care. (Wakeman, Tr. 2574). Indeed, even during this period of cost cutting, St. Luke's maintained high quality and high patient satisfaction while continuing to experience significant

patient volume growth. (Wakeman, Tr. 2495-2498, 2614-2615; Black, Tr. 5685, 5690; *see also* PX01018 at 012, *in camera*; PX01072 at 001).

ProMedica also implemented significant cost-cutting measures in response to the challenging financial and economic environment. (*See, e.g.,* PX01918 at 014-015 (Oostra, Dep. at 48-50), *in camera;* Oostra, Tr. 6124-6126). ProMedica froze new hiring during this time period. (Oostra, Tr. 6124). For example, Mr. Oostra decided not to fill ProMedica's Chief Operating Office position (after he left that position to become President) due to "expense pressures." (Oostra, Tr. 6124). ProMedica had individuals retire and did not hire replacements. (Oostra, Tr. 6124). ProMedica increased the amount that employees paid for health benefits. (Oostra, Tr. 6124; Johnston, Tr. 5443-5444). ProMedica froze travel during this time period. (Oostra, Tr. 6124). ProMedica reduced marketing expenses. (Oostra, Tr. 6124-612). And ProMedica froze non-emergency capital expenses until 2009. (PX00409 at 013, *in camera*; Oostra, Tr. 6125; PX01906 at 018, 021 (Oostra, Dep. at 67, 79-80), *in camera* ("we pulled back { } that we had")).

Most notably, some of ProMedica's cost-cutting measures were even more drastic than St. Luke's. Unlike St. Luke's, which had a no lay-offs policy, ProMedica laid off staff. (PX00403 at 001; Oostra, Tr. 6125). ProMedica closed a child day-care center. (Oostra, Tr. 6124; Johnston, Tr. 5444). Unlike St. Luke's, ProMedica eliminated services to the community that it previously offered Toledo residents. (Oostra, Tr. 6126; PX01906 at 066 (Oostra, Dep. at 257), *in camera*). Indeed, Mr. Oostra testified that he could give "example after example" of the ways in which ProMedica cut expenditures. (Oostra, Tr. 6126).[29]

[29] ProMedica did all this – cut services, staff, etc. – at time when it had approximately one *billion* dollars in the bank. (Oostra, Tr. 6126).

Finally, during 2008 and 2009, St. Luke's continued to make millions of dollars of strategic investments, including acquiring physician practices and off-site imaging sites, as well as implementing EMR systems at physicians' practices. (Wakeman, Tr. 2575; PX01852 at 005-006 (¶ 8) (Dagen Rebuttal Report)). So the expense-reduction measures that St. Luke's undertook do not indicate that it was a flailing firm any more than ProMedica's more drastic expense-reduction measures do.

7. St. Luke's Other Alternatives

Respondent's claim that St. Luke's financial condition meant that it had no alternative left but to affiliate with ProMedica is false. St. Luke's had two willing alternatives to ProMedica right in front of it. UTMC was interested in affiliating with St. Luke's. (Joint Stipulations of Law and Fact, JX00002A ¶ 51; Gold, Tr. 230-231, 244; Wakeman, Tr. 2551-2552). In fact, St. Luke's and UTMC drafted a Memorandum of Affiliation Terms in mid-2009. (PX02205; Gold, Tr. 243-244). Additionally, St. Luke's and Mercy discussed {

} a potential affiliation. (Shook, Tr. 1003-1004, *in camera*; PX01030 at 011, *in camera*). But St. Luke's ended discussions while Mercy remained interested in an affiliation. (Wakeman, Tr. 2559; Shook, Tr. 1002, *in camera*). St. Luke's effort to find affiliation partners was cursory at best. (*See* PX01909 at 053-056 (Dewey, IHT at 205, 206, 212-213, 219-220), *in camera*; PX01911 at 049-051 (Wakeman, IHT at 192-198), *in camera*).

Alternatively, St. Luke's could have stayed independent and kept its doors open for years to come. At the end of 2009, St. Luke's CEO told its Board of Directors that St. Luke's would stay open for *at least* three to seven years if it did not partner with another hospital. (Wakeman, Tr. 2624-2625; PX01920 at 037-038 (Wakeman, Dep. at 141-142), *in camera*; *see also* PX01915

at 054 (Wagner, IHT at 211), *in camera*). Today, with the improvements in the equities markets and St. Luke's positive cash-flow operating margins, Mr. Wakeman believes that St. Luke's could remain independent even longer. (Wakeman, Tr. 2626; *see* PX01920 at 038-039 (Wakeman, Dep. at 145-146), *in camera*). Complaint Counsel's financial expert concluded that, even without the Joinder, St. Luke's would have been "a financially stable organization and able to compete in the marketplace." (Dagen, Tr. 3230-3231). Notably, Mr. Wakeman had a record of turning around hospitals facing financial challenges. All four of the previous hospitals he managed – he was President of three – experienced significant financial improvement during his tenure. (Wakeman, Tr. 2473-2474; PX01911 at 014 (Wakeman, IHT at 51-52), *in camera* ("positive trajectory in terms of revenue and operation")).

In sum, Respondent's claims do not make out a viable flailing-firm defense and it certainly has not made a "*substantial showing* that the acquired firm's weakness, which cannot be resolved by any competitive means, would cause that firm's market share to reduce to a level that would undermine the government's *prima facie* case."

In sum, the evidence conclusively shows that ProMedica's acquisition of St. Luke's will substantially lessen competition. It is not always the case that the facts and the law are so squarely on Complaint Counsel's side. On the other hand, in order to hold in favor of Respondent, the Court would have to –

- Look past Respondent's acquisition of a 58.3% GAC market share and an 80.5% OB market share;
- Look past increases in concentration and HHI levels that far exceed the *Merger Guidelines'* thresholds for transactions that are presumed likely to enhance market power;
- Approve a merger to duopoly in OB;
- Look past Respondent's own documents, which show the purpose and effect of the Acquisition was to gain negotiating clout with health plans and enable St. Luke's rates to

"skyrocket," at the expense of the employers and the community;

- Ignore all the testimony from health plans, which uniformly predict that reimbursement rates will increase significantly;

- Ignore the analysis of *both* economic experts that predict statistically-significant price increases post-Acquisition;

- Accept the claim that the few remaining competitors in Lucas County, in an unprecedented provider network, combined with never-seen steering by health plans and physicians, will somehow constrain Respondent;

- Make history by approving a merger-to-duopoly on the basis of an efficiencies defense;

- Find credible and sufficient hospital entry or expansion where no evidence for it exist; and

- Accept one of the weakest defenses in all of antitrust law – a flailing-firm defense – and thereby open the doors to such defenses whenever one of the merging parties experiences a downturn due to national economic conditions and wants to make life easier on itself by merging with a competitor.

We respectfully urge the Court not to make that leap.

VI. REMEDY

As a remedy for Respondent's illegal acquisition of St. Luke's, Complaint Counsel seeks an order requiring complete divestiture to return a viable competitor to the market and restore the competition eliminated by the Acquisition. As discussed below, complete divestiture is the necessary and appropriate remedy to "restore competition to the state in which it existed prior to, and would have continued to exist but for, the illegal merger." *In re B.F. Goodrich Co.*, 110 F.T.C. 207 at 345 (1988) (quoting *In re RSR Corp.*, 88 F.T.C. 800, 893 (1976)).

A. The Clayton Act and Supreme Court Precedent Dictate Divestiture

As this Court found recently in *Polypore*, "[u]nder both the text of the Clayton Act and Supreme Court precedent, divestiture is the usual and proper remedy where a violation of § 7 has

been found." *Polypore*, 2010 FTC LEXIS 17 at *678 (citing *E. I. du Pont*, 366 U.S. at 329; *Ford Motor Co. v. United States*, 405 U.S. 562, 573 (1972)). Indeed, Section 11(b) of the Clayton Act provides that the Commission "shall" order a divestiture of "the stock, or other share, capital, or assets, held" for violations of Section 7. 15 U.S.C. § 21(b). The Supreme Court made plain that "[t]he very words of § 7 suggest that an undoing of the acquisition is a natural remedy." *E.I. du Pont*, 366 U.S. at 329. The Supreme Court also noted that divestiture is "simple, relatively easy to administer, and sure. It should always be in the forefront of a court's mind when a violation of § 7 has been found." *E.I. du Pont*, 366 U.S. at 330-31.

Complaint Counsel has established that the acquisition of St. Luke's by Respondent has substantially lessened competition in the relevant markets in violation of Section 7. As the Supreme Court has found, "it is well settled that once the Government has successfully borne the considerable burden of establishing a violation of law, all doubts as to the remedy are to be resolved in its favor." *E.I. du Pont*, 366 U.S. 334. As a result, the Commission has broad discretion to select a remedy so long as it bears a "reasonable relation to the unlawful practice found to exist." *Jacob Siegal Co. v. FTC*, 327 U.S. 608, 611-13 (1946). Here, Complaint Counsel seeks a full divestiture because "[i]t is axiomatic that the normal remedy specified in Section 7 cases is the divestiture of what was unlawfully acquired." *In re Olin Corp.*, 113 F.T.C. 400, 584 (1990). Only after Respondent divests St. Luke's can the competition lost through the Acquisition be restored.

B. Complete Divestiture Is Necessary to Restore the Competition Eliminated by the Acquisition

At trial, Complaint Counsel presented extensive evidence from health plans, employers, and physicians, as well as from Respondent's executives, that Respondent's acquisition of St. Luke's will substantially lessen competition in Lucas County. In fact, but for the Commission's

Hold Separate Agreement with Respondent, consumers already would have been harmed substantially by the elimination of competition.

In brief, the Hold Separate Agreement, which U.S. District Court Judge David A. Katz instituted as a preliminary injunction order, prevents Respondent from (1) eliminating, transferring, or consolidating any of St. Luke's clinical services, (2) terminating any of St. Luke's employees, (3) modifying or cancelling any physicians' privileges at St. Luke's, or (4) terminating any contract between a health plan and St. Luke's. (PX00069 at 001). In addition, if a health plan's contract with St. Luke's expires during the term of the Hold Separate Agreement, ProMedica must offer to "continue to accept the same terms of the contract for the remaining term" of the Hold Separate Agreement. (PX00069 at 001). The Hold Separate Agreement also requires ProMedica to preserve St. Luke's viability by "provid[ing] sufficient working capital to operate St. Luke's at its current rate of operation." (PX00069 at 001).

A full and complete divestiture is needed to restore St. Luke's to the competitive position it held prior to Respondent's unlawful acquisition. Prior to the Acquisition, St. Luke's was a competitive threat to Respondent, taking away market share and providing low-cost, high-quality, personalized care in a prime location. Oostra, Tr. 6182-6183, *in camera*; *see also* PX00159 at 012, *in camera* (ProMedica CEO affirming that ProMedica lost inpatient hospital share to St. Luke's); Wakeman, Tr. 2609-2610; *see also* PX00170 at 007 (St. Luke's CEO stating to Board that prior to the joinder, St. Luke's "leadership status in quality, service and low cost stayed firmly in place."); Oostra, Tr. 6037-6038 (stating that St. Luke's is in a desirable location). The competition between Respondent and St. Luke's resulted in lower healthcare costs, higher quality, and greater choice for Lucas County residents. (PX02148 at 054-055, 084-088 (¶¶ 95, 155-161) (Town Expert Report), *in camera*.) For example, Scott Rupley, St. Luke's

Marketing and Planning Director, wrote and testified that "an independent St. Luke's Hospital keeps the systems [including ProMedica] a little more honest," benefitting both health plans and consumers. (Rupley, Tr. 1968-1969). A full divestiture is needed to restore these benefits to the community.

C. The Proposed Order Divests St. Luke's with Ancillary Provisions

Consistent with well-established law, Complaint Counsel's Proposed Order (Attachment C; the "Proposed Order" or "CCPO") appropriately directs Respondent to divest St. Luke's, including any additions or improvements made to the hospital since the Acquisition, to an approved acquirer no later than 180 days from the date the Proposed Order becomes final. (CCPO ¶ II.A.).

The Proposed Order clarifies what assets must be divested. Specifically, Respondent is required to restore any assets to St. Luke's that have been removed post-Acquisition (other than inventory consumed in the ordinary course of business). (CCPO ¶ II.C.). The Proposed Order also requires Respondent to restore any service, program, or function that it terminated at St. Luke's post-Acquisition. (CCPO ¶ II.C.2.). In addition, Respondent must grant the acquirer of St. Luke's such license as is required for the operation of the hospital. (CCPO ¶ II.D.). All of these actions are necessary and appropriate to restore St. Luke's to its former competitive state.

The Proposed Order also outlines the actions that Respondent must take to ensure that St. Luke's acquirer can operate the divested hospital in substantially the same manner as St. Luke's was operated pre-Acquisition. (CCPO ¶ II.E.). The Proposed Order obligates Respondent to provide St. Luke's acquirer with governmental approvals, transition services, and the opportunity to recruit St. Luke's employees and medical staff necessary for operating an effective, full-

service independent hospital that provides inpatient general acute care to the community. (CCPO ¶ II.E.)

An important ancillary provision of the Proposed Order allows the Commission to appoint a Monitor to oversee the divestiture and all transitional activities, as well as appoint a Divestiture Trustee if Respondent fails to divest St. Luke's in accordance with the Proposed Order. (CCPO ¶ VI.-VII.). Having the ability to appoint a Monitor is critical because "common sense tells us that Respondents' self-interests will be best served by creating less rather than more competition from the divested assets." *Chicago Bridge*, 138 F.T.C. at 1162. A Monitor will also ensure that St. Luke's acquirer "receives what it needs to maintain a viable business" and that the "divestiture proceeds smoothly by providing a conduit between the acquirer and [Respondent] and promptly notifying the Commission of any problems." *Id.*

Complaint Counsel's Proposed Order also requires Respondent to maintain the viability, marketability, and competitiveness of the St. Luke's Hospital Assets and the Post-Joinder Hospital Business relating to it. (CCPO ¶ IV.). This action is necessary to avoid deterioration of the assets while awaiting divestiture, otherwise, the purpose of the divestiture would be defeated. The Proposed Order also imposes other standard provisions relating to compliance reporting, notification, and inspection requirements. (CCPO ¶¶ V.-IX.).

The provisions of the Proposed Order are designed to ensure that a viable and vigorous competitor is reestablished in the market to restore the competition that the Acquisition eliminated.

VII. CONCLUSION

For the foregoing reasons, supported by the evidence in the trial record, ProMedica's acquisition of St. Luke's violated Section 7 of the Clayton Act. Therefore, Complaint Counsel

respectfully requests that relief, specifically divestiture of St. Luke's and the related relief contained in the enclosed Proposed Order, and such other relief that the Court deems necessary and proper, should be entered to prevent significant consumer harm.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on September 20, 2011, I filed the foregoing document electronically using the FTC's E-Filing System, which will send notification of such filing to:

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I also certify that on September 20, 2011, I delivered via electronic mail and hand delivery a copy of the foregoing document to:

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I certify that the electronic copy sent to the Secretary of the Commission is a true and correct copy of the paper original and that I possess a paper original of the signed document that is available for review by the parties or the adjudicator.

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ATTACHMENT A

THE ANTITRUST ANALYSIS OF HOSPITAL MERGERS AND THE TRANSFORMATION OF THE HOSPITAL INDUSTRY

JONATHAN B. BAKER*

I

INTRODUCTION

Hospital mergers, once rare in the United States, have grown commonplace in the current decade. During the early 1980's, acquisitions or consolidations occurred at the rate of roughly two hundred per year, dramatically higher than the yearly rates of fifty in 1972 and five in 1961.[1] Although no more than 3 percent of all U.S. hospitals are involved in such transactions each year,[2] many, if not most, urban areas have already seen a hospital merger or consolidation.[3]

The growing frequency of hospital mergers is but one aspect of a much broader structural transformation of the U.S. hospital industry in the 1980's. New institutions have become part of the fabric of health care, and thus of the environment in which hospitals operate. Formerly peripheral institutions have grown in significance. These new or growing institutions include free standing surgical and ambulatory outpatient clinics, health maintenance organizations ("HMO's") and preferred provider organizations ("PPO's"),

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* Assistant Professor, The Amos Tuck School of Business Administration, Dartmouth College, Hanover, N.H. The author is indebted to many people for helpful discussions including Terry Calvani, Michael Fischer, and Joseph Simons; John Sipple on Hart-Scott-Rodino reporting; Toby Singer on antitrust exemptions and FTC jurisdiction; William Blumenthal on cluster markets; Robert G. Hansen and Steven Salop on product complementarity; and especially Monica Noether and Frank Sloan for close readings of an earlier draft. The opinions expressed in this article are not necessarily those of these colleagues.

1. Finkler & Horowitz, *Merger and Consolidation: An Overview of Activity in Health Care Organizations*, 39 HEALTHCARE FIN. MGMT., Jan. 1985, at 19.

2. The United States had 6,872 hospitals in 1984. U.S. DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE U.S. 1987, at 94 [hereinafter 1987 STATISTICAL ABSTRACT].

The merger rate is similar when expressed in terms of hospital beds. The early 1980's acquisitions encompassed roughly 20,000 beds per year. Finkler & Horowitz, *supra* note 1, at 25. *See generally* Mullner & Andersen, *A Descriptive and Financial Ratio Analysis of Merged and Consolidated Hospitals: United States, 1980-1985*, 7 ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 41 (1987). Roughly 1,360,000 beds were available in the U.S. hospital industry in the early 1980's, 1987 STATISTICAL ABSTRACT, *supra*, at 94, so nearly 1.5% of hospital beds were involved in such transactions each year.

3. In the first three months of 1986, significant combinations occurred or were discussed in the San Francisco, Rochester, Minnesota, Chicago, Baltimore, and Brookline, Massachusetts areas. Mullner & Andersen, *supra* note 2, at 41-42.

for-profit hospitals, multi-hospital systems, and hospital management contracts.[4] Furthermore, the direct regulatory supervision of hospitals has changed in the past two decades. In virtually all states, hospital capital investments require a certificate of need ("CON") from a state regulatory body, or else a CON requirement has recently been abolished.[5] Third party reimbursement for hospital expenses has shifted from a cost-based system to a prospective payment system ("PPS"), primarily for patients with Medicare but also for other patients in some states.[6]

Another important regulatory change is indirect. The application of antitrust law to the health field differs in the 1980's from the patterns characteristic of earlier decades. Today, unlike past decades, it is generally understood that most activities of the health professions and hospitals are governed by the antitrust laws. Hospital mergers are now reviewed under the same antitrust framework as applies to any acquisition.[7] Furthermore, antitrust law of the 1980's differs markedly from the antitrust law of the 1960's, including differences in its merger analysis.

Because antitrust law, the hospital industry structure, and the regulatory framework applied to hospital activities have each changed dramatically from their appearance in previous decades, the present antitrust constraints on hospital mergers may seem novel to hospitals, lawyers, and courts. This article shows how the antitrust analysis of hospital mergers depends upon the features of the regulatory scheme applied to the hospital industry, both directly and through the influence of regulation on industry structure and conduct. It concludes that for the provision of many hospital services, demand substitutes are limited, supply substitutes also may be limited, geographic markets are often no larger than a single metropolitan area, entry is time consuming, and market concentration is high. Under the current antitrust law and enforcement policy, these structural characteristics of the hospital industry will call for close scrutiny of hospital mergers.

II

THE REGULATION OF HEALTH CARE PROVISION: RESPONSE TO MARKET FAILURE

The antitrust analysis of hospital mergers depends importantly upon certain features of the health care regulatory scheme. Moreover, recent changes in the regulatory environment may be responsible for the rise in hospital industry acquisitions in the early 1980's. Important aspects of the regulatory framework and its historical evolution will be outlined below.

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4. *See infra* notes 32-34, 137, 207 and accompanying text.
5. *See infra* notes 16-17, 22-23, 292-97 and accompanying text.
6. *See infra* notes 20-21, 24 and accompanying text.
7. The Federal Trade Commission has taken a leadership role in showing how antitrust law applies to hospital mergers. *See* American Medical Int'l, 104 F.T.C. 1 (1984); Hospital Corp. of Am., 106 F.T.C. 361 (1985), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 481 U.S. 1038 (1987). In this area, the FTC is ably exploiting its unique ability as a specialized antitrust court to shape the law where it was once unclear.

Most people are risk-averse and are uncertain about the nature, cost, and timing of future health care requirements. Prepaid health insurance, the obvious market response, is therefore extremely desirable.[8] In its most common historical forms, however, the insurance mechanism reduces the elasticity of the demand for health care. Once health care is paid for entirely or in large part, consumers have little incentive to economize on cost.[9] Furthermore, insurance schemes have historically incorporated retrospective cost-based or charge-based reimbursement for health care providers, giving hospitals little incentive to minimize costs or compete on price.[10] As a result, prepaid health insurance has led to the overprovision of health care and to high health care prices.[11]

The bias created by prepaid health insurance toward inefficiently high health care prices and usage is further exacerbated by information problems associated with the health care market. Patients often have little knowledge about their illnesses and how to treat them. Doctors act as agents for patients, in many cases deciding on the amount of care and the hospital at which it will be provided, and often simultaneously supplying that care. When physician compensation is tied to the level of care and doctors are patient agents in selecting the care level, the price and quantity of medical care will tend to rise to inefficiently high levels.[12]

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8. *See generally* Crandall, *The Impossibility of Finding a Mechanism to Ration Health Care Resources Efficiently*, in A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE 29 (M. Olson ed. 1981); Joskow, *Alternative Regulatory Mechanisms for Controlling Hospital Costs*, in A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE, *supra*, at 219, 220-26; Hospital Corp. of Am., 106 F.T.C. at 457-58.

Health markets with prepaid health insurance are not free of other forms of market failure, however. The necessary insurance contracts may be too complex, and insurance raises well-known adverse selection and moral hazard difficulties. *See generally* Crandall, *supra*, at 31, 34 (complex contracts); Pauly, *Overinsurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection*, 88 Q.J. ECON. 44 (1974).

9. From 80% to 90% of the U.S. population has fairly extensive hospital insurance coverage, and the typical insured patient pays about 5% of hospital charges incurred. P. JOSKOW, CONTROLLING HOSPITAL COSTS 11 (1981). To the extent insurance schemes have large deductibles and no copayments, patients likely pay less than 5% of marginal hospital charges.

10. *See generally id.* at 27-31; *cf.* Danzon, *Hospital "Profits": The Effects of Reimbursement Policies*, 1 J. HEALTH ECON. 29 (1982) (hospitals have an incentive to maximize the difference between reimbursable accounting costs and true economic costs for insured patients, creating a bias toward high patient charges for insured patients).

11. Many schemes have been proposed for preserving the consumer's benefits of prepaid health insurance while reducing the systemic tendency for inefficiently high prices and output of the health care sector. *See generally* Pauly, *Overinsurance: The Conceptual Issues*, in NATIONAL HEALTH INSURANCE: WHAT NOW, WHAT LATER, WHAT NEVER? 201 (M. Pauly ed. 1980); Crandall, *supra* note 8, at 34; Zeckhauser & Zook, *Failures to Control Health Costs: Departures from First Principles*, in A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE, *supra* note 8, at 87, 109-10 (effects of cost-based reimbursement); *cf. Introduction* to A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE, *supra* note 8, at 1, 24-25 (vertical integration among insurers and hospitals would give hospitals an incentive to minimize costs and patients an incentive to prefer less costly hospitals). Despite the bias toward overprovision of health care in the economy as a whole, the distribution of access to health care is uneven: Poor and rural consumers may be underprovided with health care. *See id.* at 7.

12. This incentive is present even assuming that all physicians act ethically in making decisions for the provision of care. For a discussion of the agency relationship between doctor and patient, and the possibility that physicians induce a demand for medical care, see, for example, M. PAULY, DOCTORS AND THEIR WORKSHOPS: ECONOMIC MODELS OF PHYSICIAN BEHAVIOR (1980).

The regulatory scheme put into place in the United States in the 1960's exacerbated these biases in favor of high health care prices and high levels of health care provision. Medicare and Medicaid, landmark federal insurance programs for the elderly and poor enacted in 1965, relied upon retrospective cost-based reimbursement of health care providers, physicians, and hospitals.[13] Not surprisingly, a health care explosion occurred. Health care prices continued to rise at a substantially higher rate than prices generally,[14] and the health care share of the Gross National Product increased from 4.4 percent in 1950 and 5.3 percent in 1960 to 7.4 percent in 1970 and 9.1 percent in 1980.[15]

Congress addressed these skyrocketing health care costs in the 1970's and early 1980's when it enacted the main elements of the regulatory scheme shaping the provision of health care today. In 1974, Congress placed limitations on the quantity of health care provided consumers in order to control the health care explosion. Large hospital capital expenditures became subject to the supervision of state regulatory boards, through the requirement for a CON.[16] Virtually all states enacted CON programs by 1979, while only five had required CON approvals before 1970.[17] Furthermore, applying a

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13. Social Security Amendments of 1965, Pub. L. No. 89-97, sec. 102(a), § 1814(b), sec. 121(a), § 1905(a), 79 Stat. 286, 296, 351 (codified as amended at 42 U.S.C. §§ 1395f(b), 1396(d) (1982)). Under cost reimbursement, the only marginal costs borne by patients, and thus the only source of limits on their health care purchases, come from the opportunity cost of obtaining care, including costs of time away from work or leisure and costs of travel.

14. Even before the creation of the Medicare and Medicaid programs in the 1960's, health care prices were increasing more rapidly than the prices of most other goods and services. From 1953 to 1962, the Consumer Price Index ("CPI") for medical care rose 36.0%, while the aggregate CPI rose 13.1%. Since that time, above average health care inflation rates have continued. From 1963 to 1972, the medical CPI rose by 54.8% while the aggregate CPI rose by 36.6%. From 1973 to 1981, when the CPI for energy rose by 232.0%, the medical CPI increase of 113.9% continued to outpace the aggregate CPI increase of 104.7%. From 1982 to 1986, the medical CPI rose by 31.9% while the aggregate CPI rose by only 13.6%. During this time, the aggregate CPI was likely aided more than the medical CPI by the decline of 11.0% in the energy CPI. *See* ECONOMIC REPORT OF THE PRESIDENT 307 (1987).

15. 1987 STATISTICAL ABSTRACT, *supra* note 2, at 84 (figures for 1970 and 1980); U.S. DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE U.S. 1984, at 102 (figures for 1950 and 1960). The health care share of Gross National Product has continued to rise, reaching 10.7% in 1985. 1987 STATISTICAL ABSTRACT, *supra* note 2, at 84. Some of these price increases may reflect improvements in the quality and scope of services provided. P. JOSKOW, *supra* note 9, at 15.

16. National Health Planning & Resources Development Act of 1974, Pub. L. No. 93-641, sec. 3, § 1523(a)(4), 88 Stat. 2225, 2246 (1975) (codified at 42 U.S.C. § 300m-2 (1982) (repealed 1986)). The typical CON board reviewed all expenditures above $100,000 to $150,000. Joskow, *supra* note 8, at 219, 234. Similar review of capital expenditures was encouraged by § 1122 of the Social Security Act. Social Security Amendments of 1972, Pub. L. No. 92-603, sec. 221, § 1122, 86 Stat. 1329, 1386 (codified as amended at 42 U.S.C. § 1320a-1 (1982 & Supp. 1988)). *See generally* Frech, *The Long-Lost Free Market in Health Care: Government and Professional Regulation of Medicine*, in A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE, *supra* note 8, at 44, 61-66; Joskow, *supra* note 8, at 219, 234-43; Steinwald & Sloan, *Regulatory Approaches to Hospital Cost Containment: A Synthesis of the Empirical Evidence*, in A NEW APPROACH TO THE ECONOMICS OF HEALTH CARE, *supra* note 8, at 274. Federal Communications Commission regulation of broadcasting provides another example of the use of entry restrictions rather than the price mechanism to ration access to resources. *See* T. MORGAN, J. HARRISON & P. VERKUIL, ECONOMIC REGULATION OF BUSINESS CASES AND MATERIALS 136-37 (2d ed. 1985).

17. P. JOSKOW, CONTROLLING HOSPITAL COSTS 92-93 (1981). However, 21 states enacted CON requirements between 1970 and 1974, before such programs were federally mandated.

similar regulatory approach to other aspects of health care provision, Congress required that outside experts monitor and limit physician choice of care through peer review.[18]

Congress's 1974 mechanism for taming the health care explosion, based on monitoring and policing capital expenditures and care decisions, was replaced in the 1980's by a new incentive mechanism to attack high health care prices. Building on the experience of several states with all-payer prospective payment systems,[19] Congress introduced in 1983 a prospective payment system ("PPS"),[20] covering a substantial fraction of hospital revenues,[21] to replace cost-based Medicare reimbursement. By 1986, CON's were no longer required,[22] and in consequence have been abolished by over one quarter of the states.[23]

Under the PPS, Medicare provides for a standardized payment to every hospital nationwide for each patient with a given diagnosis. These payments are based primarily on 1981 average nationwide costs associated with the treatment of the patient's diagnostic related group ("DRG").[24] The cap on payments guarantees that each hospital will recover the average costs associated with the typical treatment and experience of patients with each

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18. Social Security Act Amendments of 1972, Pub. L. No. 92-603, § 249F, 86 Stat. 1329, 1429 (codified as amended at 42 U.S.C.A. §§ 1320c to1320c-13 (West 1983 & Supp. 1988)) (Professional Standards Review Organizations ("PSRO")). By the end of the 1970's, most areas of the United States had some type of PSRO program in operation. Steinwald & Sloan, *supra* note 16, at 282-84.

19. *See generally* Hellinger, *Recent Evidence on Case-Based Systems for Setting Hospital Rates*, 22 INQUIRY 78 (1985); *but cf.* Cone & Dranove, *Why Did States Enact Hospital Rate-Setting Laws?*, 29 J. L. & ECON. 287 (1986) (state rate-setting laws were enacted to correct monitoring problems created by Medicaid law, rather than as a response to increasing medical expenses generally).

20. Social Security Amendments of 1983, Pub. L. No. 98-21, §§ 601-607, 97 Stat. 65, 149-72 (codified as amended in scattered sections of 42 U.S.C.).

21. *See* DIV. OF NAT'L COST ESTIMATES, OFFICE OF THE ACTUARY, HEALTH CARE FINANCING ADMIN., *National Health Expenditures, 1986-2000*, 8 HEALTH CARE FINANCING REV., Summer 1987, at 1, 30 (Medicare accounts for nearly 30% of hospital care expenditures).

22. *See supra* note 16. Most studies conclude that neither CON nor PSRO programs were successful at achieving health care cost reductions. *See generally* Sloan, *Government and the Regulation of Hospital Care*, 72 AM. ECON. REV. 196 (Papers & Proceedings 1982); Joskow, *supra* note 8, at 219, 234-43; Steinwald & Sloan, *supra* note 16, at 274, 285-96; *but see* Howell, *Evaluating the Impact of Certificate-of-Need Regulation Using Measures of Ultimate Outcome: Some Cautions from Experience in Massachusetts*, 19 HEALTH SERVICES RES. 587 (1984) (CON success increases over time, as state boards develop experience); Ashby, *The Impact of Hospital Regulatory Programs on Per Capita Costs, Utilization, and Capital Investment*, 21 INQUIRY 45 (1984) (CON effect on cost containment is ambiguous, but PSRO's reduced the rate of growth in hospital costs since 1977). Empirical evidence on the entry deterring effects of CON laws is discussed *infra* note 296.

23. GENERAL ACCOUNTING OFFICE, HEALTH CARE FACILITIES: CAPITAL CONSTRUCTION EXPENDITURES BY STATE, app. I (1986). In addition, the Department of Health and Human Services no longer undertakes capital reviews pursuant to § 1122 of the Social Security Act, although that statute has not been repealed. *Another Upset for Health Planning*, 41 MED. & HEALTH PERSP. (Oct. 5, 1987).

24. *See generally* STAFF OF HOUSE COMM. ON WAYS AND MEANS, 100TH CONG., 1ST SESS., BACKGROUND MATERIAL AND DATA ON PROGRAMS WITHIN THE JURISDICTION OF THE COMMITTEE ON WAYS AND MEANS 221-36 (Comm. Print 4, 1987). The program incorporated a four year phase-in period, during which hospitals were reimbursed a declining percentage of their own historical costs, and during which reimbursement was based in part on regional costs. Future reimbursements will be adjusted for inflation.

diagnosis, but will not recover more. In consequence, hospitals must cut treatment costs in order to increase profits.

Although it may be too early to evaluate the effect of the Medicare prospective payment system on hospital costs,[25] the industry appears to have grown more competitive in consequence. The preliminary evidence suggests that both hospital admissions and hospital stays, measures of industry output, have declined as a result of the program[26] and as a result, hospital occupancy rates have fallen dramatically.[27] Because it is unlikely that the program

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25. *See generally* Hellinger, *supra* note 19, at 85. Preliminary evidence suggests that the rate of hospital cost increases declined in 1984 and 1985, following the imposition of the Medicare PPS. *See* Guterman & Dobson, *Impact of the Medicare Prospective Payment System for Hospitals*, 7 HEALTH CARE FINANCING REV. 97, 111 (1986) (increase in real Medicare benefit payments for inpatient and outpatient hospital care slowed in 1984); 1987 STATISTICAL ABSTRACT, *supra* note 2, at 85, Table No. 127 (expenditures on hospital care fell from 41.1% of total health expenditures in 1983 to 39.2% in 1985, and expenditures on medical facilities construction fell from 2.6% of the total in 1983 to 1.9% in 1985); *id.* at 86, Table No. 128, 88, Table No. 134 (rate of growth of per capita health care expenditures and hospital room charges both slowed in 1984 and 1985).

The continued (albeit slowed) growth in Medicare reimbursements despite the cost-cutting pressures of the PPS may reflect hospital manipulation of the PPS program. Hospitals can increase reimbursements through more conservative diagnoses. For example, if colds and pneumonia were diagnostic categories, and the reimbursement level were greater for the latter diagnosis, then hospitals could increase revenues by diagnosing likely colds as possible pneumonia. *See* Guterman & Dobson, *supra*, at 104; *but cf.* Vertrees & Manton, *The Complexity of Chronic Disease at Later Ages: Practical Implications for Prospective Payment and Data Collection*, 23 INQUIRY 154 (1986) (constructing DRG's based on five dimensions of diagnosis may limit ability of hospitals to manipulate categories). The continued growth in reimbursements might also reflect increases in the demand for medical care engendered by the growth of medical science and the resulting increase in the quality and variety of health care services offered. *Cf.* P. JOSKOW, *supra* note 9, at 11-19 (dramatic health care quality improvements in the 1970's).

Evidence from states with rate reimbursement schemes antedating the Medicare PPS suggests that the prospective payment approach reduces health care expenses. Morrisey, Conrad, Shortell & Cook, *Hospital Rate Review: A Theory and An Empirical Review*, 3 J. HEALTH ECON. 25, 37-41 (1984); Dranove & Cone, *Do State Rate Setting Regulations Really Lower Hospital Expenses?*, 4 J. HEALTH ECON. 159 (1985); M. NOETHER, COMPETITION AMONG HOSPITALS 74 (Bureau of Economics, FTC 1987).

26. Hellinger, *supra* note 19, at 85; Guterman & Dobson, *supra* note 25, at 103-04, 109; *but cf.* Newhouse & Byrne, *Did Medicare's Prospective Payment System Cause Length of Stay to Fall?*, 7 J. HEALTH ECON. 413 (1988) (Medicare led long-term patients to shift from short-term acute care hospitals to other hospitals.). The reduction in hospital admissions may derive from hospital incentives under the Medicare PPS to drop services that they cannot provide more cheaply than average. *Cf.* Newhouse, *Two Prospective Difficulties with Prospective Payment of Hospitals, or, It's Better to Be a Resident than a Patient with a Complex Problem*, 2 J. HEALTH ECON. 269, 272 (1983) (quality of care provided to severely ill patients and profits of teaching hospitals providing tertiary care may suffer from PPS); Sheingold & Buchberger, *Implications of Medicare's Prospective Payment System for the Provision of Uncompensated Hospital Care*, 23 INQUIRY 371, 372 (1986) (hospitals with PPS deficits may be forced to provide less uncompensated care).

Although treatment quality declines when patients substitute outpatient, nursing, and home health care for inpatient hospital care, this substitution may reflect a more efficient use of social resources. *See generally* Ellis & McGuire, *Provider Behavior Under Prospective Reimbursement: Cost Sharing and Supply*, 5 J. HEALTH ECON. 129 (1986). However, the PPS program will likely generate inefficiently low innovation in the provision of medical care by hospitals, other than cost-reducing innovation. *See* Sloan & Valvona, *Prospective Payment for Hospital Capital by Medicare: Issues and Options*, 11 HCM REV. 25, 32 (1986); Lee & Waldman, *The Diffusion of Innovations in Hospitals*, 4 J. HEALTH ECON. 373, 379 (1985).

27. The average annual U.S. hospital occupancy rate for short-term hospitals was between 73% and 76% during every year from 1972 to 1983, but fell to 68.9% in 1984. 1987 STATISTICAL ABSTRACT, *supra* note 2, at 95. The occupancy rate among for-profit hospitals fell from 65.5% in 1982 to 57.0% in 1984. *Id.* at 94. In 1986, 31 states reported 50% occupancy and 35 states reported 63% occupancy. Bean, *Latest Survey Shows Hospital Charges Increasing Far More Quickly Than CPI*, Wall

increased the costs of providing inpatient care, the best explanation for the reduction in industry output is that the PPS scheme led to a substantial reduction in the demand for hospital care.[28] This decline in demand could reduce the equilibrium number of hospitals[29] and increase the intensity of hospital competition, unless the marginal cost reduction induced by hospital response to the Medicare prospective payment system is equally dramatic. Furthermore, price ceilings on insurance reimbursements[30] will likely push hospitals to substitute price competition for quality competition.[31]

Increased competition among health care providers has led to a variety of changes in industry structure.[32] The rapid growth of multihospital systems,[33] whether created through new construction, acquisition, or management

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St. J., Jan. 6, 1988, at 17, col. 4. The average number of hospital of beds used per day fell by 9.5% in 1984, more than treble the 2.8% decline in 1983 and the 2.7% decline in 1982. In contrast, the average number beds used per day held constant between 1978 and 1981. 1987 STATISTICAL ABSTRACT, *supra* note 2, at 97.

28. The new reimbursement program caps physician reimbursement in much the same way as it limits hospital revenues. To the extent physicans act as patients' agents in demanding hospital services, and to the extent doctors are able to induce patient demand for medical care, the new reimbursement program gives doctors incentives to reduce the medical care they demand on behalf of their patients, thus reducing hospital admissions rates. Similarly, hospitals can be expected to encourage staff physicians to reduce the hospital services employed per patient, thus reducing the average length of hospital stays.

29. The number of hospitals in the United States fell by 37 between 1982 and 1984. This reduction continued a long-term trend involving the exit of small hospitals from the industry. 1987 STATISTICAL ABSTRACT, *supra* note 2, at 93, Table No. 147. *See generally* Mullner, Byre & Kubal, *Hospital Closure in the United States 1976-1980: A Descriptive Overview*, 18 HEALTH SERVICES RES. 437 (1983); Kennedy & Dumas, *Hospital Closures and Survivals: An Analysis of Operating Characteristics and Regulatory Mechanisms in Three States*, 18 HEALTH SERVICES RES. 489 (1983); Bean, *Small Rural Hospitals Struggle for Survival Under Medicare Setup*, Wall St. J., Jan. 4, 1988, at 1, col. 1; *cf.* Sager, *Why Urban Voluntary Hospitals Close*, 18 HEALTH SERVICES RES. 451 (1983) (small hospitals serving minority or Medicaid-funded patients are more likely to close). The low rate of hospital closings suggests that the distress sale of assets is unlikely to account for a large fraction of hospital merger statistics.

30. As with the Medicare PPS, Blue Cross and other insurers are similarly moving toward prospective payments, so that ceilings on reimbursement levels may soon apply to most hospital services. *See* M. NOETHER, *supra* note 25, at 87-88.

31. *See id.* at 84-88; Zwanziger & Melnick, *The Effects of Hospital Competition and the Medicare PPS Program on Hospital Cost Behavior in California*, 7 J. HEALTH ECON. 301 (1988); United States v. Rockford Memorial Corp., No. 88-C-20186, slip. op. at 81-84 (N.D. Ill. Feb. 23, 1989) (order granting injunction), *appeal filed.* In the past, hospitals would compete for patients primarily by offering them (or their doctors) amenities. Hospital Corp. of Am., 106 F.T.C. 361, 478-79 (1985); *cf.* White, *Quality, Competition and Regulation: Evidence from the Airline Industry*, in REGULATING THE PRODUCT 17 (R. Caves & M. Roberts eds. 1975) (quality competition among airlines subject to price regulation); G. DOUGLAS & J. MILLER, ECONOMIC REGULATION OF DOMESTIC AIR TRANSPORT: THEORY AND POLICY (1984) (same).

32. In addition to the structural changes discussed in the text, a growing number of affiliations among hospitals, doctors, and private health insurers may result from cost-cutting pressures. *See generally* Baker, *Vertical Restraints Among Hospitals, Physicians and Health Insurers that Raise Rivals' Costs: A Case Study of* Reazin v. Blue Cross and Blue Shield of Kansas, Inc. *and* Ocean State Physicians' Health Plans, Inc. v. Blue Cross and Blue Shield of Rhode Island, 14 AM. J. L. & MED. 147 (1988).

33. In 1985, 35% of U.S. hospitals and 38% of U.S. community hospital beds were owned, leased, or managed by a multihospital system. Alexander, Lewis & Morrisey, *Acquisition Strategies of Multihospital Systems*, 4 HEALTH AFFS., Fall 1985, at 49, 50. Only 24% of hospitals and 30% of hospital beds had been incorporated in multihospital systems in 1979. Mullner, Byre & Kubal, *Multihospital Systems in the United States: A Geographical Overview*, 15 SOC. SCI. & MED. 353, 353 (1981). The number of hosptial beds incorporated in multihospital systems rose at an annual rate of 3.0% from 1975 to 1982. Ermann & Gabel, *Multihospital Systems: Issues and Empirical Findings*, 3 HEALTH AFFS., Spring 1984, at 50, 52. From 1970 to 1981, the number of hospitals under management contract rose from

contracts, may be a response to cost-cutting pressures derived from recent regulatory changes.[34] Through this mechanism, the changing regulatory environment may have induced the recent wave of hospital acquisitions requiring antitrust analysis.

III

THE CHANGING ROLE OF ANTITRUST LAW

A. The Antitrust Revolution of the 1970's

As the regulatory framework governing the provision of health care has altered over the last two decades, so too has antitrust law changed. Antitrust of the 1980's is built around a different paradigm from the antitrust law of the 1960's as a result of the widespread adoption of the Chicago School critique of the earlier approach. Economic efficiency has become the lodestar of antitrust, and the populist goals important in the past are now treated merely as historical curiosities.[35] In addition to their normative focus on economic efficiency, Chicago School critiques of 1960's antitrust law are characterized by a presumption that most markets work well because entry is easy[36] and collusion is difficult to coordinate and enforce. In consequence, Chicago

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14 to 497, and the number grew by 20% from 1979 to 1980. Alexander & Lewis, *Hospital Contract Management: A Descriptive Profile*, 19 HEALTH SERVICES RES. 461, 461 (1984).

34. It is plausible that multihospital systems provide economies relative to free standing facilities. The rapid growth of investor-owned hospital chains has been attributed to scale economies in production, superior management, and lower capital costs, although the capital cost advantage of hospital chains over single hospitals appears small. *See generally* Sloan, Morrisey & Valvona, *Capital Markets and the Growth of Multihospital Systems*, 7 ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 83, 84, 103 (1987); Ermann & Gabel, *supra* note 33, at 50, 54-58; *cf.* Alexander & Lewis, *The Financial Characteristics of Hospitals under For-Profit and Nonprofit Contract-Management*, 21 INQUIRY 230, 240 (1984) (increased profits of contract managed hospitals may reflect efficiency in use of plant and total organizational investment). Further, acquired hospitals are likely to obtain a substantial fraction of revenues from Medicare and Medicaid reimbursements; acquired and managed hospitals are likely located in areas where HMO's are growing rapidly; and multihospital systems are unlikely to take on the ownership or management of high labor cost facilities. Morrisey & Alexander, *Hospital Participation in Multihospital Systems*, 7 ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 59, 75 (1987). These observations are consistent with the view that hospital systems constitute a response to regulator- or insurer-created cost-cutting pressures.

Other studies fail to document economies from multihospital systems. Renn, Schramm, Watt & Derzon, *The Effects of Ownership and System Affiliation on the Economic Performance of Hospitals*, 22 INQUIRY 219 (1985) (no differences in productive efficiency can be attributed to system affiliation); Levitz & Brooke, *Independent versus System-Affiliated Hospitals: A Comparative Analysis of Financial Performance, Cost, and Productivity*, 20 HEALTH SERVICES RES. 315 (1985) (system hospital profitability results from higher markups, lower capital costs, and superior management, but not from more productive use of plant and equipment). Similarly, one study has found that contract management increases hospital profitability by raising prices rather than improving productive efficiency. Kralewski, Dowd, Pitt & Biggs, *Effects of Contract Management on Hospital Performance*, 19 HEALTH SERVICES RES. 479 (1984). Further, some hospital acquisitions appear to be a mechanism for circumventing state certificate-of-need requirements rather than a way of reducing costs. In some locations, in order to obtain the right to open a new hospital in a suburban market with favorable demographics, a hospital may purchase and close a nearby urban facility with declining occupancy. Alexander, Lewis & Morrisey, *Acquisition Strategies of Multihospital Systems*, 4 HEALTH AFFS., Fall 1985, at 49, 56.

35. *See generally* ABA ANTITRUST SECTION, MONOGRAPH NO. 12, HORIZONTAL MERGERS: LAW AND POLICY 5-26 (1986) [hereinafter HORIZONTAL MERGERS]; K. DAVIDSON, MEGAMERGERS 103-28 (1985).

36. However, Chicago School antitrust practitioners accept that entry may be difficult when the government is the source of the entry barrier.

School scholars typically offer efficiency explanations rather than anticompetitive explanations for business practices and market concentration, and recommend antitrust enforcement less frequently than was common in the 1960's.[37]

The antitrust revolution of the 1970's is particularly evident in two doctrinal areas.[38] First, in 1977 the Supreme Court reversed its hostility to vertical restraints imposed by manufacturers on distributors, such as exclusive distribution territories.[39] The Court accepted the Chicago School position that these practices typically benefit consumers by facilitating interbrand competition among manufacturers.[40] Second, in the 1970's, the courts of appeals commenced a revolution in product market definition by incorporating supply substitutability into their analysis. Remarkably, the federal appellate courts undertook this initiative with no direction from the Supreme Court.[41] These courts recognized that firms could not act

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37. *See, e.g.*, R. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978); R. POSNER, ANTITRUST LAW (1976).

38. For a discussion of other aspects of the antitrust revolution, see generally T. Calvani & M. Sibarium, Antitrust Today: Maturity or Decline (Feb. 21, 1989) (unpublished manuscript); Barnett, Halverson, Scher & Whiting, *Interview with James C. Miller, III, Chairman, Federal Trade Commission*, 53 ANTITRUST L.J. 5, 5-11 (1984). The change in perspective has led to the relaxation of doctrines of *per se* illegality predicated on pre-Chicago economic analyses. *See* Millstein & Kessler, *The Antitrust Legacy of the Reagan Administration*, 33 ANTITRUST BULL. 505, 513-14 (1988).

39. Continental T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36 (1977) (overruling United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967)).

40. *GTE Sylvania*, 433 U.S. at 56 (relying on Bork and Posner); *but see infra* note 45 (vertical practices can reduce economic efficiency).

41. The Supreme Court expressly employed supply substitutability to define a product market in United States v. Columbia Steel Co., 334 U.S. 495, 510-11 (1948). The Court also acknowledged the principle in a footnote in Brown Shoe Co. v. United States, 370 U.S. 294, 325 n.42 (1962) ("The cross elasticity of production facilities may also be an important factor in defining a product market . . . .") (dictum).

Nevertheless, antitrust product market definition in the Supreme Court has been based almost exclusively on demand substitutability. United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 404 (1956) [hereinafter *Cellophane*] (defining product market as goods with "reasonable interchangeability" in demand); *see, e.g.*, R. POSNER, *supra* note 37, at 127 (*Cellophane* formulation of market definition is deficient because it ignores production substitutes). For example, two years after *Brown Shoe*, the Supreme Court majority ignored production flexibility in defining a product market, despite the district court's finding of extensive supply substitutability. *Compare* United States v. Aluminum Co. of Am., 377 U.S. 271, 276-77 (1964) [hereinafter *Rome Cable*] (insulated copper conductor and insulated aluminum conductor placed in separate markets because of insufficient demand substitutability), *with Rome Cable*, 377 U.S. at 285 (Stewart, J., dissenting) (district court's broad market definition should be upheld based on both demand and supply substitutability). Further, in a case decided shortly after *Rome Cable*, the Court claimed to follow the demand substitutability "teaching" of the *Cellophane* decision although it expressly recognized that the services incorporated in its product market did not statisfy the reasonable interchangeablity test. United States v. Grinnell Corp., 384 U.S. 563, 571-73 (1966) (placing central station burglar alarm and fire alarm services in the same product market). While *Grinnell* can be understood as incorporating supply substitutability in product market definition, *see infra* note 159, the Court did not acknowledge this interpretation.

Given the Court's emphasis on demand substitutability, the federal circuits were understandably reluctant to accept supply substitutablity as a basis for product market definition for two decades following the *Cellophane* decision, even when confronted by the economic logic which later carried the argument. *See, e.g.*, L. G. Balfour Co. v. FTC, 442 F.2d 1, 11 (7th Cir. 1971); Reynolds Metals Co. v. FTC, 309 F.2d 223 (D.C. Cir. 1962) (Burger, J.); Crown Zellerbach Corp. v. FTC, 296 F.2d 800, 812-15 (9th Cir. 1961), *cert. denied*, 370 U.S. 937 (1962).

anticompetitively, successfully raising price above competitive levels, if other firms could readily alter production processes to make a competing product.[42] More recently, courts have extended the supply substitution principle to incorporate another form of potential competition, entry, into the market power analysis. The new cases recognize that no firm can have market power, regardless of its market share, if prospective competitors can readily enter its market.[43]

The most important emerging critique of Chicago School antitrust doctrines is an economic one, accepting economic efficiency as the goal of antitrust while disagreeing with Chicago School practitioners over the likely economic consequences of various business practices and the plausibility of anticompetitive conduct.[44] For example, economists writing on topics of antitrust relevance have identified situations in which vertical practices can

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42. The leading decisions were issued in separate circuits less than one month apart in 1975. Telex Corp. v. International Business Mach. Corp., 510 F.2d 894, 914-19 (10th Cir.) (recognizing the *Cellophane* standard as the law while justifying its result by *Grinnell*), *cert. dismissed*, 423 U.S. 802 (1975); Twin City Sportservice, Inc. v. Charles O. Finley & Co., 512 F.2d 1264, 1271-74 (9th Cir. 1975) (relying on *Columbia Steel* and the *Brown Shoe* footnote, although terming the *Cellophane* standard the "point of departure" for product market definition), *aff'd after remand*, 676 F.2d 1291 (9th Cir.), *cert. denied*, 459 U.S. 1009 (1982). After these decisions, supply substitutability analysis was rapidly incorporated into product market definition by other circuits and the Federal Trade Commission. Yoder Bros., Inc. v. California-Florida Plant Corp., 537 F.2d 1347, 1368 (5th Cir. 1976), *cert. denied*, 429 U.S. 1094 (1977); United States v. Empire Gas Corp., 537 F.2d 296, 303-04 (8th Cir. 1976), *cert. denied*, 429 U.S. 1122 (1977); Budd Co., 86 F.T.C. 518, 569-72 (1975); *but see* Kaiser Aluminum & Chemical Corp. v. FTC, 652 F.2d 1324, 1330-32 (7th Cir. 1981) (reluctance to incorporate supply substitutability into market definition). Further, the supply substitutability approach was rapidly endorsed in commentary. R. POSNER, *supra* note 37, at 127-28; Note, *The Role of Supply Substitutability in Defining the Relevant Product Market*, 65 VA. L. REV. 129 (1979); Note, *Potential Production: A Supply Side Approach for Relevant Product Market Definitions*, 48 FORDHAM L. REV. 1199 (1980); *but cf.* HORIZONTAL MERGERS, *supra* note 35, at 74-75 (collecting cases questioning "whether production flexibility alone is adequate to support a broad market definition").

43. United States v. Waste Management, Inc., 743 F.2d 976 (2d Cir. 1984); United States v. Calmar, Inc., 612 F. Supp. 1298, 1301, 1305-07 (D.N.J. 1985); Echlin Mfg. Co., 105 F.T.C. 410 (1985); *cf.* ANTITRUST DIV., DEP'T OF JUSTICE, 1984 MERGER GUIDELINES § 3.3, 49 Fed. Reg. 26,823, 26,832 (1984) (Dep't unlikely to challenge mergers in markets in which entry is easy); HORIZONTAL MERGERS, *supra* note 35, at 205 (entry not treated as a significant consideration in merger analysis until recently). Entry is often considered at a later stage of merger analysis than supply substitutability, however. *See infra* note 184.

44. An alternative strand of recent critical commentary would reemphasize the populist goals important in the 1960's. Lande, *The Rise and (Coming) Fall of Efficiency as the Ruler of Antitrust*, 33 ANTITRUST BULL. 429 (1988); Fox & Sullivan, *Antitrust-Retrospective and Prospective: Where are We Coming From? Where Are We Going?*, 62 N.Y.U. L. REV. 936 (1987); Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 HASTINGS L.J. 65 (1982) (advocating wealth transfer standard rather than economic efficiency standard as criterion for the application of antitrust rules); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 8 n.31, 11 & n.38 (collecting commentary); K. DAVIDSON, *supra* note 35, at 380 n.66 (same); *cf.* Fisher & Lande, *Efficiency Considerations in Merger Enforcement*, 71 CALIF. L. REV. 1580 (1983) (comparing efficiency and wealth transfer standards); Rowe, *Antitrust in Transition: A Policy in Search of Itself*, 54 ANTITRUST L.J. 5, 12-13 (1985) ("[T]he extreme efficiency-based antitrust rollback" is inconsistent with antitrust's role in U.S. history and culture "to balance enterprise and power by controls of competition mediated by law" and to provide to the world "a new ideology to supplant old regimes of statism and cartelization, offering an alternative to the laissez-faire capitalism and state socialism that divided the industrial world for generations.").

harm economic efficiency through their horizontal effect,[45] offered a new explanation for predatory pricing and an empirical example of its successful use,[46] called into question the plausibility of the presumptions that entry is easy and market power rare,[47] revived the theory that multimarket contact reduces the incentive of conglomerates to compete,[48] and demonstrated that

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45. This new literature on "raising rivals' costs" challenges the Chicago School conclusion that vertical restraints are typically beneficial from within the economic efficiency paradigm. Krattenmaker & Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 YALE L.J. 209, 277-82 (1986); Salop & Scheffman, *Cost-Raising Strategies*, 36 J. INDUS. ECON. 19 (1987); *cf.* Salop, *Practices that (Credibly) Facilitate Oligopoly Coordination*, in NEW DEVELOPMENTS IN THE ANALYSIS OF MARKET STRUCTURE 265 (J. Stiglitz & G. Mathewson eds. 1986) (the widespread use of certain vertical arrangements may facilitate horizontal collusion). The possibility that vertical hospital mergers might be anticompetive because they raise rivals' costs is discussed *infra* notes 136-38 and accompanying text.

A recent legislative initiative to preserve antitrust law's prohibition of resale price maintenance against the challenges of Chicago School commentators is similarly defended by its supporters on economic efficiency grounds. HOUSE COMM. ON THE JUDICIARY, REPORT ON THE FREEDOM FROM VERTICAL PRICE FIXING ACT OF 1987, H.R. REP. No. 421, 100th Cong., 1st Sess. 11-13 (1987).

46. Saloner, *Predation, Mergers, and Incomplete Information*, 18 RAND J. ECON. 165 (1987); Burns, *Predatory Pricing and the Acquisition Cost of Competitors*, 94 J. POL. ECON. 266 (1986); Milgrom & Roberts, *Predation, Reputation, and Entry Deterrence*, 27 J. ECON. THEORY 280 (1982); Kreps & Wilson, *Reputation and Imperfect Information*, 27 J. ECON. THEORY 253 (1982). The Chicago School view that predatory pricing is irrational has recently been accepted by the Supreme Court. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986) (noting with approval the "consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful").

47. *See* Bresnahan, *Empirical Studies of Industries with Market Power*, in HANDBOOK OF INDUSTRIAL ORGANIZATION (R. Schmalensee & R. Willig eds.) (forthcoming) (survey of recent empirical analyses demonstrates that a great deal of market power exists in some concentrated industries).

The entry analysis of pioneering industrial organization economist Joe S. Bain is gaining renewed currency as economists are again taking seriously the possibilities that scale economies and advertising can create entry barriers. *Compare* Salop, *Measuring Ease of Entry*, 31 ANTITRUST BULL. 551, 563-65 (1986) (scale economies may create entry barriers), *with* Echlin Mfg. Co., 105 F.T.C. 410, 488-89 (1985) (Chicago School view that scale economies are not entry barriers); *compare* Salop, *Strategic Entry Deterrence*, 69 AM. ECON. REV. 335 (Papers & Proceedings 1979) (advertising may create entry barrier), *with* Telser, *Some Aspects of the Economics of Advertising*, 41 J. BUS. 166, 169-70 (1968) (Chicago School view that advertising has procompetitive effects); *see generally* J. BAIN, BARRIERS TO NEW COMPETITION (1956).

48. The view that conglomerates were likely to forebear from competition with those rivals they faced across multiple markets, for fear that price cutting in one market would lead to retaliation in another market, was commonplace among industrial organization economists in the 1960's. *See generally* F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 340-42 (2d ed. 1980). However, the hostility of antitrust law to conglomerate mergers in that decade was based largely on other theories—reflecting concerns with the opportunity for reciprocal dealing, the elimination of potential competition, an increase in entry barriers, and the ability of large firms to predate against small rivals—that are considered implausible by Chicago School commentators and are not reflected in the current Department of Justice Merger Guidelines. *See* R. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 246-62 (1978) (Chicago School critique of theories underlying challenges to conglomerate mergers); Bauer, *Government Enforcement Policy of Section 7 of the Clayton Act: Carte Blanche for Conglomerate Mergers?*, 71 CALIF. L. REV. 348 (1983) (treatment of conglomerate merger theories in D.O.J. Guidelines); *but cf.* 5 P. AREEDA & D. TURNER, ANTITRUST LAW ¶ 1114 (1980) (conglomerate mergers may harm competition by extending the area of oligopolistic interdependence). The recent revival of interest in theories of conglomerate forebearance includes both theoretical treatments, P. Woodward, Conglomerate Mergers with Tacit Collusion (Nov. 6, 1988) (unpublished manuscript); B. BERNHEIM & M. WHINSTON, MULTIMARKET CONTACT AND COLLUSIVE BEHAVIOR, Harvard Institute for Economic Research Discussion Paper No. 1317 (1987), and empirical studies, P. Woodward, An Empirical Analysis of Multimarket Contact: Do These Connections Affect Price Behavior? (Nov. 9, 1988) (unpublished manuscript); Scott, *Purposive Diversification as a Motive for Merger*, INT'L J. INDUS. ORGANIZATION (1989) (forthcoming); Scott, *Multimarket Contact and Economic Performance*, 64 REV. ECON. & STATISTICS 368 (1982).

price wars, usually considered strong evidence of competition, may in fact reflect tacit collusion.[49] Even if this critical economic scholarship grows in importance in legal commentary and judicial opinions, it will reinforce rather than replace the now orthodox efficiency orientation of antitrust law.

The present antitrust approach to mergers reflects the new emphasis of the courts on economic efficiency.[50] The most important document expressing the new view of antitrust is the 1982 Merger Guidelines of the U.S. Department of Justice ("DOJ Guidelines") (which were revised slightly in 1984).[51] The new DOJ Guidelines differ from the prior practice in analyzing mergers under the antitrust laws in several respects. Most importantly, the DOJ Guidelines adopt an approach to market definition that takes into account both supply and demand substitutability: a market is defined as the smallest group of products within a geographic area such that sellers would be capable of raising price significantly were the group of firms to act cooperatively, as a "hypothetical monopolist."[52] Goods sold at more distant geographic locations and goods less perfectly substitutable (whether demand substitutes or supply substitutes)[53] are added to a proposed market definition until a hypothetical cartel is created which could in principle raise price a "small but significant and nontransitory" amount.[54] The Department of Justice then examines whether a merger increases the risk of collusion in such a market, through measuring the increase in seller concentration[55] and considering other factors facilitating or frustrating collusion, including entry.[56] In further agreement with the new efficiency-oriented attitude of the courts in preference to the prior populist view, the DOJ Guidelines have

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49. Green & Porter, *Noncooperative Collusion Under Imperfect Price Information*, 52 ECONOMETRICA 87 (1984); Rotemberg & Saloner, *A Supergame-Theoretic Model of Price Wars During Booms*, 76 AM. ECON. REV. 390 (1986).

50. *See generally* Leddy, *Recent Merger Cases Reflect Revolution in Antitrust Policy*, LEGAL TIMES, Nov. 3, 1986, at 17, col. 1.

51. ANTITRUST DIV., DEP'T OF JUSTICE, MERGER GUIDELINES, 47 Fed. Reg. 28,493 (1982) [hereinafter 1982 MERGER GUIDELINES]; 49 Fed. Reg. 26,823 (1984) [hereinafter 1984 MERGER GUIDELINES]. The Department of Justice issued these Guidelines to clarify its enforcement policy concerning acquisitions and mergers subject to antitrust laws.

52. *See* 1984 MERGER GUIDELINES, *supra* note 51, §§ 2.0, 2.11, 2.2, 2.31.

53. The Department of Justice incorporates supply substitutability into market definition in several ways. Most importantly, it broadens product markets when required by production flexibility. 1984 MERGER GUIDELINES, *supra* note 51, § 2.21. However, the entire current sales of firms with production flexibility are not included in computing market shares when that amount overstates the potential additional supply that would be forthcoming from those firms if current producers were to raise price above the competitive level. *Id.* § 2.4. Similarly, geographic markets are broadened to include firms not directly competing with defendant producers, but selling in nearby areas, when a small price rise by defendants would induce these potential competitors to divert sales into the area presently served by defendants (a supply substitutability effect), as well as when the price rise would induce buyers to seek goods at more distant locations (a demand substitutability effect). *See id.* §§ 2.32(2), (6) (1984). Finally, the Department of Justice expressly recognizes the potential for foreign competitors to divert production into the United States in response to an anticompetitive domestic price increase. *Id.* §§ 2.4, 3.23.

54. *Id.* §§ 2.11, 2.31 (defining product market and geographic market).

55. The DOJ Guidelines rely on the Herfindahl-Hirschman Index ("HHI") to measure market concentration. This index is computed as the sum of the squares of the market shares of the individual firms in the relevant market. *Id.* § 3.1.

56. *Id.* §§ 3.3, 3.4.

backed off from the rigid reliance on market shares characteristic of both Department of Justice enforcement policy and judicial decisions of the 1960's,[57] have given new emphasis to the role of entry in deterring the exercise of market power,[58] and have raised the concentration threshold above which horizontal mergers merit antitrust concern.[59]

Not surprisingly, many horizontal mergers that would likely have been challenged under the enforcement standards of the 1960's have been cleared by the Department of Justice and Federal Trade Commission in the 1980's.[60]

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57. *Compare* 1968 MERGER GUIDELINES § 2, *reprinted in* HORIZONTAL MERGERS, *supra* note 35, at app. A (analysis of market structure, principally the number of substantial sellers and the relative sizes of their market shares, is conclusive determinant of antitrust liability in all but "certain exceptional circumstances"), *with* 1982 MERGER GUIDELINES, *supra* note 51, §§ III(B), (C) (greater weight to ease of entry and other factors facilitating collusion); *compare* United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 363 (1963) (concentration creates presumption of anticompetitive effect), *with* United States v. General Dynamics Corp., 415 U.S. 486, 501-02 (1974) (market shares are "relevant as a prediction of future competitive strength" but may be misleading); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 28-50, 165-75.

58. The DOJ Guidelines incorporated ease of entry into the market power calculus before the courts. 1982 MERGER GUIDELINES, *supra* note 51, § III(B); 1984 MERGER GUIDELINES, *supra* note 51, § 3.3; *see supra* note 43 (leading court decisions postdate Guidelines).

59. *Compare* United States v. Von's Grocery Co., 384 U.S. 270 (1966) (holding illegal a grocery chain merger among firms with a combined market share of 7.5%), *and* 1968 MERGER GUIDELINES, *supra* note 57, §§ 5-6 (indicating intent to challenge acquisitions of firms with market shares under 5%), *with* 1982 MERGER GUIDELINES, *supra* note 51, § III.A.1 (raising concentration thresholds) (1984 MERGER GUIDELINES, *supra* note 51, § 3.11); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 195-98 (practical effect of *General Dynamics* and the 1982 DOJ Guidelines was to raise concentration thresholds required for intervention); *but see* Hospital Corp. of Am. v. FTC, 807 F.2d 1381, 1385-86 (7th Cir. 1986) (Posner, J.) (*Von's Grocery* arguably remains authoritative, according to a leading proponent of Chicago School antitrust views), *cert. denied*, 107 S. Ct. 1975 (1987). The connection between concentration and likelihood of collusion has been challenged by economists who argue that highly concentrated industries could be more profitable because they reflect the achievement of superior product design, lower costs, or other economic efficiencies. *See generally* F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 288-92 (2d ed. 1980).

60. Leddy, *Recent Merger Cases Reflect Revolution in Antitrust Policy*, Legal Times, Nov. 3, 1986, at 17, col. 1 ("Even the casual observer of the antitrust scene knows that [enforcement agencies] both are filing fewer and fewer merger cases, and that the cases they do file generally involve very highly concentrated markets with five or fewer firms."); *see* Sims & Lande, *New Forces Chip Away at Agencies' Policy of Antitrust Abandonment*, Legal Times, Apr. 20, 1987, at 14, col. 1 ("Merger enforcement is undeniably looser today than a decade ago."). Chicago School scholars first led both enforcement agencies in the early 1980's, when President Reagan named William F. Baxter to head the Antitrust Division and appointed James C. Miller as Chairman of the Federal Trade Commission. More recent agency heads have similarly been sympathetic to Chicago School positions.

Chicago School ideas have led to a liberalization of merger enforcement standards and are the primary reason for the recent permissiveness of the enforcement agencies. Yet, some decline in enforcement activity would likely have occurred had standards not been relaxed and had the number of mergers not increased. *See* K. DAVIDSON, *supra* note 35, at 143-45 (documenting merger wave beginning in late 1970's). The 1970's and 1980's saw the broadening of many economic markets from nationwide, where they were concentrated, to worldwide, where they were unconcentrated. In consequence, some transactions which would not have been permitted two decades ago are allowed today. *Compare* United States v. LTV Corp., 1984-2 Trade Cas. (CCH) ¶ 66,133 (D.D.C. 1984) (impact of foreign steel imports on domestic steel prices supports consent judgment allowing merger of second and sixth largest domestic steel producers), *with* United States v. Bethlehem Steel Corp., 168 F. Supp. 576 (S.D.N.Y. 1958) (prohibiting merger of second and sixth largest domestic steel producers because of concentration in regional and national markets). In future decades, world markets are likely to grow more concentrated. Then broadening geographic markets will no longer reduce market concentration figures to less troubling levels, and more mergers will receive close scrutiny even if current standards of antitrust review are not changed. In such cases, limitations on the ability of U.S. enforcers to obtain pre-merger notification, jurisdiction, discovery, and relief when

In addition, the enforcement agencies now exhibit substantially less concern with vertical and conglomerate mergers than did their counterparts in the 1960's,[61] consistent with Chicago School interpretations of these acquisitions as efficient rather than anticompetitive.

B. Antitrust and Health Care

1. *Interstate Commerce.* In the past two decades, the number of antitrust cases involving the health care industry has grown dramatically. This explosion followed on the heels of two Supreme Court decisions in the mid-1970's: the 1975 decision in *Goldfarb v. Virginia State Bar*[62] and the 1976 decision, *Hospital Building Co. v. Trustees of Rex Hospital.*[63] *Goldfarb* applied the Sherman Act to the "learned professions,"[64] and *Rex Hospital* applied it to hospitals operating in small market areas.[65] Taken together, these decisions confirmed that the Sherman Act section 1[66] requirement that a restraint of trade lie in or affect interstate commerce does not bar application of that law to the health care industry.[67] Furthermore, in 1980 Congress removed

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some defendants are foreign are likely to raise enforcement difficulties that can be solved only by international cooperation.

61. *See generally* Halverson, *An Overview of Legal and Economic Issues and the Relevance of the Vertical Merger Guidelines*, 52 ANTITRUST L.J. 49, 76-81 (1983).

62. 421 U.S. 773 (1975).

63. 425 U.S. 738 (1976).

64. 421 U.S. at 785-88; *accord* Arizona v. Maricopa County Medical Soc'y, 457 U.S. 332, 348-49 (1982) (price-fixing agreements among doctors "are not premised on public service or ethical norms," so merit no special antitrust treatment); *cf.* Smith v. Northern Mich. Hosps., Inc., 703 F.2d 942, 949 n.12 (6th Cir. 1983) (although the medical profession is not exempt from the antitrust laws, some professional practices might survive antitrust scrutiny under the rule of reason even though they are illegal in other contexts).

65. 425 U.S. at 743 (interstate commerce requirement satisfied if activity is in or "substantially and adversely affects interstate commerce") (quoting Gulf Oil Corp. v. Copp Paving Co., 419 U.S. 186, 195 (1974)); *accord* McLain v. Real Estate Bd., 444 U.S. 232, 242 (1980). Some circuits read *McLain* as requiring that plaintiff prove a nexus between the challenged restraint on competition and interstate commerce, although that hurdle is readily satisfied. *See, e.g.*, Crane v. Intermountain Health Care, Inc., 637 F.2d 715, 721-22, 724 (10th Cir. 1980) (en banc); Stone v. William Beaumont Hosp., 782 F.2d 609, 617-20 (6th Cir. 1986) (Holschuh, J., concurring); Hayden v. Bracy, 744 F.2d 1338, 1343 n.2 (8th Cir. 1984). Other circuits interpret *McLain* less restrictively, as holding that plaintiff need not demonstrate that the alleged violation affects interstate commerce so long as defendant's activity has an effect on interstate commerce. *See, e.g.*, Shahawy v. Harrison, 778 F.2d 636, 640 (11th Cir. 1985); Turf Paradise, Inc. v. Arizona Downs, 670 F.2d 813, 818-19 (9th Cir.), *cert. denied*, 456 U.S. 1011 (1982); *cf.* Bunker Ramo Corp. v. United Business Forms, Inc., 713 F.2d 1272, 1280-82 (7th Cir. 1983) (interstate commerce requirement is easily satisfied regardless of the interpretation of *McLain*); P. AREEDA & H. HOVENKAMP, ANTITRUST LAW ¶ 232.1a (Supp. 1987) (same).

66. 15 U.S.C. § 1 (1982).

67. Perhaps the recent application of antitrust law to the health care industry should not have been surprising. *See* American Medical Ass'n v. United States, 317 U.S. 519, 528-29 (1943) (practice of medicine regulated by the Sherman Act). It has long been established that the Sherman Act covers all practices that Congress is permitted to regulate pursuant to the commerce clause of the Constitution. United States v. South-Eastern Underwriters Ass'n, 322 U.S. 533, 557-59 (1944). Furthermore, even before *Goldfarb*, the Federal Trade Commission "was starting to organize its health care program and had already begun an investigation into the issue of physician control over prepaid health care organizations." T. CALVANI, REMARKS BEFORE THE AMERICAN BAR ASSOCIATION'S JOINT PROGRAM ON ANTITRUST ISSUES IN THE HEALTH CARE INDUSTRY (Feb. 20, 1986), *reprinted in* 1986 Trade Reg. Rep. (CCH) ¶ 50,479, at 56,276 (1986).

interstate commerce limitations on the reach of Clayton Act section 7 to permit the prospective antitrust review of mergers and acquisitions in or "affecting" interstate commerce.[68] Today, these jurisdictional requirements of the antitrust laws do not present a significant hurdle to the application of antitrust to hospital mergers.[69]

2. *Implied Repeal.* The application of antitrust to the health industry has also been aided by the 1981 Supreme Court decision[70] that Congress's health planning regulatory scheme, instituted in 1974 under the National Health Planning and Resources Development Act ("NHPRDA"),[71] did not impliedly repeal the application of the antitrust laws to the health care field.[72] Thus, a state requirement that a hospital merger receive state certificate-of-need approval pursuant to NHPRDA mandates did not immunize the acquisition from judicial review under the antitrust laws.[73]

3. *State Action.* The state action exemption remains an important limitation to the scope of antitrust review of many hospital activities, perhaps including some hospital mergers. The exemption was established by the Supreme Court in 1943, in *Parker v. Brown.*[74] In that decision, the Court held that Congress, in passing the antitrust laws, never intended to preempt state economic regulation restraining competition, so long as those restraints constitute "state action or official action directed by a state."[75] The

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68. 15 U.S.C. § 18 (1982); *see generally* ABA ANTITRUST SECTION, ANTITRUST LAW DEVELOPMENTS 148 n.4 (2d ed. 1984).

69. United States v. Hospital Affiliates Int'l, Inc., 1980-81 Trade Cas. (CCH) ¶ 63,721, at 77,853 (E.D. La. 1980); *cf.* City of Fairfax v. Fairfax Hosp. Ass'n, 562 F.2d 280, 283 (4th Cir. 1977) (monopolization case), *vacated and remanded on other grounds*, 435 U.S. 992 (1978); *but cf.* Proger, *Antitrust Developments Affecting the Health Care Sector*, 57 ANTITRUST L.J. 315, 315 n.3 (1988) (collecting recent non-merger health care antitrust decisions in which the complaint was dismissed for lack of interstate commerce).

70. National Gerimedical Hosp. & Gerontology Center v. Blue Cross, 452 U.S. 378 (1981).

71. Pub. L. No. 93-641, § 3, 88 Stat. 2225, 2227-57 (1975) (some of these provisions were repealed by Pub. L. No. 99-660, 100 Stat. 3799 (1986)). The statute established "health systems agencies" ("HSA's"), advisory boards composed of health care consumers and providers, to develop health care plans for local areas in order to control health care costs. The statute also created statewide planning boards and required that each state establish a certificate-of-need process. *See generally National Gerimedical*, 452 U.S. at 383-85.

72. *National Gerimedical*, 452 U.S. at 393.

73. State of North Carolina v. P.I.A. Asheville, Inc., 740 F.2d 274, 279-85 (4th Cir. 1984) (en banc), *cert. denied*, 471 U.S. 1003 (1985); American Medical Int'l, Inc., 104 F.T.C. 1, 185-90 (1984); *but see* American Medical Int'l, Inc., 104 F.T.C. at 188 (refusing to decide whether implied immunity would have been appropriate had local planning agency expressly advocated "cost-saving cooperation among providers" pursuant to NHPRDA) (quoting *National Gerimedical*, 452 U.S. at 393 n.18); Groner, *Hospital Mergers, Health Planning, and the Antitrust Laws: A Principled Approach to Implied Repeal*, 7 J. LEGAL MED. 471 (1986) (suggesting that NHPRDA may shield some activities from antitrust laws); O'Neill, *Antitrust and Nearby Hospital Combinations*, 4 HEALTHSPAN, May 1987, at 3, 7. Today, CON's are no longer required and have been abolished in many states. *See supra* notes 16-17, 22-23 and accompanying text.

74. 317 U.S. 341 (1943).

75. *Id.* at 351. "In a dual system of government in which, under the Constitution, the states are sovereign, save only as Congress may constitutionally subtract from their authority, an unexpressed purpose to nullify a state's control over its officers and agents is not lightly to be attributed to

exemption attempts to harmonize the national policy favoring competition embodied in the antitrust laws with constitutional principles of federalism.[76]

After *Parker,* the Court gave little attention to the state action doctrine until the mid-1970's. In 1980, after reviewing a flurry of Supreme Court state action decisions from the end of the previous decade, the Court concluded that the state action exemption applies only to restraints on competition that are (1) "clearly articulated . . . as state policy" and (2) "actively supervised" by the state.[77] In two cases decided in the 1980's, the Court added a threshold requirement to this two part test: a state regulation must be "facially inconsistent" with the antitrust laws before a court can hold that regulation to have been preempted by Congress, and thus before it can address whether the state action exemption will apply.[78] This threshold requirement appears not to restrict significantly the scope of the exemption.[79]

Congress." *Id.*; *c.f.* Community Communications Co. v. City of Boulder, 455 U.S. 40, 62 (1982) (Rehnquist, J., dissenting) (state action questions are preemption rather than exemption issues).

76. *See id.* at 352; *cf.* City of Lafayette v. Louisiana Power & Light Co., 435 U.S. 389, 421 (1978) (Burger, C.J., concurring in part) (*Parker* is "grounded on principles of federalism"); *see generally* P. AREEDA & H. HOVENKAMP, *supra* note 65, at ¶ 212.1f.

In response to recent commentary arguing that the state action exemption should be narrowly construed in order to allow wide scope to free market principles underlying the antitrust laws, one author endorses the state action principle as a bulwark against "a return to the era the Court left behind when it repudiated Lochner v. New York[, 198 U.S. 45 (1905)]." Garland, *Antitrust and State Action: Economic Efficiency and the Political Process,* 96 YALE L.J. 486, 488 (1987). Garland correctly emphasizes that a reduction in the breadth of state action immunity comes at the price of reduced deference to the independent regulatory role of the states in a federal system. However, if the judicial branch sets out to strike down state regulatory legislation in order to expand the scope of free market contracting, it is unlikely to implement this program through construction of the antitrust laws, which Congress can readily amend to protect state power. Wiley, *Revision and Apology in Antitrust Federalism,* 96 YALE L.J. 1277 (1987) (response to Garland). Rather, this program would be implemented through the construction of constitutional provisions. *See* R. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN (1985); B. SIEGAN, ECONOMIC LIBERTIES AND THE CONSTITUTION (1980); *see generally* Baker, *Has the Contract Clause Counter-Revolution Halted? Rhetoric, Rights, and Markets in Constitutional Analysis,* 12 HASTINGS CONST. L.Q. 71 (1984).

77. California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc., 445 U.S. 97, 105 (1980); *accord* Patrick v. Burget, 108 S. Ct. 1658, 1663 (1988) ("Only if an anticompetitive act of a private party meets both of these requirements is it fairly attributable to the State."); Southern Motor Carriers Rate Conference v. United States, 471 U.S. 48, 57, 61 (1985) (state compulsion not required if state actively supervises regulatory schemes); *see Parker,* 317 U.S. at 351 ("a state does not give immunity to those who violate the Sherman Act by authorizing them to violate it, or by declaring that their action is lawful").

78. Fisher v. City of Berkeley, 475 U.S. 260, 262, 264-65, 270 (1986); Rice v. Norman Williams Co., 458 U.S. 654, 659-62 (1982); *but cf.* P. AREEDA & H. HOVENKAMP, *supra* note 65, at ¶ 209.2, at 84-85 (*Rice* threshold and *Parker* tests viewed as successive steps in a preemption analysis, thus, "[i]f the state statute appears to be preempted under *Rice* because it creates serious restraints, it can nevertheless be saved from preemption by satisfying *Parker*").

79. *Fisher* and *Rice* likely stand for no more than the unremarkable proposition that Congress, in passing the antitrust laws, did not automatically preempt all state or municipal regulations with deleterious consequences for economic efficiency. *Accord Parker,* 317 U.S. at 351 (finding "no suggestion of a purpose to restrain state action in the [Sherman] Act's legislative history"); *cf.* Page, *Interest Groups, Antitrust, and State Regulation:* Parker v. Brown *In the Economic Theory of Legislation,* 1987 DUKE L.J. 618, 620-21 (state action doctrine permits "judicial deference to state economic choices whose costs and benefits fall primarily on the citizens of the state"). The Court in *Fisher* held that landlord actions undertaken pursuant to a municipal rent control ordinance could not be challenged as antitrust violations even though their effect on competition would be similar to that of other actions that would clearly violate the antitrust laws (such as a concerted agreement by landlords to lower rents in order to benefit tenants). Had the rent control ordinance reviewed in *Fisher* instead

The state action exemption may be asserted by private parties acting pursuant to state regulation.[80] These regulatory schemes may be created and supervised by state legislatures, or they may be created and supervised by state agencies and political subdivisions.[81] It is not necessary that the state supervise the regulatory schemes of municipalities or agencies for actions undertaken pursuant to those regulatory schemes to invoke the state action exemption.[82] In those cases, however, the municipality or agency must "actively supervise" the regulatory scheme for the defense to apply.[83] Moreover, the state action exemption is predicated on state regulation. State ownership of the entity engaging in the alleged restraint of trade is analytically irrelevant to the determination of the application of the exemption.[84] State ownership may in practice, however, be associated with substantial state supervision.

In antitrust litigation concerning hospital mergers, the most plausible argument for invoking the state action exemption is that a state's CON process, required in many states for hospital consolidation, allows mergers to be undertaken pursuant to a clearly articulated and actively supervised state

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required landlords to cooperate to fix prices, or ratified concerted landlord action (recalling *Midcal*), the threshold test would have been met and the Court would then have considered whether the state action exemption applied. *See Rice*, 458 U.S. at 662, 662 n.9 (state statute is preempted only if it requires firms to violate antitrust laws; if statute merely authorizes such conduct without compelling it, firm actions are subject to antitrust review). *Cf.* Bates v. State Bar of Arizona, 433 U.S. 350, 359-63 (1977) (state bar association disciplinary rule restricting lawyer advertising exempt because promulgatated by state agency pursuant to clearly articulated policy and supervised actively during enforcement proceedings). In its most recent state action decision, the Court ignored the threshold requirement. Patrick v. Burget, 108 S. Ct. 1658 (1988).

80. *Southern Motor Carriers*, 471 U.S. at 61.

81. *Fisher*, 475 U.S. at 264-65; Town of Hallie v. City of Eau Claire, 471 U.S. 34, 40 (1985); Community Communications Co. v. City of Boulder, 455 U.S. 40, 52 (1982); City of Lafayette v. Louisiana Power & Light Co., 435 U.S. 389, 415 (1978).

82. *Hallie*, 471 U.S. at 46-47 (municipality); Humana of Illinois, Inc. v. Board of Trustees of Southern Illinois University, 1986-1 Trade Cas. (CCH) ¶ 67,127, at 62,804-05 (C.D. Ill. 1986)(agency); *cf.* St. George's School of Med. v. Department of Registration and Educ., 640 F. Supp. 208, 211 (N.D. Ill. 1986) (state agency conduct exempt when agency is supervised by legislature, through ability to amend statutes, and by state courts, through administrative review.)

83. Patrick v. Burget, 108 S. Ct. 1658 (1988) (Oregon did not actively supervise hospital peer review committee because no state agency was empowered to review private peer review decisions and overturn those not in accord with state policy); *Humana of Illinois*, 1986-1 Trade Cas. (CCH) at 62,806 (hospital may invoke state action immunity because it was actively supervised by state university); *see Hallie*, 471 U.S. at 46 n.10 ("where state or municipal regulation by a private party is involved, however, active state supervision must be shown, even where a clearly articulated state policy exists"); *see generally* P. AREEDA & H. HOVENKAMP, *supra* note 65, at ¶¶ 212.9 a, b. Under some circumstances, judicial review will constitute adequate supervision. Bolt v. Halifax Hosp. Medical Center, 851 F.2d 1273 (11th Cir.), *vacated and petition for reh'g en banc granted*, 861 F.2d 1233 (11th Cir. 1988).

84. *Cf.* Coastal Neuro-Psychiatric Assocs. v. Onslow Memorial Hosp., 795 F.2d 340 (4th Cir. 1986) (state ownership of hospital is not a factor in allowing the state action exemption for a county hospital's decision to limit doctor access to equipment); Jiricko v. Coffeyville Memorial Hosp. Medical Center, 628 F. Supp. 329 (D. Kan. 1985) (state action exemption does not bar antitrust claims against state owned hospital because Kansas hospital operations do not constitute a public function); *but cf.* Limeco, Inc. v. Division of Lime, 778 F.2d 1086, 1087 (5th Cir. 1985) (state action exemption applies to state agency acting as competitor in a commercial activity).

policy.[85] In an en banc opinion addressing this question, the Fourth Circuit held that a North Carolina CON program instituted pursuant to the NHPRDA, requiring state regulatory approval of hospital acquisitions, failed to meet the ongoing state supervision predicate for the state action exemption.[86] The Fourth Circuit emphasized that the state CON procedure provided for no regulation of post-acquisition prices and no penalties for non-compliance with state regulation.[87] Thus, a state could create a regulatory scheme to displace competition when necessary to effectuate other state policies,[88] which would exempt from antitrust scrutiny acquisitions made pursuant to regulatory mandates, although North Carolina did not do so.[89]

4. *Intra-enterprise Cooperation.* In *Copperweld Corp. v. Independence Tube Corp.*,[90] the Supreme Court held that a corporate parent and its wholly owned subsidiary are a single enterprise under the Sherman Act section 1,[91] incapable of combining in restraint of trade. In reaching this conclusion, the Court emphasized that both a parent firm and its subsidiary have the identical goal of maximizing profits for the enterprise as a whole, so never exhibit the independent and competitive decisionmaking which the antitrust laws protect.[92] Although the narrow holding of *Copperweld* leaves open the question of whether two wholly owned affiliates with a common parent are incapable of conspiring together, the Court's rationale readily encompasses this case.[93] Thus, the theory of *Copperweld* appears to exempt corporate reorganizations involving wholly owned affiliates from review under both the Sherman Act section 1 and the Clayton Act section 7.[94]

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85. State action limited to state financing (through use of industrial development borrowing authority) and state ownership of the hospital facility, without state management, is insufficient to satisfy the requirements for the state action exemption. *See* City of Fairfax v. Fairfax Hosp. Ass'n, 562 F.2d 280, 284-85 (4th Cir. 1977) (monopolization case), *vacated*, 435 U.S. 992 (1978).

86. North Carolina v. P.I.A. Asheville, Inc., 740 F.2d 274 (4th Cir. 1984) (en banc), *cert denied*, 471 U.S. 1003 (1985); *cf.* General Hosp. of Humana, Inc. v. Baptist Medical System, 1986-1 Trade Cas. (CCH) ¶ 66,996, at 62,116-17 (E.D. Ark. 1986) (Arkansas CON procedure satisfies active supervision requirement so alleged anticompetitive conduct of defendant hospital in causing the state not to approve plaintiff hospital expansion is sheltered by state action exemption).

87. *P.I.A. Asheville*, 740 F.2d at 278.

88. For example, a state might wish to allow a hospital merger even though the transaction raises substantial antitrust questions, if the new entity agrees to keep open a hospital in a poorly served region that otherwise would close or agrees to serve patients unable to pay.

89. Had North Carolina directly regulated hospital prices and services as well as major capital investments, the argument for ongoing state supervision of the regulatory scheme would have been much stronger, and thus the state action exemption may well have insulated the acquisition from antitrust review. *See* California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc., 445 U.S. 97, 105-06 (1980) (state could require resale price maintenance in violation of federal antitrust laws if state regulated prices).

90. 467 U.S. 752 (1984).

91. 15 U.S.C. § 1 (1982).

92. *See Copperweld*, 467 U.S. at 768-69, 771.

93. Hood v. Tenneco Texas Life Ins. Co., 739 F.2d 1012, 1015 (5th Cir. 1984); HRM, Inc. v. Tele-Communications, Inc., 653 F. Supp. 645, 647 (D. Colo. 1987); Gucci v. Gucci Shops, Inc., 651 F. Supp. 194, 197-98 (S.D.N.Y. 1986); *but see In re* Ray Dobson's Lincoln-Mercury, Inc., 604 F. Supp. 203, 205 (W.D. Va. 1984).

94. *Cf. Copperweld*, 467 U.S. at 777. ("A corporation's initial acquisition of control will always be subject to scrutiny under § 1 of the Sherman Act and § 7 of the Clayton Act . . . . Thereafter, the

After *Copperweld,* it could be argued that the consolidation of two hospitals owned and managed by differing affiliates of the same religious organization, such as a merger between hospitals run by different religious orders within the Catholic Church, would be exempt from antitrust review as the actions of a single enterprise. *Copperweld* does not compel this result, however. Affiliated nonprofit organizations, unlike the for-profit enterprise considered in *Cooperweld,* may have competing or multiple interests which can lead them to act in ways inconsistent with obtaining the maximum pecuniary return to their umbrella group as a whole.[95] Thus, a hospital run by the Sisters of Mercy may compete with a hospital run by the local Catholic diocese, and a merger between the two hospitals could have anticompetitive consequences, even though the bodies governing the operations of each hospital owe ultimate allegiance to the same church.

A sensible policy for vindicating hospital competition in merger analysis, consistent with the broad thrust of *Copperweld,* would treat affiliated nonprofit hospitals as separate entities for the purpose of the antitrust review of their merger if they are controlled independently, have independent interests, and make independent competitive decisions on the facts of the case.[96] Such a policy should be applied consistently: If affiliated nonprofit hospitals would be considered separate entities if they merged, they should not be aggregated in computing market shares in connection with the analysis of an unrelated acquisition in their market.[97]

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enterprise is fully subject to § 2 of the Sherman Act and § 5 of the Federal Trade Commission Act . . . to control dangerous anticompetitive conduct.").

95. Note, *Antitrust and Nonprofit Entities,* 94 HARV. L. REV. 802, 811-12 (1981); *cf.* Marjorie Webster Junior College v. Middle States Ass'n of Colleges & Secondary Schools, 432 F.2d 650, 654 (D.C. Cir.) (nonprofit firm may have non-commercial purposes), *cert. denied,* 400 U.S. 965 (1970); Sonitrol of Fresno, Inc. v. AT&T Co., 1986-1 Trade Cas. (CCH) ¶ 67,080, at 62,567-68 (D.D.C. 1986) (partially owned subsidiaries of a for-profit firm are capable of conspiring with their parent or each other, despite parent *de facto* control, because common purpose is absent).

96. In deciding whether affiliated church hospitals are a single entity under Sherman Act § 1, for example, courts should look to factors such as the presence of overlapping executives or directors, the degree of supervision of rates, hiring, capital expenditures, and service offerings by common church superiors, and the historical independence of the relevant church bodies governing hospital activities. *But see* Proctor v. General Conference of Seventh-Day Adventists, 651 F. Supp. 1505, 1524-25 (N.D. Ill. 1986) (church units held part of single, unified body with unity of purpose; rejecting evidence on how church operates in practice or theory); Zimmerman v. Board of Publications of the Christian Reformed Church, 598 F. Supp. 1002, 1010 (D. Colo. 1984) (church and its publications board act as single entity, incapable of conspiring); *cf.* Photovest Corp. v. Fotomat Corp., 606 F.2d 704, 726-27 (7th Cir. 1979) (similar factors proposed for test of intra-enterprise conspiracy among for-profit firm affiliates), *cert. denied,* 445 U.S. 917 (1980), *disapproved in Copperweld,* 467 U.S. at 772 n.18.

97. *See infra* notes 267-74 and accompanying text (market share measures). Furthermore, if affiliated nonprofit hospitals could be separate entities capable of violating the antitrust laws through merger, then their merger should be subject to pre-merger notification to allow the enforcement agencies the opportunity to investigate the issue. The FTC currently interprets the Hart-Scott-Rodino Act, Pub. L. No. 94-435, § 201, 90 Stat. 1381, 1390-94 (1976) (codified at 15 U.S.C. § 18a (1982)), to require pre-merger notification of a transaction between affiliated nonprofit hospitals not controlled by the same entity, as with a merger of hospitals run by distantly related institutions within the same church. *See* 16 C.F.R. §§ 801.1(a)(1), (a)(3), (b) (FTC definitions of person, ultimate parent entity, and control).

5. *Nonprofit Institutions.* Half of all U.S. hospitals are organized as private nonprofit institutions,[98] and an even larger fraction of hospital beds are controlled by private nonprofits.[99] A nonprofit entity is not subject to Federal Trade Commission jurisdiction under the FTC Act unless the entity is organized to carry on business for the profit of its members.[100] This proscription prevents the Commission from bringing an enforcement action against a merger between nonprofit hospitals under FTC Act section 5.[101] However, the FTC may apparently bring enforcement actions against nonprofits under Clayton Act section 7, as the Clayton Act provides an independent basis for FTC actions.[102]

The prohibitions of Clayton Act section 7 apply to many nonprofits, although that statute may not reach some transactions challengable under Sherman Act section 1. Clayton Act section 7 permits the government and private plaintiffs to challenge stock acquisitions by nonprofit hospitals. Section 7 also arguably authorizes enforcement actions against asset acquisitions among nonprofit firms,[103] although the limited authority on this

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98. In 1984, 51% of U.S. hospitals were under nonprofit control, 15% were under proprietary control, and 34% were under governmental control. *See* 1987 STATISTICAL ABSTRACT, *supra* note 2, at 93; *cf.* Frech, *Comments on Antitrust Issues*, 7 ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 263, 265 (1987) (historical reasons for domination of nonprofit hospitals no longer apply; nonprofit form now anachronistic).

99. In 1975, 69.6% of all hospital beds were controlled by private nonprofit hospitals, 22.7% by government hospitals, and only 7.7% by for-profit hospitals. White, *The American Hospital Industry Since 1900: A Short History*, 3 ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 143, 149 (1982).

100. 15 U.S.C. § 44 (1982). Thus, the FTC may exercise jurisdiction over the "business aspects" of the nonprofit American Medical Association's activities on behalf of member physicians "even if [those aspects] are considered secondary to the charitable and social aspects of their work." American Medical Ass'n v. FTC, 638 F.2d 443, 448 (2d Cir. 1980), *aff'd per curiam by an equally divided Court*, 455 U.S. 676 (1982).

101. 15 U.S.C. § 45 (1982). *But see* Miles, *Hospital Mergers and the Antitrust Laws: An Overview*, 29 ANTITRUST BULL. 253, 261-62 (1984) (evaluating argument that hospitals are subject to FTC jursidiction because they are in reality for-profit physician cartels). Furthermore, if either the acquiring or acquired firm is a for-profit entity, the FTC apparently could seek to halt the merger under FTC Act § 5 prior to its consumation by suing to enjoin that one party.

102. Clayton Act § 11, 15 U.S.C. § 21 (1982), authorizes the FTC to enforce Clayton Act § 7, 15 U.S.C. § 18 (1982), directly. *In re* Adventist Health System/West, File No. 881-0122 (F.T.C. Mar. 15, 1989) (order denying petition to quash subpoena), *request for full Commission review denied*, F.T.C. Apr. 10, 1989; *cf.* United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 348 (1963) (Clayton Act "explicitly enlarged the FTC's jurisdiction").

103. Clayton Act § 7, 15 U.S.C. § 18 (1982), proscribes all anticompetitive stock acquisitions and anticompetitive asset acquisitions by persons subject to FTC jurisdiction. The Supreme Court has held that the limitation on covered asset acquisitions does not prevent a suit under Clayton Act § 7 to bar asset acquisitions among banks, an industry over which the FTC has no jurisdiction under FTC Act § 5, 15 U.S.C. § 45(a)(2) (1982), unless the asset acquisition falls short of merger. United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 344 (1963). The Court emphasized that mergers resemble stock acquisitions in purpose and effect more closely than they resemble a "pure purchase of assets," even when they take the contractual form of an asset acquisition. *Id.* at 345-46. On similar reasoning, mergers among nonprofits that take the form of an asset acquisition are most likely included within the scope of Clayton Act § 7 even though the FTC Act does not award the Commission jurisdiction over nonprofits, and even if the nonprofit is created without the "stock" form of ownership. *See generally* Winslow, *Analyzing a Hospital Merger*, 2 ANTITRUST HEALTH CARE CHRONICLE 4, 8-9 (1988).

issue is in conflict.[104] To the extent that nonprofit hospital acquisitions are exempt from review under that statute the FTC will be unable to challenge them. Regardless of the reach of Clayton Act section 7, mergers among nonprofit firms are subject to antitrust review under the Sherman Act, as nonprofits are not exempt from the antitrust laws merely because of their form of ownership or corporate purpose.[105]

The standard of review for acquisitions challenged under Clayton Act section 7 is arguably more difficult to satisfy than the standard applied to mergers under Sherman Act section 1, because section 7 is intended to halt restraints of trade in their incipiency while section 1 applies only to those agreements actually restraining trade.[106] Under the current application of these statutes to acquisitions, however, the practical distinction between them is small.[107] In consequence, the nonprofit status of merging hospitals does not significantly limit the antitrust review of their actions, although uncertainty regarding FTC jurisdiction or the reach of section 7 may cause governmental enforcement against non-profits to take the form of a Justice Department suit brought under Sherman Act section 1.[108]

6. *Other Exemptions.* Two other avenues for obtaining antitrust exemptions seem unlikely to apply to hospital mergers, although they may immunize some hospital activities from antitrust review. These are exemptions for the "business of insurance,"[109] and for the cooperative solicitation of

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104. *Compare* United States v. Rockford Memorial Corp., 1989-1 Trade Cas. (CCH) ¶ 68.462 (section 7 reaches non-stock mergers accomplished by persons not under the jurisdiction of the FTC), *appeal filed, with* United States v. Carilion Health System, 707 F. Supp. 840, 841 & n.1 (W.D. Va. 1989) (referring to Sept. 30, 1988, order granting in part defendants' motion to dismiss) (United States may not seek to enjoin merger of non-profit hospitals under Clayton Act § 7), *appeal filed,* No. 89-2625 (4th Cir. 1989); *cf.* Hospital Corp. of Am. v. FTC, 807 F.2d 1381, 1390 (7th Cir. 1986) ("There is a possible gap in the FTC's jurisdiction over acquisitions involving nonprofit corporations."), *cert. denied,* 481 U.S. 1038 (1987).

105. American Soc'y of Mechanical Eng'rs, Inc. v. Hydrolevel Corp., 456 U.S. 556, 576 (1982); *cf.* Note, *Antitrust and Nonprofit Entities,* 94 HARV. L. REV. 802 (1981) (advocating application of antitrust laws to nonprofits identically with their application to for-profit firms, regardless of the nonprofit's goals, except to the extent the nonprofit corrects a market failure); *but cf.* Arthur, *Farewell to the Sea of Doubt: Jettisoning the Constitutional Sherman Act,* 74 CALIF. L. REV. 266, 278, 348-49 (1986) (doubting whether Congress intended to address anticompetitive activities by nonprofits in passing the Sherman Act).

106. Brown Shoe Co. v. United States, 370 U.S. 294, 318, 318 n. 33 (1962); *see* United States v. Penn-Olin Chem. Co., 378 U.S. 158, 170-71 (1964).

107. 2 P. AREEDA & D. TURNER, ANTITRUST LAW ¶ 304 (1978).

108. *Carilion,* 707 F. Supp. 840, 841, 846-47 (W.D. Va. 1989) (United States may seek to enjoin merger of nonprofit hospitals under Sherman Act § 1), *appeal filed,* No. 89-2625 (4th Cir. 1989); *see* United States v. First Nat'l Bank & Trust Co., 376 U.S. 665, 671-72 (1964) (merger of for-profit firms violates § 1). As the FTC enforces Sherman Act § 1 only through its incorporation into FTC Act § 5, this approach is not open to it. 2 P. AREEDA & D. TURNER, *supra* note 107, at ¶¶ 303, 305c, 307.

Furthermore, mergers involving nonprofit hospitals meeting the size-of-parties or size-of-transactions tests must be reported under the pre-merger notification provisions of the Hart-Scott-Rodino Act, unless they are transfers to or from a federal, state, or local governmental agency. 15 U.S.C. § 18a (1982); 16 C.F.R. § 801.2(d) (1988). However, certain joint ventures among nonprofits need not be reported. 16 C.F.R. § 802.40 (1988).

109. 15 U.S.C. §§ 1012(b), 1013(b) (1982) (McCarran-Ferguson Act). To be found exempt, the activity must also be regulated by state law, and not constitute coercion or a boycott. This exemption has been construed narrowly in the health care field. Group Life & Health Ins. Co. v. Royal Drug Co.,

governmental action.[110] Also, defendant hospitals have unsuccessfully taken the remarkable position that the absence of price competition in the hospital industry should insulate a hospital acquisition from antitrust scrutiny.[111]

IV

THE ANTITRUST ANALYSIS OF HOSPITAL MERGERS

The mainstream approach to merger review in the 1980's, as expressed in the DOJ Guidelines, attempts to determine whether a reduction in the number of firms in a market substantially increases the likelihood of collusion or other anticompetitive consequences.[112] The standard approach proceeds in three steps: (1) defining the relevant market(s) in which anticompetitive consequences from a merger could arise; (2) identifying the firms within each market and examining their market shares to infer the likelihood of anticompetitive effects from an acquisition; and (3) adjusting that inference by considering other factors affecting the ability of the firms to collude, including ease of entry.[113] As will be seen, the current hospital regulatory scheme has important consequences for the antitrust analysis of hospital mergers, both directly and indirectly, through its influence on industry structure.

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440 U.S. 205 (1979) (reimbursement agreement between Blue Shield and pharmacies providing drugs to insured consumers falls outside the business of insurance); Union Labor Life Ins. Co. v. Pireno, 458 U.S. 119 (1982) (holding that insurer's use of peer review process to determine reasonableness of health care provider reimbursements is subject to antitrust review); *cf.* Klamath-Lake Pharmaceutical Ass'n v. Klamath Medical Serv. Bureau, 701 F.2d 1276 (9th Cir.), *cert. denied,* 464 U.S. 822 (1983) (health insurer's operation of pharmacy held "business of insurance").

110. The *Noerr-Pennington* doctrine awards immunity to cooperative solicitation of government action, as an exercise of first amendment freedoms. Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 127 (1961); United Mine Workers v. Pennington, 381 U.S. 657 (1965); *accord* Mercy-Peninsula Ambulance, Inc. v. County of San Mateo, 592 F. Supp. 956, 967 (N.D. Cal. 1984) (alleged conspiracy to create paramedic monopoly through influencing county government protected from antitrust review), *aff'd on other grounds,* 791 F.2d 755 (9th Cir. 1986). This exemption presents a difficulty for antitrust enforcers attempting to challenge cases involving non-price predation that employs the political process. *See, e.g.,* General Hosps. of Humana, Inc. v. Baptist Medical System, 1986-1 Trade Cas. (CCH) ¶ 66,996, at 62,117-18 (E.D. Ark. 1986); *see generally* R. BORK, *supra* note 37, at 144-60; Calvani, *Non-Price Predation: A New Antitrust Horizon,* 54 ANTITRUST L.J. 409 (1985). For example, this exemption apparently allows hospitals to solicit cooperatively rate increases under state or federally run prospective reimbursement schemes, even though this limited cooperation might facilitate collusion over the rates charged for the same procedures to classes of patients for which hospital rates are unregulated.

111. American Medical Int'l, 104 F.T.C. 1, 179-80 (1984) (even if hospitals did not compete, although in fact they do, antitrust law would apply absent congressionally mandated exemption).

112. Merger review is prospective under the Clayton Act, and thus is concerned with likely future conduct rather than past conduct. 15 U.S.C § 18 (1982) (proscribing acquisitions when their effect "may be substantially to lessen competition, or to tend to create a monopoly"). The historical development of the antitrust proscriptions governing horizontal mergers is described in HORIZONTAL MERGERS, *supra* note 35, at 28-50. The mainstream approach of the DOJ Guidelines may be understood as an economic efficiency-oriented interpretation of the leading Supreme Court decisions on merger analysis. United States v. General Dynamics Corp., 415 U.S. 486 (1974); United States v. Philadelphia Nat'l Bank, 374 U.S. 321 (1963).

113. *See* 1984 MERGER GUIDELINES, *supra* note 51, §§ 2, 3.

A. The Possible Harm to Competition

A reduction in the number of hospitals in a market may allow the remaining hospitals to cooperate in a price increase for all or most services.[114] Collusion is the primary harm to competition that could result from horizontal[115] hospital mergers, and thus the primary concern of their antitrust review. Cooperation need not take the form of an explicit contract; a tacit agreement to raise prices among firms aware of each other's marketplace behavior equally generates antitrust concern.[116]

Joint ventures among horizontal competitors raise anticompetitive concerns similar to those of horizontal acquisitions and are subject to a similar antitrust review.[117] Hospital management contracts[118] in effect create joint ventures among the hospitals with affiliated managements. Thus, an agreement by one hospital to be managed by the same firm that owns or manages a competitor will be subject to antitrust review because it may facilitate hospital industry collusion much as could a merger between the hospitals.[119]

The DOJ Guidelines treat the number of firms in the industry as an important indicator of the likelihood of collusion, because it becomes more difficult to coordinate and police cartels as their membership increases.[120] In

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114. *Cf. id.* § 1 ("Where only a few firms account for most of the sales of a product, those firms can in some circumstances either explicitly or implicitly coordinate their actions in order to approximate the performance of a monopolist.")

115. Horizontally related firms sell goods or services in direct competition. Firms are vertically related to their suppliers and customers. Mergers involving unrelated firms are termed conglomerate mergers. Although many if not most mergers involving hospitals are not horizontal, this article emphasizes the analysis of horizontal hospital mergers because they are the primary concern of antitrust enforcers today. *Cf.* Rule, *Antitrust Enforcement and Hospital Mergers: Safeguarding Emerging Price Competition*, 21 J. HEALTH AND HOSP. L. 125, 125 (1988) (Antitrust Division does not investigate the acquisition by a multihospital chain of a hospital in a geographic market in which the system currently does not do business); *but see infra* notes 136-38 and accompanying text.

116. *See, e.g.*, United States v. General Motors Co., 384 U.S. 127, 142-43 (1966); Esco Corp. v. United States, 340 F.2d 1000, 1007-08 (9th Cir. 1965); *cf.* R. POSNER, *supra* note 37, at 39-77 (antitrust law should reach express and tacit collusion, but not mere oligopolistic interdependence).

117. United States v. Penn-Olin Chem. Co., 378 U.S. 158 (1964); *see* General Motors Corp., 103 F.T.C. 374 (1984) (approving GM-Toyota joint venture); *see generally* Bresnahan & Salop, *Quantifying the Competitive Effects of Production Joint Ventures*, 4 INT'L J. INDUS. ORG. 155 (1986). Research and development joint ventures are analyzed under a lenient statutory standard. 15 U.S.C.A. §§ 4301-05 (West Supp. 1988) (National Cooperative Research Act of 1984).

118. *See supra* notes 32-33 and accompanying text (multihospital systems); *infra* notes 273-74 and accompanying text (concentration measures).

119. Firms entering into hospital management contracts are not subject to pre-merger notification, however, unless the agreements also involve the acquisition of stock or assets. 15 U.S.C. § 18a (1982) (Hart-Scott-Rodino Amendments to the Clayton Act).

As with mergers, hospital management contracts may create production efficiencies and thereby lower consumer prices rather than generate anticompetitive price increases. For example, the managed hospital may take advantage of superior management talent, or scale economies in purchasing, hiring, and other functions. The antitrust significance of efficiencies from mergers or joint ventures is discussed *infra* notes 337-46 and accompanying text.

120. 1984 MERGER GUIDELINES, *supra* note 51, § 3.1; *see generally* Elzinga, *New Developments on the Cartel Front*, 29 ANTITRUST BULL. 3 (1984); Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964). The Department of Justice's choice of concentration index, the HHI, can be interpreted as measuring the number of equal sized firm equivalents to the current market structure. (The number of equal sized firm equivalents is determined by dividing 10,000 by the HHI. Thus, an HHI of 2000

general, the greater the number of colluding firms, the more difficult it is for them to agree how to allocate among themselves the output reduction necessary to engineer a desired price rise.[121] Sellers find coordination particularly difficult because an express agreement to fix prices and reduce output is unenforceable, as it violates Sherman Act section 1.[122]

Furthermore, the greater the number of firms involved, the more difficult it is for firms to enforce a cartel. Every member of a cartel has an incentive to cheat on the agreement: A firm can profit by secretly undercutting the cartel price by a small amount, preserving a price well above marginal cost while dramatically increasing output. This incentive to cheat disappears, however, when rivals quickly detect a cheater's output expansion and are able to punish it by expanding output speedily to reduce the market price. If this response can be anticipated, a potential cheater will recognize that it will be unable to sell many additional units at the high cartel price. Under such circumstances, cartel members will find cheating less profitable than cooperating.[123] In general, the fewer the firms, the easier monitoring and policing cheating from a collusive agreement becomes, and thus the greater the danger that attempts to collude will be successful.[124]

The regulatory framework presently governing hospitals may affect the form through which the private benefits from collusion become manifest. To the extent that prospective payment regulation caps the rates hospitals may charge,[125] colluding hospitals will be unable to obtain higher prices directly through cooperation.[126] Hospitals subject to binding maximum price regulation may nevertheless raise price indirectly, through concerted action to reduce quality of care.[127] For example, hospitals would profit from concerted action to reduce the frequency of tests given patients with various diagnoses, or concerted action to reduce amenities for doctors or patients.[128] Similarly,

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could have been generated by five equally sized firms, and an HHI of 1000 could have been generated by ten equally sized producers.) In this way, the Guidelines are concerned with both the relative size of competitors and their number.

121. When sellers as a group reduce output, the market price rises because consumers will bid up the purchase price along the downward sloping market demand curve.

122. 15 U.S.C. § 1 (1982).

123. *See generally* Salop, *supra* note 45.

124. For a discussion of other factors that facilitate or hinder collusion, *see infra* notes 305-35 and accompanying text.

125. In most states prospective payment caps presently apply only to patients covered by Medicare. It is also possible that hospitals have set rates below these maximums.

126. However, there are many ways hospitals can collude on price, or, similarly, collude to reduce advertising and promotional expenses. *See generally* Hospital Corp. of Am., 106 F.T.C. 361, 496-99 (1985).

127. Such a scheme in effect raises prices when they are expressed in units of constant quality. Thus, it has the same economic effect as collusion over price. *See id.* at 497 (examples of how colluding hospitals might reduce quality competition).

128. If hospital quality would be inefficiently high in the absence of cooperation because of the market failures discussed previously, a hospital cartel that lowers quality might improve economic efficiency. However, it would be difficult to tell whether this would occur in any specific case. Further, Congress has arguably dismissed this possibility by authorizing states to set up CON procedures and peer-review mechanisms to monitor expenses, without exempting hospital mergers from the usual antitrust review. Had Congress believed that hospital competition would reduce

hospitals may coordinate to resist cost containment pressures created by insurers[129] or PPO's,[130] or to manipulate certificate-of-need processes to reduce entry.[131]

Collusion among the horizontal competitors that sell in a relevant market is in practice the primary concern of antitrust enforcers and courts in analyzing prospective mergers. However, mergers can also lead to anticompetitive consequences through other mechanisms. These mechanisms, noted below, are not discussed in detail because they do not yet appear in the hospital merger case law.

First, a reduction in the number of firms in a market through merger can cause the price charged by non-cooperating oligopolists to increase even if the firms do not collude, merely because the competing firms are few enough to recognize their interdependence. The resulting price increases are likely to be small if sellers deal in homogeneous products; tacit collusion rather than a change in the non-cooperative oligopoly equilibrium is properly the central focus of merger enforcers when goods are not differentiated.[132]

If instead producers offer significantly differentiated products or services, as may be true with hospitals,[133] cooperation between as few as two producers

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social welfare, as with natural monopolies, it could have mandated traditional rate of return regulation. *See generally* S. BREYER, REGULATION AND ITS REFORM (1982).

If regulatory policy concerning hospitals were to move to utility style rate-of-return regulation, hospitals could be required to separate regulated and unregulated activities in separate subsidiaries and avoid mergers that would evade rate regulation. *See* 1984 MERGER GUIDELINES, *supra* note 51, § 4.23; United States v. American Tel. & Tel. Co., 524 F. Supp. 1336 (D.D.C. 1981) (denying defendants' motion to dismiss), 552 F. Supp. 131 (D.D.C. 1982) (modified final judgment, approving proposed decree ordering a regulated utility company, *inter alia*, to divest local operating companies and requiring equal access to certain facilities), *aff'd mem. sub nom.* Maryland v. United States, 460 U.S. 1001 (1983). The concern for evasion of rate regulation is absent when the regulatory scheme limits entry without regulating prices.

129. *See generally Hospital Corp. of Am.*, 106 F.T.C. at 496. Concerted boycotts of insurers could lead to higher prices directly, by removing a competitive force pressuring for price discounts, or indirectly through reduced quality of service.

130. PPO's may obtain low cost hospital services for those patients who obtain health care through them by seeking competitive offers of discounts from hospitals. Through coordinated pricing, hospitals may resist this competitive pressure.

131. *Hospital Corp. of Am.*, 104 F.T.C. at 498. Rival hospitals earning economic profits have an incentive to agree to protest a certificate-of-need application made by a potential entrant. To the extent incumbent hospital views are influential to the board awarding certificates of need, or to the extent a contested certificate of need is expensive for an applicant to pursue, then entry will be deterred or delayed, and incumbent hospitals will protect their economic profits from new competition. While the hospitals acting collectively to deter entry may be earning the profits they are protecting from a collusive agreement to raise price or lower quality of care, these profits are not necessarily predicated on cooperation outside of the agreement to protest the certificate of need. For example, if demand grows in a geographic market, incumbent hospitals recognizing their interdependence but not cooperating may choose prices under which each earns economic profits. *But see infra* note 132 and accompanying text (gains from noncooperative interaction may be small). Economic profits will remain so long as the hospitals deter both new entry and incumbent hospital expansion, both of which could require a certificate of need.

132. *See* Ordover, Sykes & Willig, *Herfindahl Concentration, Rivalry, and Mergers*, 95 HARV. L. REV. 1857 (1982); HORIZONTAL MERGERS, *supra* note 35, at 179-80; R. POSNER, *supra* note 37, at 39-77 (antitrust law should reach express and tacit collusion, but not mere oligopolistic interdependence).

133. Quality differences among hospitals in one metropolitan area are extremely large. *Hospitals*, 6 WASHINGTON CONSUMERS' CHECKBOOK 13 (1987).

of similar products can lead to large economic profits even if the other firms in the relevant market do not participate in the cooperative arrangement. This will occur if, for a substantial fraction of consumers, the two firms' products are close substitutes, while no third firm offers another product that buyers would readily substitute for these goods.[134] Although this possibility is relevant to antitrust merger analysis,[135] it has not been raised in the handful of extant hospital merger opinions.

Mergers or joint ventures between hospitals and non-hospital entities can have anticompetitive effects through another non-collusive mechanism: A merger might raise rivals' costs, and thereby enable the merger partners to raise price.[136] For example, a merger between a hospital and an equipment supplier could raise costs for rival hospitals if it forecloses their access to low cost inputs. Alternatively, the merger could raise costs for rival suppliers if it forecloses their ability to sell to the hospital. In either case, the merger would have anticompetitive consequences if the lessening of competition from disfavored rivals enables the merging firms to raise price, either for hospital services or for hospital supplies.[137] As with horizontal mergers, these

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134. Suppose, for example, that three neighboring hospitals offer coronary bypass surgery, but one of the three is substantially disfavored by consumers relative to the others because it has a higher mortality rate for the operation or lacks a new diagnostic tool (product differentiation), or because it is in an inconvenient location relative to the others (geographic differentiation). In such a case, a merger between the first two hospitals could lead to higher rates for this operation. Under current enforcement agency and judicial practice, it is unlikely that the product market would exclude the third, disfavored firm. An antitrust analysis would nevertheless take this effect into account by treating a reduction in direct competition as a potential competitive concern in a broad market. *See infra* note 135.

135. *See* 1984 MERGER GUIDELINES, *supra* note 51, § 3.413; Complaint, Federal Trade Commission v. Coca-Cola Co., No. 86-1764 ¶ 14(a) (D.D.C. filed June 24, 1986) (proposed merger alleged likely to lessen competition by eliminating direct competition between Coca-Cola and Dr. Pepper); Baker & Bresnahan, *The Gains from Merger or Collusion in Product-Differentiated Industries*, 33 J. INDUS. ECON. 427 (1985).

A court concerned about this competitive problem could address it by defining significantly more narrow product markets in differentiated product industries than are currently employed. However, it is unlikely that an antitrust enforcer or court in the present environment would group, for example, Coca-Cola and Dr. Pepper in a product market to the exclusion of Pepsi even were cooperation from Dr. Pepper alone likely to allow Coke to raise prices significantly. *Compare* Federal Trade Commission v. Coca-Cola Co., 641 F. Supp. 1128, 1133 (D.D.C. 1986) (carbonated soft drink product market), *vacated*, 829 F.2d 191 (D.C. Cir. 1987), *with* M. Reinstadtler, The Economics of Merger In Product Differentiated Industries: A Framework for Analyzing Merger Activity in the Soft Drink Industry, (Master's Thesis, Sloan School of Management, Massachusetts Institute of Technology, May 1987) (Coca-Cola would gain market power by merging with Dr. Pepper), *and* Complaint, Federal Trade Commission v. Coca-Cola Co., No. 86-1764 ¶ 14(a) (D.D.C. filed June 24, 1986) (merger would remove direct competition between Coca-Cola and Dr. Pepper).

136. *See* Complaint, Federal Trade Commission v. Coca-Cola Co., No. 86-1764 ¶ 14(d) (D.D.C. filed June 24, 1986) (merger allegedly created market power by raising rival's costs); *cf.* Christian Schmidt Brewing Co. v. G. Heileman Brewing Co., 753 F.2d. 1354 (6th Cir.) (competitor has standing to challenge merger because acquisition allegedly harms competitor's access to distribution), *cert. dismissed*, 469 U.S. 1200 (1985).

137. These are vertical mergers with horizontal consequences. In each case, the merging firms in effect create an "involuntary cartel;" rivals facing an increase in marginal costs are forced to reduce output much as they would were they party to a collusive agreement with the merging firms. *See generally* references cited *supra* note 45.

Similarly, a joint venture between a hospital and health care providers such as HMO's or PPO's could raise costs for competing hospitals by foreclosing them from patients or medical staff. *See*

possible anticompetitive harms from vertical acquisitions must be weighed against any efficiency benefits of vertical integration before the merger is proscribed.[138]

B. Market Definition

To analyze whether a hospital merger increases the likelihood of collusion among the firms remaining in a market, the enforcement agencies and courts first define the markets of interest.[139] Market definition is often the determinative analytic step in antitrust litigation, and thus is strongly contested.[140] The primary market definition approach employed today is expressed in the DOJ Guidelines.[141] The DOJ Guidelines define a relevant

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generally Baker, *supra* note 32. However, the efficiency gains from vertical coordination will generally overwhelm any competitive harm arising from such an arrangement.

138. *See infra* notes 338-46 and accompanying text (efficiency defense). Vertical integration may generate a host of possible efficiencies. Kaserman, *Theories of Vertical Integration: Implications for Antitrust Policy*, 23 ANTITRUST BULL. 483 (1978); Waterson, *Vertical Integration, Variable Proportions and Oligopoly*, 92 ECON. J. 129 (1982); Williamson, *The Vertical Integration of Production: Market Failure Considerations*, 61 AM. ECON. REV. 112 (Papers & Proceedings 1971).

139. This approach is employed regardless of whether firms would seek to cooperate in order to raise prices or to lower quality of care. *See supra* note 31 and accompanying text, notes 127-28 and accompanying text (lowering quality is like raising price).

140. An amusing account of this process appears in Stigler, *The Economists and the Problem of Monopoly*, in THE ECONOMIST AS PREACHER AND OTHER ESSAYS 38, 51 (G. Stigler ed. 1982).

To the extent antitrust enforcers emphasize the economic consequences of a transaction rather than identifying its legal categories, market definition is less determinative of the judicial outcome. For example, an industry with one group of firms selling close substitutes and another group selling more distant substitutes could be viewed in antitrust terms alternatively as two narrowly defined markets where each group of firms offers significant potential competition for the other, or as one broadly defined market in which some firms sell goods differentiated from the output of others. It is difficult to see why the legal consequences of a merger among two firms selling close substitutes in this industry should turn on the arbitrary choice between these two views of the market, even though the increase in market concentration is likely to appear much larger if the narrower market definition is adopted.

141. 1982 MERGER GUIDELINES, *supra* note 51. This approach was preserved with minor modifications in the 1984 revisions to the DOJ Guidelines. So long as economic efficiency remains an important goal of antitrust enforcement, the DOJ Guidelines market-definition algorithm is likely to remain the leading market-definition methodology, as it defines markets with express reference to interdicting the exercise of market power in the economist's sense of the term. 1984 MERGER GUIDELINES, *supra* note 51, §§ 1, 2. *See generally* HORIZONTAL MERGERS, *supra* note 35, at 105-110 (description of "hypothetical monopolist" market definition paradigm).

Two alternative paradigms continue to have advocates, though each has been criticized by adherents of the DOJ Guidelines approach. The first defines market boundaries based on the absence of product flows. Elzinga & Hogarty, *The Problem of Geographic Market Delineation in Antimerger Suits*, 18 ANTITRUST BULL. 45 (1973); Elzinga & Hogarty, *The Problem of Geographic Market Delineation Revisited: The Case of Coal*, 23 ANTITRUST BULL. 1 (1978); *see* Harris & Jorde, *Antitrust Market Definition: An Integrated Approach*, 72 CALIF. L. REV. 1 (1984) (analogous approach to product market definition); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 96-101 (description and evaluation of "historical insularity" as a market definition paradigm); *but see* Werden, *The Use and Misuse of Shipments Data in Defining Geographic Markets*, 26 ANTITRUST BULL. 719 (1981) (critical evaluation of product flow approach to geographic market definition by one drafter of 1982 DOJ Guidelines).

A second alternative paradigm includes goods with correlated prices in the same market. Stigler & Sherwin, *The Extent of the Market*, 28 J. L. & ECON. 555 (1985); Horowitz, *Market Definition in Antitrust Analysis: A Regression-Based Approach*, 48 S. ECON. J. 1 (1981); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 102-105 (description and evaluation of "price relationships" paradigm); *but see* J. BAKER, WHY PRICE CORRELATIONS DO NOT DEFINE ANTITRUST MARKETS: ON ECONOMETRIC ALGORITHMS FOR MARKET DEFINITION (Working Paper No. 149, FTC Bureau of Economics 1987) (critical evaluation of

market as a set of products within a geographic area that could profitably be sold at a significantly higher price (for example, a 5 percent price increase) were their sellers to coordinate pricing and output decisions.[142] This algorithm relies on projecting the profitability of a price increase to what the DOJ Guidelines term a hypothetical "monopolist" of the products at issue. These sellers might equivalently be viewed as a hypothetical cartel.[143]

1. *Demand and Supply Substitutability.* The DOJ Guidelines emphasize that two economic forces might defeat the attempt of a hypothetical cartel to raise price through a coordinated reduction in output among cartel members. The first is demand substitutability: consumers may respond to a high cartel price by switching to goods not included in the hypothetical cartel, or by doing without the cartelized product altogether, in sufficient numbers as to make the price rise unprofitable.[144] The second force that might impede the hypothetical cartel from successfully raising price is supply substitutability: firms not included in the hypothetical cartel, or potential entrants, may be able to produce profitably a product competitive with the good sold by the hypothetical cartel while undercutting the cartel's price. If so, consumers may switch to the new product in sufficient numbers to make the hypothetical cartel's price increase unprofitable.[145] In assessing both demand and supply substitutability, the appropriate factual inquiry is a hypothetical one. It is necessary to look beyond actual substitution patterns to the potential substitution likely to follow a hypothetical 5 percent price rise.[146]

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price correlations approach to market definition); Scheffman & Spiller, *Geographic Market Definition Under the U.S. Department of Justice Merger Guidelines*, 30 J. L. & ECON. 123, 124-28 (1987) (comparing "economic markets" defined by price correlations with "antitrust markets" defined in accordance with the DOJ Guidelines).

142. 1984 MERGER GUIDELINES, *supra* note 51, § 2. The DOJ Guidelines can be understood as defining a relevant market as a group of homogeneous products sold in a region such that the collectivity faces a downward sloping residual demand curve, under the frequently plausible assumption that the hypothetical cartel has roughly constant marginal costs for outputs between the competitive and the cartel levels. *See generally* Landes & Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981); Scheffman & Spiller, *supra* note 141, at 124-28; J. BAKER, *supra* note 141; *cf.* Baker & Bresnahan, *The Gains from Merger or Collusion in Product-Differentiated Industries*, 33 J. INDUS. ECON. 427 (1985) (technique for estimating residual demand curve); Baker & Bresnahan, *Estimating the Residual Demand Curve Facing a Single Firm*, 6 INT'L J. INDUS. ORGANIZATION 283 (1988) (same); Harris & Simons, *Focusing Market Definition: How Much Substitution is Necessary?*, in RESEARCH IN L. & ECON. (R. Zerbe ed.) (forthcoming) (identifying percentage sales loss necessary to make a price rise unprofitable). Concentration and factors facilitating or frustrating collusion are important because they influence the ability or interest of the firms in the collectivity to take advantage of the group's downward sloping demand curve.

143. 1984 MERGER GUIDELINES, *supra* note 51, § 2.

144. For an analysis of how much sales the hypothetical cartel must lose before raising price becomes unprofitable, see Harris & Simons, *supra* note 142.

145. A third force might defeat an actual cartel: cheating on the cartel price by cartel members. However, the conceptual experiment for market definition of the DOJ Guidelines presumes that cartel coordination is perfect and asks whether that hypothetical coordination would be profitable. Once a market is defined according to this approach, the remainder of the Guidelines analysis addresses whether coordination is likely within that market by considering concentration, entry conditions, and other factors affecting the incentives of market participants to collude or to cheat on a cartel. *See generally infra* notes 183-87 and accompanying text.

146. For many products, market demand may grow more elastic as price rises. If so, a smaller fraction of customers will substitute away from the good when price rises from a low level, relative to

In principle, an extremely large number of relevant markets that include the merger partners will satisfy the DOJ Guidelines definition.[147] However, as the DOJ Guidelines note, in most antitrust cases it will be sufficient to analyze the transaction in the smallest market satisfying the market definition algorithm.[148] Such parsimony is not uniformly practiced in the antitrust analysis of hospital mergers, however, as will become evident in the discussion of the "cluster market" approach to product market definition.

2. *Product Market Definition: Application of the DOJ Guidelines to Hospitals.* The substitutability analysis of the DOJ Guidelines readily applies to hospital product market definition. The procedure begins with each hospital service offered by the merging hospitals, such as childbirths, emergency room treatment, or heart surgery.[149] To determine the extent of demand substitutability for each service, a question like the following must be posed: If the price of a medical service rises by 5 percent for one year, will a sufficient fraction of patients forgo the use of that service or substitute some other form of treatment to make that increase unprofitable?[150] Patients may make this

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the fraction who will shift away if price rises the same percentage from a higher base. This likely empirical regularity, termed the "*Cellophane* trap" in antitrust analysis, leads to the seeming paradox that greater demand substitution may be observed when a good sells for a monopoly price than when it sells for a competitive price. *See* Note, *The* Cellophane *Fallacy and the Justice Department's Guidelines for Horizontal Mergers*, 94 YALE L.J. 670 (1985).

147. For example, suppose that all the cola-flavored soft drinks constitute a product market because consumers would accept a significant price rise coordinated among the cola brands produced by Coke, Pepsi, RC, and other manufacturers, without switching to other soft drink flavors such as lemon-lime or root beer. Then, necessarily, all soft drinks, all beverages, and all food products, for example, will also constitute product markets, because coordinated action by all producers of these goods could at a minimum lead to an increase in the price of soft drinks, and may lead to higher prices for other goods as well. Similarly, if three neigboring states comprise a relevant geographic market for the sale of some product, because a price increase limited to those states would not be competed away by consumers shopping outside the area or by outside dealers shipping a competitive product into the area, then other relevant geographic markets can always be defined by adding additional states to the original three.

One might wish to analyze a merger in one of these broader markets as well as in the smallest market that satisfies the DOJ Guidelines algorithm because anticompetitive behavior may be more likely to occur in markets in which it is more attractive. If the gains from collusion are limited in a narrow market (for example, because market demand is fairly elastic) while those gains are large in a broad market (because demand is inelastic), and if the broad market incorporates few if any more producers than the narrow market, then the danger from both collusion and its likelihood may be greater in the broad market. *See* Weyerhaeuser Co., 106 F.T.C. 172, 289-90 (1985) (geographic market excludes distant producers who nevertheless "limit the amount of harm [from] . . . any exercise of market power"). Another example of a merger more troublesome in a broad market than a narrow one appears *infra* note 204 (transactions complements). Furthermore, some mergers may produce anticompetitive effects in markets in which the merging firms do not directly participate. *See* FTC v. Coca-Cola Co., 641 F. Supp. 1128 (D.D.C. 1986) (merger of upstream soft drink concentrate producers has anticompetitive effect in downstream soft drink market), *vacated*, 829 F.2d 191 (D.C. Cir. 1987).

148. 1984 MERGER GUIDELINES, *supra* note 51, §§ 2.11, 2.31.

149. Each of these services could be viewed as the aggregation of more finely parsed services. In the event there are significant limitations on demand and supply substitutability within these groupings, the product market definition procedure should commence at a more disaggregated level, perhaps with services such as normal childbirths, poisoning emergencies, or coronary bypass surgery.

150. The DOJ Guidelines ask whether sellers could profitably impose a "small but significant and nontransitory" price increase. In most contexts, the Department interprets this phrase as indicating

decision on their own, their doctor may make it for them, or insurers may influence patient decisions by refusing reimbursement for all or part of the inflated charges.

If few patients will substitute some other treatment or forgo use of the medical service in response to a 5 percent price rise, so that the price increase would be profitable for a hypothetical monopolist of the service, then demand substitutability will not limit the ability of a hypothetical monopolist to exercise market power. Hence, the service at issue constitutes a product market under the Guidelines, unless the market must be expanded to account for supply substitutability. If, instead, the price rise would be unprofitable when limited to a service or a set of services, additional services must be added to the proposed product market from those other treatments patients would substitute for it until a set of services satisfying the demand substitutability test is identified.

To determine the extent of supply substitutability for a service offered by one of the merging hospitals, a similar question must be posed: If the hospital raises prices for the service and its demand substitutes by 5 percent, in combination with those other institutions also offering any of the services in that set, will rival institutions currently or potentially offering other hospital services be able to introduce the cartelized services within one year, and thus compete away the hypothetical price increase?[151] If production flexibility would limit the ability of a hypothetical cartel to raise price profitably, the product market must be expanded to account for the competitive influence of firms selling supply substitutes.[152]

The DOJ Guidelines approach emphasizes that different competitors may be found in each product market in which the merging firms participate. For large classes of hospital services, such as many types of secondary inpatient care,[153] the same firms—namely all the local hospitals—will likely be found in

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a 5% price rise lasting one year. 1984 MERGER GUIDELINES, *supra* note 51, § 2.11. The Department of Justice may presently employ a 10% price rise rather than a 5% price rise as its standard in market definition. Briggs, *An Overview of Current Law and Policy Relating to Mergers and Acquisitions*, 56 ANTRUST L.J. 657, 681 n.1 (1988). A 10% standard should tend to broaden product markets, although it is difficult to gauge the practical significance of this change.

151. 1984 MERGER GUIDELINES, *supra* note 51, § 2.21.

152. It may be difficult to identify the amount of sales or capacity of firms producing supply substitutes that must be included in the market share computation. *See infra* notes 267-72 and accompanying text (units in which concentration is measured); 1984 MERGER GUIDELINES, *supra* note 51, § 2.21 n.10 (1984); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 110-16.

153. Nearly all hospitals offer "primary" or outpatient care, as may a variety of non-hospital health care providers including family practioners, physicians' offices, outpatient clinics, and perhaps chiropractors. "Secondary" care is provided by most, although not all, hospitals. This category involves the commomly requested services of specialists in areas such as surgery, radiology, anesthesiology, obstetrics, and pediatrics. Some non-hospital institutions, such as surgi-centers, may offer some forms of secondary care. Basic nursing, medical, surgical, anesthesiology, laboratory, radiology, pharmacy, and dietary hospital services are sometimes considered primary care, and other times considered secondary care. "Tertiary" care involves complex and specialized treatments, such as complex surgery or the treatment of severe illnesses. It is usually provided by teaching hospitals in large urban areas. The distinctions among these service groupings are fluid, but generally turn on the frequency of patient utilization (tertiary care services are the least frequently required), the number of hospitals offering the service (tertiary care services are least frequently offered, most likely

each relevant product market.[154] However, for some services, the product market will include such new institutions as free standing ambulatory care facilities or free standing surgical care facilities.

When product markets for hospital services are defined by the DOJ Guidelines approach, supply substitutability is likely to be the most contested issue in product market definition. Patients in need of one medical procedure will rarely be able to substitute another; demand substitutability will generally be limited. In contrast, it is possible that hospitals can easily shift resources across vastly different services. If, for example, hospitals offering appendectomies, but not coronary bypass surgery, could quickly and cheaply shift equipment, facilities, and personnel to offer the cardiac procedure, then the two services should be incorporated into the same product market on supply substitutability grounds.[155] Even if supply substitutability is substantial, the market definition approach of the DOJ Guidelines is likely to generate a large number of relevant product markets in which a merger must be evaluated. It is unlikely that all hospital services are supply substitutes, however.[156]

3. *Product Market Definition: Cluster Markets.* The reported hospital merger decisions employ an approach to product market definition that relies on the Supreme Court's "cluster of services" paradigm. The first cluster market was defined by the Court in its 1963 decision in *United States v. Philadelphia National Bank.*[157] In that case, the Court determined that commercial banking

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because few physicians can acquire sufficient experience to become competent providers when few patients require the services), and the complexity of the service (tertiary care services are the most complex). Tertiary care services are generally, if not always, provided by institutions also offering secondary care. *See* Proger, *Relevant Market*, 55 ANTITRUST L.J. 599, 616 (1987).

154. For this reason, cluster markets probably are not inconsistent with the DOJ Guidelines methodology. *See infra* notes 184-201 and accompanying text (pragmatic approach).

155. Some aspects of the two procedures appear to overlap: Both may require the use of some of the same diagnostic instruments, the same operating rooms and hospital beds, and the same nursing staff. However, a hospital performing one procedure may lack surgeons and specialists experienced in the other procedure, and may not own some diagnostic and treatment tools. Furthermore, it may take time to develop a reputation among referring physicians and patients for quality care in the new medical practice area. If the hospital is unable to remedy these and any other omissions within one year, the time horizon of the DOJ Guidelines for market definition, then the two procedures should not be placed in the same market on supply substitutability grounds. In addition, if hospitals must obtain regulatory approval to offer new services, such as certificate-of-need approval to create additional facilities, and if the regulatory process is time-consuming, supply substitution possibilities will be further reduced. *Cf. infra* notes 290-97 and accompanying text (discussion of certificate of need as entry barrier).

156. One commentator contends that all types of medical services, such as medical-surgical, pediatrics, obstetrics, and gynecology are close substitutes in supply, and concludes that acute inpatient care forms a relevant product under the substitutability criteria of the DOJ Guidelines. Lynk, *Antitrust Analysis and Hospital Certificate-of-Need Policy*, 32 ANTITRUST BULL. 61, 74 (1987). This author offers no evidence for the claimed production flexibility and ignores the difficulties discussed *supra* in note 155 that impede a primary care hospital or limited secondary care facility considering the addition of secondary or teritary care services. *See also infra* note 167.

157. 374 U.S. 321, 356-57 (1963); *accord* United States v. Connecticut Nat'l Bank, 418 U.S. 656, 664-66 (1974); United States v. Phillipsburg Nat'l Bank & Trust Co., 399 U.S. 350, 360-61 (1970); *cf.* United States v. Grinnell Corp., 384 U.S. 563, 573 (1966) (defining cluster market of central station protective services).

activity—including loans and other types of credit, deposit accounts, checking services, and trust administration—formed a unique cluster of products and services distinct from those offered by other financial institutions such as savings and loans, finance companies, and credit unions.

The Court has provided little theoretical justification for grouping products or services into the one product market. Banking services were clustered in *Philadelphia National Bank* because distinctiveness, cost advantages, and "a settled consumer preference" insulated each commercial banking product from competition.[158] In contrast with all previous product markets defined by the Court, the goods and services clustered into the commercial banking product market were neither demand nor supply substitutes.[159] Although the Supreme Court has not defined a cluster market since 1974, it has never renounced the approach. In consequence, lower courts continue to apply the cluster market concept to exclude firms supplying partial product lines from product markets when some producers supply a full line.[160]

The cluster market concept is to date the uniform approach to product market definition of the hospital merger case law.[161] Relying on the cluster of

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158. 374 U.S. at 356-57. Outside of banking services, the Court has identified only one product market termed a cluster of services, for accredited central station protective services. United States v. Grinnell Corp., 384 U.S. at 573. This cluster was justified on the view that "to compete effectively, [firms] must offer all or nearly all types of service." *Id.* at 572. Further, in both *Philadephia Nat'l Bank* and *Grinnell*, the Court found "commercial realities" consistent with the cluster. 374 U.S. at 357; 384 U.S. at 572. In *Grinnell*, decided under Sherman Act § 2, the Court also established that the cluster approach is not limited to market definition under the Clayton Act, the statute enforced in *Philadelphia Nat'l Bank*.

159. The goods and services "viewed collectively [have] . . . characteristics which negate reasonable interchangeability." United States v. Philadalphia Nat'l Bank, 201 F. Supp. 348, 363 (E.D. Pa. 1962), *rev'd on other grounds*, 374 U.S. 321 (1963). While neither the district court nor the Supreme Court investigated the possibility of supply substitutability in its market definition analysis, the opportunities for production flexibility appear limited in the banking industry. For example, the resources devoted to trust administration are probably not well suited for making commercial loans or accepting demand deposits. In contrast, the protective services clustered in *Grinnell*, including burglary and fire protection when offered electronically from a central station, are likely supply substitutes although they are not demand substitutes. *See* 384 U.S. at 572-73. Thus, *Grinnell*, unlike the bank cases, may be understood as reflecting the supply substitution principle in market definition. *See supra* note 41; *cf.* 1984 MERGER GUIDELINES, *supra* note 51, § 2.21 n.9 (production substitution may lead to aggregate description of markets).

160. The commercial banking product cluster excludes financial intermediaries such as credit unions and savings and loans that offer some but not all banking services. *See* HORIZONTAL MERGERS, *supra* note 35, at 75-76, 75 n.370 (collecting lower court decisions excluding partial line producers from cluster markets); *but cf.* United States v. Phillipsburg Nat'l Bank, 399 U.S. 350, 360-61 (1970) (other financial institutions do not provide the convenient customer access to financial services offered by banks, hence do not offer close substitutes for any bank services). In banking cases, lower courts arguably remain constrained by precedent to adopt the cluster market approach even when substitutability considerations might suggest alternative product market definitions. *See* Note, *The Line of Commerce for Commercial Bank Mergers: A Product-Oriented Redefinition*, 96 HARV. L. REV. 907, 912 n.32 (1983); United States v. Connecticut Nat'l Bank, 418 U.S. 656, 663-64 (1974) (similarity between savings and commercial banks "is not sufficient at this stage in the development of savings banks . . . to treat them together with commercial banks").

161. However, courts have generally ignored the cluster market concept in defining product markets in recent non-merger cases involving medical services provided by hospitals. *E.g.*, Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984) (anesthesiology services constitute a product separate from other hospital services) (tying claim); Seidenstein v. National Medical Enter., 769 F.2d

services paradigm, product markets have been defined consisting of "general acute care hospital services," excluding outpatient substitutes for the individual services comprising the cluster;[162] "short term, acute care hospital services;"[163] "inpatient psychiatric care by private psychiatric hospitals and non-government general acute care hospitals;"[164] "acute inpatient hospital care;"[165] and inpatient hospital services including outpatient substitutes for those services.[166] As with the markets defined in the Supreme Court's bank cases, these product markets include services that are neither demand nor supply substitutes.[167]

The cluster approach raises a variety of analytic and practical difficulties. From the substitutability perspective of the DOJ Guidelines, the approach is remarkable because it asserts antitrust relevance to collections of products and services that are not substitutes.[168] Furthermore, the weak theoretical basis for the groupings defined by the Court makes it difficult for lower courts to identify other appropriate collections of non-substitutes in a principled way.

The cluster approach is also troublesome in application. It appears likely to lead government enforcers and courts to apply the antitrust laws in a manner inconsistent with promoting economic efficiency in two situations, when both of these difficulties may be avoided by defining product markets for individual services pursuant to the DOJ Guidelines. First, the cluster

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1100 (5th Cir. 1985) (invasive cardiology services market) (monopolization claim); Robinson v. Magovern, 521 F. Supp. 842, 878 (W.D. Pa.) (adult open heart surgery market) (refusal to deal and monopolization claims), *aff'd*, 688 F.2d 824 (2d Cir.), *cert. denied*, 459 U.S. 971 (1982); Gonzales v. Insignares, 1985 Trade Cas. (CCH) ¶ 66,701 (N.D. Ga. 1985) (anesthesiology market and medical services market) (exclusive dealing claim); *but see* Weiss v. York Hosp., 745 F.2d 786, 826-27 (3d Cir.) (upholding jury finding of inpatient hospital health care cluster market) (monopolization claim), *cert. denied*, 470 U.S. 1060 (1985).

162. *Hospital Corp. of Am.*, 106 F.T.C. at 466; (quoting *American Medical Int'l*, 104 F.T.C. at 192-94; *see* United States v. National Medical Enter., 1987-1 Trade Cas. (CCH) ¶ 67,640 (E.D. Cal. 1987) (general acute care hospital services product market) (consent judgement).

163. American Medicorp, Inc. v. Humana, Inc., 445 F. Supp 589, 605 (E.D. Pa. 1977).

164. United States v. Hospital Affiliates Int'l, 1980-81 Trade Cas. (CCH) ¶ 63,721, at 77,852-53 (1980) (preliminary injunction case). Government hospitals were excluded because they offered a different quality of care than private psychiatric hospitals.

165. United States v. Rockford Memorial Corp., No. 88-C-20186, slip op. at 23 (N.D. Ill. Feb. 23, 1989), *appeal filed.*

166. United States v. Carilion Health System, 707 F. Supp. 840, 849 (W.D. Va. 1989) (order denying injunction), *appeal filed*, No. 89-2625 (4th Cir. 1989).

167. One commentator contends that an acute inpatient hospital care cluster is justified by strong supply substitutability in the provision of hospital services. Lynk, *supra* note 156, at 74. This view implictly rejects the narrower product market definitions common in non-merger antitrust litigation involving hospital services, *see supra* note 163, and implicitly suggests that the inpatient hospital product market clusters identified in merger litigation follow from *Grinnell* rather than from *Philadelphia National Bank*. *See supra* note 159. This interpretation of hospital cluster markets is difficult to reconcile with the fact that the Federal Trade Commission, an economically sophisticated decisionmaker, neither discussed nor relied on supply substitutability in arriving at its product market definitions in *American Medical International* and *Hospital Corp. of America*, 106 F.T.C. 361 (1985). Indeed, the FTC refers to hospital services as complements in its discussion of market definition in *American Medical Int'l.*, 104 F.T.C. at 194. *See also supra* note 156.

168. *See* Note, *supra* note 160; HORIZONTAL MERGERS, *supra* note 35, 139 n.692 (collecting commentary challenging cluster market concept).

approach ignores or undervalues the significance of competition from firms offering a partial line of services but not all the services in the cluster. In hospital industry terms, cluster markets may lead courts to underestimate the significance of outpatient clinics in restraining some forms of hospital collusion, and so to interdict mergers generating increased concentration among hospitals when the danger of collusion is limited.[169]

Second, concentration figures for cluster market output or capacity are potentially misleading because they award each multiproduct firm a market share equal to an average of that firm's share in providing each of a number of individual services. Thus, one hospital's low share of a region's total patients or beds may obscure its high share in the provision of certain individual services, particularly if those services account for a small fraction of total hospital activities. In consequence, a merger which creates high concentration in the provision of a service for which demand and supply substitutability is limited could readily avoid antitrust challenge under the cluster approach to product market definition when the same transaction would properly receive careful scrutiny under the DOJ Guidelines approach to market definition.

Two approaches to making sense of cluster markets under the DOJ Guidelines methodology for assessing the likelihood of collusion are analyzed below. The first, based on economic relationships of complementarity among clustered products, is unsatisfactory because the role of complementarity in affecting the ability of firms to collude is closer to that of a factor facilitating or frustrating collusion than to the role substitutability plays in market definition. The second approach, a pragmatic one, is more appealing. The pragmatic approach finds clustering a cost-effective tool for implementing the DOJ Guidelines when, as best can be told from available market information, all competing firms sell multiple products or services, firm market shares do not vary significantly across products, and entry conditions are similar across products. In this situation, antitrust analysis will be similar across products or services, so enforcers and courts sensibly conserve resources by treating the services identically in aggregate form. As will be seen, however, the pragmatic justification for cluster markets breaks down when some firms successfully compete with a partial line of services.

a. Should product complements define cluster markets? Cluster markets have been identified among goods or services that are complements in supply, demand, or transactions.[170] This observation suggests to some commentators

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169. If the firms supplying a partial line of services are plausible potential entrants into the cluster, their competitive effect may be taken into account in considering entry barriers. However, an entry analysis will not always correct for an improper market definition. Courts are unlikely to consider outpatient surgical clinics, for example, as potential providers of the full spectrum of hospital services grouped in an inpatient care cluster even though surgi-centers provide demand substitutes for some types of inpatient care.

170. *See* HORIZONTAL MERGERS, *supra* note 35, 139 n.694 (collecting cases clustering supply complements), 140 n.698 (collecting cases clustering demand complements), 140 n.700 (collecting cases clustering transactions complements). On other occasions, courts have refused to include

that complementarity might provide a rationale for cluster markets.[171] The approach is initially attractive because it promises to offer a principled rule to identify the bounds of product clusters based on an economic force, much as the economic force of substitutability bounds relevant markets under the DOJ Guidelines approach.

Three types of complementary products may be distinguished, one in supply and two in demand.[172] If it is cheaper to produce or distribute two goods together than separately, production technology is characterized by economies of scope and the two goods are supply complements.[173] Extreme cases of scope economies, in which the creation of one product is a necessary by-product of manufacturing the other—such as beef with hides, or nitrogen with oxygen in an air separation gas process—are sometimes termed coproducts or joint products. Some scope economies seem plausible in the hospital industry: a hospital already offering one surgical procedure may have the equipment, operating rooms, surgeons, anesthesiologists, and support staff available to allow it to offer many other surgical procedures at low marginal cost.[174] However, little empirical evidence exists on the significance of these economies for hospital operation.[175]

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complementary products in the same product market. *See* HORIZONTAL MERGERS, *supra* note 35, 140 n.699 (collecting cases refusing to place demand complements in the same product market). However, when demand complements are also supply or demand substitutes, courts readily include them in the same product market by applying the usual substitutability doctrines. Kaiser Aluminium & Chem. Corp. v. FTC, 652 F.2d 1324 (7th Cir. 1981) (basic bricks and basic specialties, substitutes in production while demand complements for steel manufacturing, placed in same product market); United States v. International Tel. & Tel. Corp., 1971 Trade Cas. (CCH) ¶ 73,619, at 90, 540-41 (N.D. Ill. 1971) (vending machines and manual food service placed in same product market as demand substitutes, although the two are demand complements for some consumers who purchase part of their meals from each source).

171. *See American Medical Int'l*, 104 F.T.C. at 194 (clustered services are complements); *see generally* HORIZONTAL MERGERS, *supra* note 35, at 139-40; 2 P. AREEDA & D. TURNER, *supra* note 107, at ¶ 521a, at 352 (advocating inclusion of joint products in the same product market); Note, *Rationalizing Antitrust Cluster Markets*, 95 YALE L. J. 109 (1985) (advocating transactions complementarity as the sole basis for product clustering).

172. HORIZONTAL MERGERS, *supra* note 35, at 138-41. A fourth type of complementarity, strategic complementarity, is defined only for firms not cooperating and so is not directly relevant to an assessment of the likelihood of collusion. *See* Bulow, Geanakopolis & Klemperer, *Multimarket Oligopoly: Strategic Substitutes and Complements*, 93 J. POL. ECON. 488 (1985). Furthermore, network externalities—the benefits a customer obtains from buying a product or service compatible with the purchases of other buyers—may constitute a fifth type of complementarity. *See, e.g.*, David, *Clio and the Economics of Qwerty*, 75 AM. ECON. REV. 332 (Papers and Proceedings 1985).

173. *See, e.g.*, Spence, *Contestable Markets and the Theory of Industry Structure: A Review Article*, 21 J. ECON. LITERATURE 981 (1983); Panzar & Willig, *Economies of Scope*, 71 AM. ECON. REV. 268 (Papers and Proceedings 1981).

174. Even if some inputs cannot be employed in both procedures—for example, if surgeons with a gynecological specialty lack the training and experience to undertake heart surgery—it is plausible that enough other inputs can be shared so as to make the marginal cost of offering the second procedure, given that the first is offered, lower than the cost of creating a new facility with the sole purpose of offering the second procedure.

175. One study finds diseconomies of scope for the offering of medical-surgical services, maternity services, and emergency room services together with each other, but finds scope economies for the offering of pediatrics with these other services. Cowing & Holtmann, *Multiproduct Short-Run Hospital Cost Functions: Empirical Evidence and Policy Implications from Cross-Section Data*, 49 SOUTHERN ECON. J. 637, 648-50 (1982); *see* Grannemann, Brown & Pauly, *Estimating Hospital Costs*, 5 J. HEALTH ECON. 107 (1986) (scope diseconomies between emergency department and inpatient care).

From the point of view of buyers, goods may be complements in two ways: as demand complements or transactions complements. Demand complements are, loosely speaking, goods that many buyers consume in concert, such as peanut butter with jelly or cameras with film. Hence, if the price of one demand complement rises, consumers reduce their purchases of both products.[176] A variety of services in the hospital industry might be demand complements,[177] including surgery and inpatient care,[178] intensive care and other forms of inpatient care,[179] or various diagnostic procedures.[180]

Transactions complements are goods that buyers prefer to purchase together, without necessarily consuming them together.[181] The goods sold by a supermarket are likely transactions complements because consumers would pay a slight premium to buy milk and vegetables in one stop rather than make separate visits to the dairy and the vegetable stand, even if the two products will be eaten at separate meals. Most hospital services could be transactions complements. For example, consumers often prefer to undergo diagnostic tests and medical treatments in one hospital visit rather than purchasing these services at different times. Similarly, the hotel services which a hospital provides as a part of inpatient care would not be desired by patients except in conjunction with nursing and other medical services.[182]

If complementarity is to serve as the basis for product market definition, then this economic force must play a role in antitrust analysis of market power comparable to that of substitutability, the basis for market definition under the DOJ Guidelines, rather than the role of a factor facilitating or frustrating collusion. The DOJ Guidelines radically distinguish between economic forces that will impede cartel success assuming the best efforts of cartel members to cooperate, and economic forces which increase or reduce the incentive of each member to cooperate. Forces which will undercut cartel success even

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176. *See generally* J. HENDERSON & R. QUANDT, MICROECONOMIC THEORY: A MATHEMATICAL APPROACH 31 (3d ed. 1980).

177. *See* Frech, *supra* note 98, at 266 ("[M]any hospital services are strong complements to each other. Hotel services, meals, blood tests, X-rays and surgery are all necessary to produce inpatient surgical service.")

178. Surgical patients generally require post-surgical inpatient care, and some patients hospitalized for illness also require surgery.

179. Intensive care patients likely require inpatient care when they improve, and some hospitalized patients may require intensive care in the course of their treatment.

180. Patients with some complaints may require both x-rays and blood analyses in order to distinguish possible diagnoses; in these cases the procedures would be demand complements.

181. *See generally* Note, *supra* note 171. These goods can be thought of as a special type of demand complement: if goods are indexed by time of purchase, consumers prefer to acquire similarly timed goods in concert.

182. *Cf.* United States v. Rockford Memorial Corp., No. 88-C-20186, slip op. at 21 (N.D. Ill. Feb. 23, 1989) ("In tandem with overnight care, the hospital has assembled a variety of services 'under one roof.' This ability to perform a variety of tests and procedures in one place is . . . unmatched by a non-hospital health provider."), *appeal filed.*

Hospital services may also be transactions complements from the point of view of insurers purchasing prospective patient care. For example, an HMO wishing to offer a variety of hospital services to its patients in the event they need care must contract with hospitals to provide a full line of services. It may be cheaper for the HMO to contract with a single hospital for all the necessary services than to provide those services through contracts with multiple hospitals.

given perfect cooperation, namely demand and supply substitutability, are incorporated into the market definition process.[183] Forces which might raise or decrease the incentive of a cartel member to cooperate fully with its colluding rivals are addressed later, after markets are defined.[184] Concentration is the first economic issue evaluated after market definition because the number of colluding rivals has historically been considered the most important determinant of the difficulty of cartel coordination and the ease of cheating on the cooperative agreement.[185] Other factors facilitating or frustrating collusion are also addressed following market definition as evidence that might rebut a presumption of anticompetitive effect resulting from concentration.[186]

As will be demonstrated below, each type of complementarity plays an economic role in affecting the likelihood of collusion comparable to a factor facilitating or frustrating collusion. While each type of complementarity provides an incentive for producers of product complements to reduce simultaneously the output of all complements, this incentive generally does not limit the success of a cartel in which all members are cooperating to the extent possible.[187] Hence, complementarity is not comparable to a factor which should be considered in market defintion.

i. Effect of supply complementarity. When a firm produces supply complements, a reduction in the output of any one product in effect raises the marginal cost of producing (the last units of) its complement, as scope economies must be sacrificed to produce those units. In consequence, if a multiproduct firm reduces its output of one good, it has an incentive to reduce as well its output of all other products complementary in supply.[188] Every other firm producing the supply complements has similar incentives, so collusion to reduce the output of one product alone[189] will lead to a decreased output of its supply complements.

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183. *See supra* text accompanying notes 139-42 (market definition).

184. Ease of entry is treated as a factor facilitating or frustrating collusion capable of rebutting a presumption of anticompetitive effect arising from concentration. United States v. Waste Management, Inc., 743 F.2d 976 (2d Cir. 1984). However, entry plays a role in antitrust analysis similar to supply substitution. *See infra* note 287. In consequence, the Federal Trade Commission is moving toward evaluating the significance of entry before that of concentration—closer to the market definition step of antitrust analysis than the facilitating factors step. B.F. Goodrich Co., 1988 Trade Reg. Reports (CCH) ¶ 22,519, at 22,142-46 (F.T.C. 1988); Echlin Mfg. Co., 105 F.T.C. 410, 487 (1985). *See infra* notes 286-305 and accompanying text.

185. *See infra* notes 265-85 and accompanying text.

186. *See infra* notes 305-35 and accompanying text.

187. This conclusion holds regardless of whether the complementary goods are sold by the firms selling the cartelized product. While supply complements are invariably sold by the multiproduct firms that sell the cartelized products, and transactions complements are usually sold by such multiproduct firms, demand complements are often sold by different firms.

188. 2 P. AREEDA & D. TURNER, *supra* note 107, at ¶ 521a, at 352.

189. A cartel composed of multiproduct producers may find it possible to coordinate a reduction in output and increase in price for some but not all products if, for example, cheating is easy to monitor and police in some markets while difficult in other markets.

This by-product of collusion over the first product will not generally make a single product cartel unprofitable because the reduction in output of the complementary good allows the firm to avoid sales of the complementary product generating low marginal revenue.[190] When the colluding firms are unable to make marginal adjustments in output, however, it is possible that cooperation will not be profitable among sellers of supply complements.[191] In neither case would profits likely increase significantly were the supply complement brought into the collusive arrangement; the complement is already in effect present by virtue of the joint production technology. Thus, while supply complementarity may influence the total profits available to colluding firms and thereby affect individual firm gains from cooperation, the exclusion of products complementary in supply from a cooperative

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190. This result can readily be demonstrated for joint products, the extreme case of scope economies, under one set of plausible assumptions about the marketplace. Assume that a firm producing joint products makes one unit of good A for every unit of good B, at a joint marginal cost denoted MC. All firms are assumed to have identical cost functions, and marginal cost is assumed constant for outputs between competitive and cooperative levels. Before the cartel was organized, the two products sold at prices P^a and P^b respectively. If the market was competitive at that time, $MC = P^a + P^b$. If both products have downward sloping industry demand curves, marginal revenue on each product (from the point of view of the industry as a whole) is less than price. Thus, $MC > MR^a + MR^b$.

To raise the price of good A, colluding firms must sell less of that good. Assume that the only profitable way to reduce output is to reduce production of both products (rather than preserving production of A and B while destroying some units of good A). On the margin, a cooperating firm gains by saving MC. However, the firm loses $MR^a + MR^b$, the marginal revenues available from selling the last unit of the joint products produced. As $MC > MR^a + MR^b$ at the previous competitive equilibrium, some output reduction necessarily increases the firm's profits.

This result would not change were the price in market B to remain at P^b, as might occur were single product firms able to employ an alternative technology to produce good B at a marginal cost of P^b. In this case, $MC > MR^a + P^b$ at the competitive equilibrium. Now a reduction in the output of both products by multiproduct producers colluding over good A saves each firm costs equal to MC, but causes each producer to forgo revenues equal to $MR^a + P^b$. Collusion in market A remains profitable on the margin, even though the practice no longer raises the revenues available from the last unit sold in market B.

Were the goods not extreme supply complements, the firm would likely prefer to reduce the output of good A by more than the output reduction chosen for joint products if the demand curve for good A is more inelastic than the demand curve for good B.

191. The unprofitability of cooperation in this special case turns on production indivisibilities rather than supply complementarity. Suppose that a multiproduct firm produces two goods, denoted A and B. Assume extreme supply complementarity: The firm can produce one unit of each good for a total expenditure of \$18 or else two units of each at a total cost of \$28, but it cannot manufacture the goods in unequal amounts or produce more than two units. Suppose further that each good sells for a market price of \$7, and that there are a large number of firms with identical production technologies as the first. Under these assumptions, each firm will choose to produce two units of each good. At this output, the firm receives total revenues of \$28, equal to firm costs, and earns no economic profit.

The firm of interest might consider participating in a collusive arrangement with its rivals under which all firms would halve their output of good A, in the expectation based on demand conditions that the market price for A would rise to \$10 before it would become profitable for entrants to produce A alone using some other technology. However, if an alternative technology for producing good B is available, and if new entrants using that technology would be attracted by a market price above \$7, the firm will choose not to participate in the cartel. If it reduces its output of good A to one unit, it necessarily reduces its output of B as well. The firm would find that it spends \$18 to produce two products generating revenues of \$17, so it loses \$1. Nor could the firm profit by producing two units of each good and destroying one unit of good A; this strategy would generate a loss of \$4.

arrangement will not generally make unprofitable an otherwise profitable cartel.[192]

ii. Effect of demand complementarity. When a firm sells a good having demand complements, it recognizes that an increase in the price of that product, as might result from cartel behavior, reduces the demand for the complementary products regardless of whether it or another firm produces the complementary goods. Multiproduct firms collaborating on a reduction in output for one good thus necessarily also collaborate to reduce the sales of those demand complements they also produce. In consequence, aggregate profits will likely be lower for a colluding firm also selling demand complements for the cartelized product than for a corresponding single good producer in the cartel. But the injury multiproduct producers of demand complements inflict on themselves, and their resulting disincentive to cooperate in a cartel over the first product, will typically not deter cartel formation whether or not the cartel also is able to coordinate price and output

192. *Cf.* Note, *supra* note 171, at 117 (multiproduct firms selling supply complements can collude on single products profitably).

of the second product,[193] although exceptions to this generalization may occur.[194]

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193. For example, suppose two demand complements, denoted A and B, have the following symmetric inverse demand curves: $P^a = 100 - 3Q^a + Q^b$ and $P^b = 100 - 3Q^b + Q^a$. (As a technical matter, the assumption that these linear demand functions are derived from maximizing the utility function of the same representative consumer requires that the coefficients of the complementary products be identical, here unity.) Assume further that only one firm produces both goods. For this firm, fixed costs are zero, and the marginal cost of producing either product equals the quantity of that good it produces: $MC^a = Q^a$ and $MC^b = Q^b$. The profits available to this hypothetical single firm would also be available collectively to cartel members whose aggregate demand and marginal cost functions equal those assumed for this one producer. Thus, structural features affecting the incentives of this firm to act as a monopolist equally suggest the incentives of firms in an oligopoly to collude.

Two benchmark equilibria may be derived for this problem. First, if the firm acts as a price taker in both markets (case I), an assumption that defines the competitive equlibrium, it can be shown that it will produce 33.3 units of each good, sell them at a price of 33.3, and earn profits of 555.6 in each market for a total profit of 1111.1. Second, if the firm instead acts as a monopolist in both markets (case II), it will sell 20 units of each product at a price of 60 in each market, and earn 1000 in profits in each market for a total profit of 2000.

To determine the significance of the sale of a demand complement on a firm's incentives to collude, the profits of a single product monopolist are compared with those of a multiproduct firm monopolizing only one market. Assume that a single producer monopolizes good A, while good B sells in a competitive market (case III). This monopolist recognizes that the output and price of good A, which it controls, affect the demand for good B, and thereby affect the equilibrium output in that market and in turn influence the demand for good A. With this indirect feedback effect in mind, the single product producer will choose to make 19.2 units of good A and sell them at a price of 72.1. It will earn profits of 1201.9. (The competitive B industry would then sell 29.9 units of that product at a price of 29.8 and earn profits of 444.2.) This monopolist reduces the output of good A to a level even lower than that of the monopolist in both markets because it does not bear the costs of the negative demand externality it imposes on sellers of the complementary product.

A final case is employed to analyze the effect of demand complementarity on the incentive of a multiproduct firm to monopolize one product when its demand complement is not monopolized. Assume that a multiproduct producer of both goods recognizes its market power over product A but acts as a price taker in market B (case IV). In other words, a multiproduct firm producing both products observes that its output decision in market A affects the demand curve it faces in market B. But unlike the monopolist in both markets considered in case II, it does not recognize that it faces a downward sloping demand for the second good. In this situation, the firm produces 20.4 units of good A, which sell at a price of 68.9. It also manufactures 30.1 units of good B, which sell for the price of 20.4. Firm profits are 1197.6 in market A and 405.8 in market B, for a total profit of 1603.4. This firm produces slightly more of good A than does the single product monopolist (case III) because it internalizes the negative externality inflicted on the demand for good B by a monopoly in good A. While firm profits in market A are slightly lower in this case than for the single product monopolist (1197.6 as compared with 1201.9 in case III), aggregate firm profits of 1603.4 substantially exceed the aggregate profits of 1201.9 for the single product monpolist. Furthermore, while the multiproduct firm able to monopolize only one market earns fewer profits than the mulitproduct firm able to monopolize both markets (1603.4 in case IV versus 2000 in case II), the multiproduct firm limited to monopolizing market A earns substantially more profits than a multiproduct producer forced to act as competitively in both markets (1603.4 in case IV versus 1111.1 in case I).

In this example, the incentives of the single product firm to monopolize good A (case III) are not significantly different from those of the multiproduct firm able to monopolize only one market (case IV). Further, the total profits available to the multiproduct firm able to monopolize only one market (case IV) are substantially in excess of the profits earned by a competitive industry (case I). Hence, demand complementarity did not reduce the incentive of a multiproduct firm to monopolize one market alone.

194. Suppose the two demand complements A and B each sell at the market price of \$7, and each good costs \$6.50 to produce. Some firms produce only one of these products, and others produce both. No incumbent firm can expand its output at a marginal cost of less than \$8 for each good, and new entry would also be forthcoming in both markets at a price of \$8. Suppose further that the producers of good A recognize that if they each reduce their output by 20%, the market price will

The factors affecting the profitability of single product collusion for the multiproduct producer of demand complements are readily identified. A multiproduct firm selling a demand complement as well as the cartelized product experiences the least potential disincentive to cartel formation when the firm's sales revenues from the complement are small relative to its revenues from the cartelized good, when the degree of complementarity is weak, and when the product subject to collusion has an inelastic demand curve. On the other hand, a multiproduct producer may find it unprofitable to participate in a cartel to raise the price of one product when the firm has much greater sales of a demand complement, the goods are strong complements, and the good subject to collusion has an elastic demand curve.[195] In such a case, the cartel in the first product will increase firm revenues derived from that market, but that benefit could be outweighed by lost revenue in the large market for the complementary product if the high price for the first good dramatically reduces demand for the complement.

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rise to $8. Because the goods are demand complements, the higher price of good *A* will generate a 10% reduction in the demand for good *B* and the market price for good *B* will decline to $6.90.

A firm producing good *A* but not good *B* will profit from a cooperative agreement to reduce output by 20%. If this firm makes five units of good *A*, its profits are $2.50 before collusion. But under the cooperative arrangement, the firm's profits will rise to $6, even though its output of good *A* declines to four units. In contrast, a firm producing both products might find collusion in the *A* market unprofitable. If that firm produces five units of good *A* and 50 units of good *B*, its pre-collusive profit is $2.50 on good *A* and $25 on good *B*, for a total profit of $27.50. When the firm joins the cartel, it reduces its production of good *A* to four units, and finds that its share of the decreased market demand for good *B* allows it to sell only 45 units. Its profit on good *A* rises to $6, but its profit on good *B* falls to $18, so its total profit declines to $24. This firm would not lose money, however, if the collusive price of good *A* is $9 or more, or if the firm's share of revenues from good *B* is reduced.

In this example, the reduction in demand for a demand complement removed the incentive of a multiproduct producer to collude on one product alone. If instead the multiproduct firm was able to collude on both goods simultaneously, it likely would have found cooperation profitable. For example, a 20% reduction in the output of both products might generate a market price of $7.80 for each. Under this assumption, a firm formerly producing five units of good *A* and 50 units of good *B* would, in concert with its rivals, reduce output to four units of good *A* and 40 units of good *B*. Its profits would rise from $27.50 to $57.20.

195. These are the factors causing collusion to be profitable in the example described *supra* note 194.

This situation is most likely to arise in the context of collusion in the sale of one product by vertically integrated producers. An integrated firm making both an upstream input and a downstream product, such as a firm producing both steel and fabricated steel products, is selling demand complements. Consumers of fabricated steel goods are in effect purchasing both the steel and the fabrication. Further the goods may be strong demand complements; the fabricator may have little leeway to vary the steel content of many of his downstream products. Consequently, a firm that is primarily a fabricator, with very little captive steel production, may not find it profitable to participate in a steel cartel if the cartel price is at the high level preferred by unintegrated steel producers. Indeed, this producer might undermine a steel cartel by expanding captive production. This firm would, however, profit from a fabricated goods cartel. In contrast, a firm primarily producing steel with very small fabrication operations would find the steel cartel very profitable, but would find a fabrication cartel unprofitable if the cartel price is at the high level preferred by unintegrated fabricators. While some output reduction and price rise in one or both markets would profit both these firms, unintegrated firms and integrated firms may have substantially different views as to the best output reduction in each market. Under such circumstances, horizontal coordination may be difficult to arrange. Moreover, vertical integration may increase the ability of cartel members to cheat secretly, thereby deterring cartel formation. *See infra* note 200. These issues are discussed in detail in B.F. Goodrich, 1988 Trade Reg. Rep. (CCH) ¶ 22,519, at 22,161-66 (F.T.C. 1988).

Even in this extreme case, however, some output reduction for both goods will profit this multiproduct firm; this producer's complaint is that the cartel chose a mix of output reductions very profitable for other cartel members but unprofitable for it.[196] Thus, if a multiproduct producer of demand complements acts in the best interests of the cartel, and if the cartel chooses an output reduction that maximizes joint profits of all members, then the firm would always be willing to participate in a collusive agreement.[197]

Unincluded demand complements are qualitatively less troublesome to a cartel than unincluded demand substitutes. Consider a case of strong demand substitutability: Assume that two products, such as California and New York table wine, are virtually interchangeable for buyers. Assume also that each good can be produced with constant marginal cost, and that the costs of making each are nearly identical. No matter how much the sellers of the first product reduce their output in an attempt to raise price, the market price of both will remain near marginal cost. By reducing output, collusive sellers of the first good will succeed in lowering rather than raising their revenues, so will almost surely find collusion unprofitable. Compare a case of strong demand complementarity: Two products are consumed in fixed proportions, one unit of each. These products might be nuts and bolts, or lift tickets and hotel rooms at a ski resort.[198] In this case, consumers care only about the sum of the two prices; buyer demand is for both goods together. If the output of one of these goods is reduced, as by a cartel among the producers of that product, consumers will reduce their purchases of the other good and will bid up the total price they are willing to pay for the package of the two products. Unless joint demand is elastic, this action will raise the total revenues available to producers of the two goods, allowing the producers of each to profit.[199] As unincluded substitutes are much more likely than unincluded complements to reduce cartel profitability, it is appropriate that demand substitutes but not demand complements be taken into account during the market definition stage of antitrust analysis.[200]

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196. This divergence of interests arises because the multiproduct producer internalizes the demand externality created by complementarity, while the single product producer does not. Hence, a cartel composed of some single product producers and some other firms that also produce demand complements may have a difficult coordination task, to the extent the interests of the single product firms and the multiproduct firms differ.

197. In some cases, side payments between other cartel members and this firm may be required to induce the firm to participate, further increasing the difficulties of cartel coordination.

198. The goods might also be downstream consumer products and upstream inputs. *See infra* note 195.

199. The sellers of the first product may be able to earn monopoly profits by raising the price of that good even if they are unable to raise the total price of both goods to consumers. Consumers will happily pay more for the first good if the price of the demand complement is reduced, as consumers care only about the total price. Further, so long as the lower price for the demand complement exceeds the sum of its marginal cost plus its average recoverable fixed cost, the competing producers of the demand complements will remain in the marketplace while accepting a revenue reduction, and the equilibrium output and market price for the package need never change. Hence the cartel in one good can profit by appropriating the rents that a competitive market would have awarded its demand complement. The author is indebted to Steven Salop for this observation.

200. Demand complementarity may also create a second difficulty for cartel formation when one firm sells all the complementary goods. Multiproduct sellers of demand complements may find it

iii. Effects of transactions complementarity. Sellers of transactions complements must recognize that consumers care about the total price of their consumption bundle but are not otherwise concerned about the price of individual goods. For example, grocery store shoppers may primarily be interested in the aggregate cost of the goods in their grocery shopping cart, and may not otherwise be concerned about the price of milk. If goods are transactions complements, a cooperative agreement to raise the price of one good could be undercut by firms that lower the price of one of the good's transactions complements.[201] Because a cartel composed of multiproduct sellers must foreclose this option for cheating, the cartel may find it necessary to raise price on all products with transactions complementarity sold by member firms; the members of a grocery store cartel may agree to raise their markup on all products in the store, across the board, rather than limit the price raise to a handful of individual products such as milk and other dairy goods.[202] But if the meat department in the grocery were owned by a separate firm from the rest of the store, for example, the grocery need not fear that its meat subcontractor would lower price to undercut collusion

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possible to cheat on a cartel in one good by lowering their price of its demand complement for consumers willing to buy both goods from it. However, lowering the price of a complement allows a multiproduct firm to cheat on a cartel only if the firm is able to increase sales of the cartelized product. A tied purchase requirement is one mechanism for accomplishing this result. This mechanism for undercutting a cartel cannot be employed unless consumers purchase all demand complements from one buyer, as when goods are strong transactions complements. *See infra* notes 201-04 and accompanying text. Another situation in which consumers purchase demand complements simultaneously occurs when consumers buy the downstream output of a vertically integrated producer. This firm in effect sells the demand complements of upstream inputs and downstream fabrication. *See infra* note 195. In both cases, the difficulty for cartel formation does not arise if multiproduct firms act in the best interest of the cartel. Thus, this problem is best treated as a factor facilitating collusion rather than as a concern of market definition.

201. *See* Note, *supra* note 171, at 119; *supra* note 200.

For an example of how transactions complementarity may facilitate cheating on a cartel, suppose that consumers invariably buy one unit of product *A* and one unit of product *B* each week, and that it costs consumers an extra $1 to shop at two stores rather than one because of the extra time involved. Then goods *A* and *B* are transactions complements.

Suppose that a store sells 10 units of goods *A* and *B* each day for $7 each. Assume further that these goods cost the store $7 each, so it earns no economic profit. If there are many identical stores, and all raise the price of good *A* to $8, suppose that each would then sell only eight units of that product. Cooperation limited to good *A* would be desired by each, as it would create profits of $8. If such cooperation occurs, however, each firm would likely have a strong incentive to lower its price on good *B* to $6.50, even though that price is below the cost of good *B*. Consumers will discover that they can obtain one unit of both *A* and *B* for $14.50 at a store which lowers the price of *B*, while their shopping trip will cost $15 otherwise. In consequence, any one store might be able to attract, for example, 40 customers purchasing one unit of each product if it is the only store colluding on good *A* and simultaneously discounting good *B*. In that case the store will earn a total profit of $20. Competition on good *B* will likely emerge, until its price falls to $6 and firms no longer earn economic profits despite their cooperation on the price of good *A*. This problem with collective action would be remedied by an agreement not to reduce the price of good *B* when increasing the price of good *A* or an agreement to raise the price of both products.

202. The fact that milk is a transactions complement for other goods when sold in a grocery store does not mean that a dairy cartel desiring to collude on the price of milk must make an agreement with the vegetable cartel and the meat cartel. Dairies produce only one product, milk at wholesale, while grocery stores distribute a variety of transactions complements at retail.

involving the remaining grocery products.[203] Thus, if collusion over one set of products, such as the retail sale of dairy goods, would be profitable, it will never be undercut by the failure of the cartel to include other firms selling transactions complements; it will only be undercut by cartel members choosing not to act in the best efforts of the cartel by cheating through lowering the price of those complements which they also sell. Hence transaction complementarity operates for multiproduct sellers like a factor facilitating or frustrating collusion, by altering the incentives of such sellers to make their best efforts for cartel success, rather than as an economic force impeding those best efforts, which should be taken into account in market definition.[204]

iv. Complementarity as a market definition criterion. Each type of complementarity has been shown to play a role in affecting the likelihood of collusion comparable to a factor facilitating collusion rather than an economic force suitable for consideration during market definition.[205] If complementarity is nevertheless allowed to form a basis for product market definition, two analytic problems will be created. First, using complementarity as well as substitutability as a market definition criterion may generate inappropriate product markets. When goods are moderate but not strong complements, or when there are substitutes for some but not all goods in the cluster, it may well be misleading to expand provisional product markets by adding complements instead of adding substitutes.[206] For example, suppose market power inferences regarding hospital mergers are derived from a cluster market defined by acute inpatient hospital care, based on some form of complementarity among hospital services. At some point the presence of new institutions competing with respect to some but not all of those services, such as free standing ambulatory or surgical clinics, belies those inferences.[207] Yet the complementarity logic does not assist in

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203. The grocery is likely to benefit from this action because the reduction in market basket prices would shift business to it from its rival colluding firms. The meat counter would not benefit because its price reduction would cause it to sell at a price below marginal cost unless side payments were arranged.

204. Even if a retail dairy cartel is made unsuccessful by the incentives of grocery store sellers of milk to cheat by lowering the price of other grocery products, a retail grocery cartel might be successful. This observation suggests that a merger of two groceries analyzed in both a dairy product market and a grocery product market might appear more anticompetitive in the grocery market than the dairy market. For another example of a merger more troubling in a broad product market than a narrow one, see *supra* note 147.

205. Furthermore, it is possible to consider fully the significance of complementary products by treating them as a factor facilitating or frustrating collusion. *See infra* notes 321-26 and accompanying text. It is therefore unnecessary to consider their effect during market definition.

206. Even if this process is not misleading, it may be complex. When provisional product markets may be expanded either by adding close complements or by adding close substitutes, the market definition task requires choosing between dissimilar alternatives.

207. *See, e.g.*, Hospital Corp. of Am., 106 F.T.C. 361, 465-66 (1985) (narrowing the cluster in response to new forms of competition), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 481 U.S. 1038 (1987).

identifying situations when markets based on substitutability are to be preferred to the cluster based on complementarity.[208]

Second, product market definitions based on complementarity may confuse rather than clarify a court's or enforcer's understanding of the economic forces affecting the likelihood of industry collusion. For example, when goods have strong complements, the monopoly profits from cooperative action most likely derive primarily from the subset of those products lacking substitutes. Indeed, it is necessary that some products in the cluster meet the market definition standards involving substitutability for any product in the group to increase in price as a result of producer collusion.[209] Thus, it is the absence of substitutes, not the presence of complements, that confers the possibility of market power on producers of a product or service, although the presence of complementary goods may affect the incentives of such producers to take advantage of their potential ability to increase revenues through a cooperative reduction in output. Product market definition based exclusively on the extent of demand and supply substitutability preserves the focus of antitrust concern on the necessary condition for cartel success.[210] It is misleading to shift attention away from the product or service where collusion can generate supracompetitive pricing in order to highlight one factor (complementarity) potentially facilitating or frustrating collusion, particularly when this factor will rarely be the most significant factor affecting firm incentives to collude.

b. Pragmatic approach to product clusters.[211] A superior approach to making sense of cluster markets applies the term solely for descriptive and analytic

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208. *Cf.* Note, *supra* note 160 (new competition in banking makes previous cluster markets inadvisable).

The clustering of product complements can also increase market definition difficulties if the geographic extent of competition for each good differs, as might easily be the case for supply complements. In such a case, geographic market definition will be confused. *See infra* note 237 and accompanying text.

209. For example, if beef producers would be able to raise the price of beef through a cooperative output reduction, then beef satisfies the product market definition algorithm of the DOJ Guidelines. Even if beef producers must also reduce their output of beef's supply complement, hides, in order to take advantage of their market power in beef, the higher price of beef will contribute to increasing aggregate firm profits. If hides also form a relevant product market, the reduction in output of hides may increase profits in that market as well, so a separate antitrust analysis of the hides market may demonstrate that the beef market collusion creates anticompetitive problems in more than one market. But if neither beef nor hides forms a relevant product market based upon the substitutability considerations of the DOJ Guidelines, neither good will increase in price as a result of producer collusion to reduce the output of the two complements simultaneously.

210. However, defining a broader market aggregate including complements for the product lacking substitutes is not formally inconsistent with the DOJ Guidelines because a large number of product markets satisfy the DOJ Guidelines methodology. *See supra* notes 147-48 and accompanying text.

211. The term "pragmatic approach" may be misleading to the extent it suggests, incorrectly, that the resulting markets do not reflect the economic principles of the DOJ Guidelines. Rather, this approach defines cluster markets in order to apply the DOJ Guidelines analysis more effectively by avoiding unnecessary complexity, but only in situations where the result would not change were the market power analysis undertaken for individual product markets. The author is indebted to George Priest for this observation.

convenience in situations where it will not be misleading. In two related situations, the cluster approach will likely generate the same market power inferences as the DOJ Guidelines substitutability analysis while minimizing analytic complexities. First, when the same firms sell the same set of products, which do not happen to be substitutes, in the same geographic areas with similar market shares, and when each individual product would constitute a product market under the DOJ Guidelines, the antitrust analysis of each would be so similar in practice that no loss of analytic power comes from treating the products as a collection. For example, if cardiac surgery and computerized axial tomography (CAT scans) are neither demand nor supply substitutes, it would be sensible to incorporate these procedures in an inpatient hospital care cluster market when each procedure would form a product market individually under the usual substitutability tests, and when they are offered by the identical set of hospitals with similar market shares.

Alternatively, if finely partitioned market share data are unavailable, concentration in many individual product markets will necessarily be estimated with the same aggregate figures. If there is no compelling reason to believe demand and supply substitutability opportunities, entry conditions, or market shares differ significantly across individual products, then the antitrust analysis will be similar for each good so they may conveniently be analyzed as a collection.[212] Thus, cardiac surgery and neurosurgery might be placed in the same surgery cluster market if statistics on surgical patients days do not distinguish between these procedures, and if there is no reason to believe substitution opportunities, entry conditions, or market shares differ among them. But this cluster is less compelling, for example, if one hospital specializes in one procedure so is likely to have a particularly high share of that service, if the equipment employed in orthopedic surgery can be used in heart surgery but not neurosurgery, or if there is a nationwide shortage of cardiac surgeons and a glut of neurosurgeons.

This pragmatic approach to cluster market definition is not inconsistent with the Supreme Court's delineation of cluster markets in the bank cases. The Court's emphasis on the "commercial realities" that insulate products within the cluster from outside competition[213] suggests that the same firms compete across all products with similar shares. Under this interpretation, the Court's cluster market of banking services makes sense if, for example, banks with large deposits also have large loan portfolios and extensive trust

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212. The Department of Justice takes a similar view. *60 Minutes with Charles F. Rule, Assistant Attorney General, Antitrust Division*, 57 ANTITRUST L.J. 257, 274-75 (1988); Rule, *supra* note 115, at 126-27. Differences in market shares across services in hospital market clusters may be substantial, however. One commentator suggests that the individual services grouped in the cluster market defined by the FTC in its *Hospital Corp. of America* opinion differ widely in concentration from the aggregate concentration figures. T. MCCARTHY, EMERGING COMPETITIVE ISSUES IN HEALTH CARE MARKETS, Eighth Annual Antitrust & Trade Regulation Seminar of the National Economic Research Associates, Inc. (July 10, 1987).

213. United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 356-57 (1963).

administration services, and regulatory barriers limit entry into these markets.[214]

The Court also adopted a pragmatic market definition approach unrelated to substitutability or complementarity in undertaking its *geographic* market definition in *Grinnell,*[215] but not in its product market definition where the cluster market recognized by the Court was likely predicated on supply substitutability.[216] The Court in *Grinnell* defined a national market for accredited central station protective services when it expected little variation in concentration and competitive conditions across individual geographic markets. In a large number of geographic regions, the same firm was the exclusive provider of central station services.[217] Further, in each location a large number of customers were unwilling to purchase protective services other than through a central station provider.[218] Thus, one producer was likely a monopolist for central station protection in each of a large number of regions of the country. Rather than analyze the similar markets for several services in over 100 cities, the Court chose to define a cluster market for these services and a nationwide geographic market.[219] Assuming the product market was correctly defined, the defendant's 73 percent nationwide market share of central station protective services[220] probably did not misrepresent its monopoly power in the local regions underlying this geographic market definition.[221]

The pragmatic rationale will not justify a cluster market when some firms sell subsets of the clustered goods but not the full line. When partial line sellers are present, a different collection of sellers can offer each good,

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214. The product market involving a cluster of banking services may also be consistent with a rationale for clustering based on demand or transactions complementarity, or on supply substitutability. The district court in the *Philadelphia National Bank* case found that "Each [banking service] is an integral part of the the whole, almost every one of which is dependent upon and would not exist but for the other." United States v. Philadelphia Nat'l Bank, 201 F. Supp. 348, 363 (E.D. Pa. 1962), *rev'd on other grounds,* 374 U.S. 321 (1963). In affirming the district court's product market definition clustering banking services, the Court noted both "cost advantages" for banks in providing personal loans relative to small-loan companies—suggesting supply substitutability with other banking services, the basis for the cluster market defined in *Grinnell*—and a "settled consumer preference" for bank provision of financial services, suggesting demand or transactions complementarity. *Philadelphia Nat'l Bank,* 374 U.S. at 356-57.

215. United States v. Grinnell, 394 U.S. 521 (1966). The author is indebted to Terry Calvani for helpful discussions concerning this point.

216. *See supra* note 149.

217. *Grinnell,* 384 U.S. at 578.

218. Alternatives, such as watchmen or audible alarms, differ in "utility, efficiency, reliability, responsiveness, and continuity . . . . For many customers, only central station protection will do." *Grinnell,* 384 U.S. at 574. *But see id.* at 590-91 (Fortas, J., dissenting).

219. The Court recognized that individual stations operate only within an area 25 miles in radius, *id.* at 575, so it in effect defined a geographic cluster market as well as a product cluster market. The dissent found the majority's nationwide geographic market indefensible because of the absence of demand and supply substitutability. *Id.* at 588-89 (Fortas, J., dissenting).

220. *Id.* at 578.

221. The dissent excoriated the majority for not undertaking a "market-by-market" analysis of competition, but recognized that "it might well be the case" that defendant had monopoly power in "a number of those local areas." *Id.* at 589-90 (Fortas, J., dissenting). However, the dissent also presented some evidence of differences in concentration across markets, which would recommend a market-by-market analysis. *Id.* at 592.

multiproduct sellers may have widely differing market shares for each product, and entry conditions likely vary across goods. Under these circumstances, cluster markets will misrepresent the nature of competition for many if not all the products clustered.[222] Thus, the "acute inpatient care" cluster market for hospital services defined in the recent FTC cases is not appropriate when hospitals have significant actual or potential competition from free standing surgical or emergency room facilities,[223] or when non-hospital providers of outpatient services could readily serve additional patients presently obtaining medical care from hospitals.[224] Similarly, commentators identify the rise of new financial institutions offering some but not all the services of commercial banks as a reason for replacing the cluster approach with the DOJ Guidelines substitutability methodology in defining product markets for bank services.[225]

When cluster markets are defined by applying this pragmatic rationale, the underlying principle behind market definition remains the substitutability analysis of the DOJ Guidelines. Hence, when new substitutes in demand or supply become available, the cluster market must give way to product markets defined by each service and its substitutes. In future hospital merger cases, in consequence, services for which hospitals face competition from non-hospital providers will likely merit separate product markets.[226] However, cluster markets may continue to be appropriate for those limited groups of services offered exclusively by hospitals,[227] especially when all hospitals offer them in similar shares, or when data limitations prevent market share computations by individual services.[228]

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222. Approaching the competitive analysis market by market may also suggest a curative divestiture that would not be apparent if competition is analyzed solely within the cluster. *See infra* note 341 and accompanying text (fix-it-first policy).

223. American Medical Int'l, 104 F.T.C. 1, 193 (1984).

224. Hospital Corp. of Am., 106 F.T.C. 361, 465 n.6 (1984), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 55 U.S.L.W. 3746 (1987). *Cf. id.* at 466 ("It may well be that in this case the proper product market excludes *all* outpatient care; perhaps outpatient care should be a separate relevant market or markets.").

225. *See* HORIZONTAL MERGERS, *supra* note 35, at 75 n.369 (collecting commentary questioning whether cluster markets remain appropriate in the financial services sector "after two decades of evolution").

226. *Cf.* Proger, *supra* note 153, at 619 ("[A]s more evidence becomes available about the emerging forms of new competition in health care and about their substitutability with hospital based services, relevant product market definition in hospital cases will take into account these new forms of competition.").

227. *Cf.* Proger, *supra* note 153, at 621 ("[T]here may be a core of inpatient tertiary hospital services for which there are no non-hospital substitutes. But not all services provided by a hospital are within that core.").

228. Even if large clusters continue to appear justified, it would be inappropriate to place secondary inpatient care services and tertiary inpatient care services in the same cluster because all hospitals do not offer both types of patient care in the same market shares. This is evident from the observations that the geographic markets for tertiary care services are generally much larger than the geographic markets for secondary care services, *see infra* note 237 and accompanying text, and that some hospitals offering secondary care services are unable to offer tertiary care.

4. *Geographic Market Definition.*

a. Application of the DOJ Guidelines to hospitals. The DOJ Guidelines approach to market definition identifies the geographic market in which a merging hospital producing a relevant product competes similarly to the way it defines the product market. Under the DOJ Guidelines, geographic market definition begins with the location of each merging hospital or each facility of a multi-hospital entity. The DOJ Guidelines ask whether a hypothetical monopolist of each relevant product at that location would find it profitable to raise the product's price significantly. If not, the location of a nearby actual or potential competitor in the product market is added to the proposed market and the question is repeated. Increasingly distant locations are incorporated in the provisional market until a geographic area is identified in which a hypothetical cartel selling a given relevant product would be able to raise price a significant amount without unprofitably losing many patients to actual or potential competitors outside the area. This region is the smallest relevant geographic market associated with a given relevant product market.[229] A different geographic market may correspond to each separate relevant product market.

As with product market definition, the DOJ Guidelines approach to geographic market definition takes into account both demand and supply substitutability.[230] A proposed geographic market is too small so long as a

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229. *See* 1984 MERGER GUIDELINES, *supra* note 51, § 2.3.

For antitrust analysis, the DOJ Guidelines market definition algorithm is superior to the geographic market definition methodology described in Garnick, Luft, Robinson & Tetreault, *Appropriate Measures of Hospital Market Areas*, 22 HEALTH SERVICES RES. 69, 73 (1987). These authors incorporate an outside hospital into their provisional geographic market so long as a significant fraction of patients substitute care at that more distant hospital for care at *any* single hospital within the proposed market. This algorithm will lead to markets that are broader than those of the DOJ Guidelines because this test is much easier for a distant hospital to meet than the DOJ Guidelines standard for inclusion. Under the DOJ Guidelines methodology, more distant hospitals are added to the proposed market only if the number of customers who would substitute *any* outside hospital, the marginal patients, is a large fraction of the patients collectively served by *all* the hospitals within the proposed market. Only then will distant hospitals collectively provide a competitive brake on cartel pricing within the provisional geographic market, so only then must one or more distant hospitals be added to the relevant market. Under the Garnick et al. methodology, the proposed market will instead be expanded if the number of marginal patients is a large fraction of the patients served by any *one* of the hospitals within the proposed market, namely the hospital from which in large part they switch. In consequence, some hospitals included in the resulting market could be excluded without jeopardizing a cartel's ability to collude successfully.

The Guidelines algorithm is also superior for antitrust analysis to a second methodology proposed by these authors that identifies the competitors of a given hospital as all hospitals within an arbitrary 5 or 15 mile radius around it. Garnick, Luft, Robinson & Tetreault, *supra*, at 69. This approach ignores physical features of geography, population distributions, and other factors affecting patient substitution patterns. Hence the resulting geographic markets may bear no relation to areas within which collusive arrangements might occur.

230. The one geographic cluster market defined by the Supreme Court, in *Grinnell*, 384 U.S. 521, can be rationalized on pragmatic grounds consistent with the substitutability concerns of the DOJ Guidelines. *See supra* notes 214-20 and accompanying text. Complementarity is not an issue for geographic market definition, unlike product market definition. Under a supply complementarity rationale for product cluster markets, a geographic cluster market could in principle be defined for multi-hospital chains if scope economies across multi-plant firms are substantial. Such a market would be analogous to product cluster markets based on scope economies. However, geographic

substantial fraction of patients would purchase hospital services from firms at locations outside the initially defined area if prices rose slightly at nearby hospitals. The market need no longer expand when a sufficient number of patients would pay a high collusive price rather than bear the costs of traveling for health care to locations outside the boundaries of the hypothetical cartel,[231] for then a cartel within the region would be profitable. In general, the larger the geographic region, the fewer the number of customers who will consider locations outside the region where the relevant product is sold to be demand substitutes for locations within the region. As a result, the larger the region, the less the threat that new competition located outside the region will compete away the monopoly profits of the hypothetical cartel.

Perhaps the most important factor limiting the geographic scope of markets for the services offered by hospitals is the unwillingness of patients to patronize hospitals far from their residences.[232] Often, the longer the distance a patient must travel, the farther his friends and relatives must also travel to visit him and the farther his physicians must travel. Further, long distances between home and hospital are disfavored because a patient may be forced by physician affiliations to switch doctors if he wishes to select a distant hospital.[233] Indeed, to the extent the physician is the patient's agent in advising on health care choices, physician preferences and affiliation are likely

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scope economies fail to approach in magnitude the scope economies at issue in product markets, and in any event complementarity is an unsatisfactory basis for market definition.

231. It is not possible to quantify the critical fraction of patients unwilling to switch locations without knowing the demand curves facing the two groups and the cost function for the hypothetical cartel. Thus, survey data on the propensity of customers to switch hospitals as relative prices change can be suggestive but not conclusive concerning the extent of geographic markets. *Cf. supra* note 142 and accompanying text (comparable issue for product market definition); Baker & Bresnahan, *The Gains from Merger or Collusion in Product-Differentiated Industries*, 33 J. INDUS. ECON. 427 (1985) (market power of sellers in product differentiated industries depends upon fraction of inframarginal customers).

Further, surveys describing pre-merger behavior can be misleading as evidence of demand substitution predilections. If the market is competitive prior to the merger, few patients will have reason to travel to distant locations, so surveys of actual substitution patterns will show patient substitution to be low. Yet many of these patients would be willing to travel to avoid 5% price increases by nearby hospitals. *See supra* note 134 (*Cellophane* trap); *infra* notes 241-42 and accompanying text (hospital patient-flow data).

232. McGuirk & Porell, *Spatial Patterns of Hospital Utilization: The Impact of Distance and Time*, 21 INQUIRY 84, 86 (1984).

233. A patient is likely to select a specialist in his community, if one acceptable to his primary care physician is available, for similar reasons of minimizing transportation costs. Through this mechanism, patient hospital preferences may be taken into account in choice of physician. McGuirk & Porell, *supra* note 232, at 86. Similarly, if HMO's have limited hospital affiliations, a patient will factor both travel time and insurance premium into his selection of health care provider, and thus, choice of hospital.

Further, if some hospitals raise the price of a hospital service, doctors may alter their hospital affiliations, admitting patients to lower priced hospitals (or employing ambulatory care clinics) instead of hospitals whose prices have increased. Indeed, doctors can be expected to consider the price of hospital services in making recommendations to patients, to the extent hospitals and doctors compete for patient rents and joint (health care) demand is elastic. *Cf. supra* note 199.

to count strongly in the patient's decision.[234] Not surprisingly, doctors prefer to obtain affiliations and admit patients into hospitals located near the doctor's office.[235] Similarly, third party payers (health insurers) may create financial incentives for patients to favor hospitals in a narrow geographic area, thereby limiting the scope of geographic markets.[236]

Patient substitution preferences vary across hospital services. To obtain some hospital services, primarily the specialized services offered by "tertiary" care providers, many patients will travel long distances. Therefore, the geographic markets for such services are likely to be larger than the geographic markets for primary and secondary care services.[237]

b. Patient flow statistics. Geographic market definition in the extant hospital merger opinions has been based primarily upon patient flow statistics, the most readily available information on geographic competition. This methodology applies in the hospital context the Elzinga-Hogarty approach to geographic market definition, under which geographic markets are identified based on shipment patterns of the products at issue.[238] Under this methodology, the geographic market is expanded until two tests are simultaneously satisfied: The firms within it must account for most of the shipment inside the candidate region, and those firms must do most of their business inside the candidate region. In the hospital industry, patient flow is the analogue of shipments. Thus a geographic market for a given product

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234. Hospital Corp. of Am., 106 F.T.C. 361, 467 (1985), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 55 U.S.L.W. 3746 (1987); American Medical Int'l, 104 F.T.C. 1, 197 (1984); McGuirk & Porell, *supra* note 232, at 84, 86. The Department of Justice relied on this observation in defining the geographic market it alleged in a recently litigated hospital merger case. It pointed to the narrow geographic spread of physician privileges and the resulting patient admitting practices as evidence for a narrow geographic market. *Rockford*, No. 88-C-20186, slip op. at 28-29 (N.D. Ill. Feb. 23, 1989), *appeal filed*.

235. *See* Garnick, Luft, Robinson & Tetreault, *supra* note 229, at 69, 72.

236. *See Rockford*, No. 88-C-20186, slip op. at 29-30 (N.D. Ill. Feb. 23, 1989), *appeal filed*.

237. Rule, *supra* note 115, at 127. *See Hospital Corp. of Am.*, 106 F.T.C. at 468. This observation creates a problem for geographic market definition if the product market is defined based upon the cluster of services approach. In *Hospital Corp. of Am.*, the FTC chose to ignore the broad tertiary care service areas, and defined geographic markets based primarily on patient flows for secondary care. This was probably the best choice given that the cluster approach to product definition was employed, because the Commission's primary competitive concern was with the potential for collusion among secondary care providers. However, if individual secondary and tertiary care services form separate product markets, each can have a different geographic market. *See supra* note 228.

238. Elzinga & Hogarty, *The Problem of Geographic Market Delineation in Antimerger Suits*, 18 ANTITRUST BULL. 45 (1973) [hereinafter Elzinga & Hogarty, *Antimerger Suits*]; Elzinga & Hogarty, *The Problem of Geographic Market Delineation Revisited: The Case of Coal*, 23 ANTITRUST BULL. 1 (1978) [hereinafter Elzinga & Hogarty, *The Case of Coal*]; *see* HORIZONTAL MERGERS, *supra* note 35, at 96-101.

A related methodology from the health policy literature defines hospital market areas for hospital planning purposes based on patient flow, whether determined from hospital admissions and discharges, *see* Garnick, Luft, Robinson & Tetreault, *supra* note 229, at 69, 73, or vital statistics mortality data, *see* Carpenter & Plessas, *Estimating Hospital Service Areas Using Mortality Statistics*, 20 HEALTH SERVICES RES. 19 (1985). This literature attempts to explain hospital admissions by distance from the patient's community, controlling for demographic characteristics, medical care requirements, and the distance to alternative hospitals. McGuirk & Porell, *supra* note 232, at 84, 85-86.

market is identified when the hospitals in the region serve most of the patients using the services in the product market who originate in that region, and when most of the hospital patients seeking the services in the product market come from that region.[239]

Several difficulties with the Elzinga-Hogarty approach have been identified. Geographic market definition based on actual patterns of customer association with firms can either be underinclusive or overinclusive relative to the regions that the DOJ Guidelines would delineate.[240] On the one hand, defining markets for hospital services based on patient flow can understate the geographic regions relevant for antitrust merger analysis. This difficulty arises because the hospital choices patients actually make are based on current prices. Yet, if a hospital cartel consisting only of hospitals actually patronized were to increase price, enough patients may shift to hospitals slightly farther away, not currently patronized, to defeat the price increase.[241] In short, potential competitors must be included in the relevant geographic market for merger analysis but these firms will not be identified by patient flow data.[242]

On the other hand, markets based on patients flows may overstate the geographic markets relevant to antitrust merger analysis when the product market includes hospital services that are not perfect substitutes. In this case, those patients with strong preferences for obtaining services at distant hospitals—such as many tertiary care patients or patients desiring higher quality care than is available locally—will travel there, even if most patients are unwilling to travel.[243] A hospital market that includes these distant institutions will therefore encompass a region larger than the smallest region

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239. Technically, the market is expanded until the LIFO (little in from outside) and LOFI (little out from inside) statistics are small. To apply this test to hospital markets, it is necessary to calculate the fraction of hospital patients from a particular region who are admitted to hospitals outside the region (to test whether the LOFI requirement holds) and the fraction of patients admitted to hospitals inside the region who originate outside the area (to see if LIFO holds). *See Hospital Corp. of Am.*, 106 F.T.C. at 468 n.7. Elzinga and Hogarty have variously argued that these tests are met for a proposed area when the LIFO and LOFI fractions fall below 25%, Elzinga & Hogarty, *Antimerger Suits*, *supra* note 238, at 45, 74-75, and when they fall below 10%, Elzinga & Hogarty, *The Case of Coal*, *supra* note 238, at 1, 2.

240. Werden, *Market Delineation and the Justice Department's Merger Guidelines*, 1983 DUKE L.J. 514, 576 [hereinafter Werden, *Market Delineation*]; Werden, *The Use and Misuse of Shipments Data in Defining Geographic Markets*, 26 ANTITRUST BULL. 719 (1981) [hereinafter Werden, *Shipments Data*]; Scheffman & Spiller, *Geographic Market Definition Under the U.S. Department of Justice Merger Guidelines*, 30 J.L. & ECON. 123, 129 (1987).

241. Similarly, hospitals in the neighborhood of colluding hospitals yet not offering the services defined by the relevant product market may respond to the higher cartel price by introducing new services, and thereby inducing patients to depart from their current hospital choices.

242. One recent study in the health policy literature recognizes this antitrust criticism of the patient origin approach. "One limitation of a direct measurement of demand for hospital services is inclusion only of institutions that currently provide care. For many issues, it is important also to include potential competitors—that is, hospitals that could obtain the equipment and staff to begin to compete for certain sets of patients (for example, by adding a heart surgery program)." Garnick, Luft, Robinson & Tetreault, *supra* note 229, at 69, 71.

243. Werden, *The Limited Relevance of Patient Migration Data in Market Delineation for Hospital Merger Cases*, J. HEALTH ECON. (forthcoming) [hereinafter Werden, *Patient Migration*]; Ordover & Willig, *The 1982 Department of Justice Merger Guidelines: An Economic Assessment*, 71 CALIF. L. REV. 535, 551-52

in which a hospital cartel could successfully collude. This difficulty may be particularly serious when product markets are defined based on the cluster of services methodology, rather than when product markets are more finely partitioned based on the DOJ Guidelines methodology.[244]

Once these criticisms of geographic market definition based on patient flow are recognized, market boundaries can readily be adjusted to account for them. The first adjustment avoids underinclusion. Hospitals outside the region of current patient flow need not be considered potential competitors and included in a broadened geographic market if evidence of patient travel preferences, obtained independently from patient flow statistics,[245] establishes that the outside hospitals would not be turned to for medical care in the event that the currently patronized hospitals were to collude and raise prices. Because it is typically costly for patients to patronize distant hospitals, however, it will rarely be necessary to expand the market beyond the area of current patient choice.

The second adjustment avoids overinclusion. Distant hospitals can be excluded from the market even if a fraction of patients from the market obtain care there, so long as those patients traveling long distances obtain qualitatively different services from the services available nearby. Thus, if patients leave the region only for specialized treatment at tertiary care hospitals, those facilities and other hospitals equally distant can be excluded from the geographic market if the product market involves less specialized services.[246] With these two adjustments, patient flow statistics will allow the identification of the relevant geographic market as defined by the DOJ Guidelines.[247]

(1983); Werden, *Market Delineation, supra* note 240, at 514, 576; Werden, *Shipments Data, supra* note 240, at 719, 725-26.

Patient origin data may also overstate the size of the relevant geographic market if the more distant hospitals operate at full capacity. Capacity constrained hospitals will be unable to expand output to compete away the price increase created by the other hospitals in the area with excess capacity, so may be excluded from a cartel without jeopardizing collusive profits.

Further, the ability of a monopolist to practice geographic price discrimination can lead the Elzinga-Hogarty approach to underestimate the geographic market because there will be "significant exports of a product from an area even though that product and area are a market under the Guidelines." Werden, *Market Delineation, supra* note 240, at 514, 576.

244. *See infra* note 258 and accompanying text (adjustment in *Hospital Corp. of Am.* for this problem).

245. *See infra* note 249 and accompanying text (adjustment in *American Medical Int'l* for this problem).

246. Similarly, patient inmigration from surrounding regions to hospitals in a city will often substantially exceed patient outmigration from the city to more distant hospitals because of the higher perceived quality of city hospitals. Werden, *Patient Migration, supra* note 243. Under such circumstances, geographic market definition can be based exclusively on outmigration data to avoid overinclusion. *See infra* note 262. Alternatively, one study employing patient flow data attempts to avoid overinclusion by excluding patient cases with high DRG weights, thought to represent those patients requiring the most specialized care. Morrisey, Sloan & Valvona, *Defining Geographic Markets for Hospital Care*, LAW & CONTEMP. PROBS., Spring, 1988, at 165, 179-80, 185-86.

247. Alternatively, one might identify geographic markets pursuant to the DOJ Guidelines methodology by estimating residual demand curves. Scheffman & Spiller, *supra* note 141, at 123. However, the necessary data may be unavailable.

In its recent hospital merger decisions, the Federal Trade Commission used patient flow statistics to define the geographic markets, while making adjustments in order to avoid the overinclusion and underinclusion problems. In both *American Medical International* and *Hospital Corp. of America,* the Commission defined geographic markets for its acute inpatient care product market clusters. The geographic market in *American Medical International,* the California region comprised of San Luis Obispo County and the City of San Luis Obispo, was defined primarily based on statistics describing patient "in flow" and patient "outmigration."[248] However, the FTC confirmed that this market did not exclude more distant potential competitors by observing that its market definition was also supported by "geographic barriers (patient convenience and limited mobility, location of admitting physician)."[249] The resulting market excluded a hospital located twenty-five miles from the city of San Luis Obispo.[250]

In *Hospital Corp. of America,* the Commission recognized that a geographic market must be expanded beyond the region of those hospitals currently selected by patients to include significant potential competitors.[251] However, the FTC was forced to adopt the Chattanooga, Tennessee, urban area as its geographic market because the region was accepted by the parties to the case and there was insufficient factual evidence from which to define the extent of a broader market.[252] The Commission nevertheless recognized the need to avoid overinclusion in its market definition by ignoring distant patient travel to obtain specialized, tertiary care when it interpreted patient flows.[253]

A recent federal district court decision in a hospital merger case relied extensively upon patient flow statistics to define the geographic market as a three-county area (plus small parts of two other counties) around Rockford, Illinois.[254] The court recognized that geographic markets for tertiary services

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248. *American Medical Int'l,* 104 F.T.C. at 195-96.

249. *Id.* at 196. The Commission also argued that its geographic market definition was supported by industry recognition of competitive regions. *See id.* at 196, 197.

250. *Id.* at 197.

251. *Hospital Corp. of Am.,* 106 F.T.C. at 466, 471-72.

252. *Id.* at 472. The accepted urban area is comprised of one Tennessee county and three adjoining Georgia counties. The Commission rejected complaint counsel's proposed broader market on the ground that there was no credible basis for adding the regions proposed, in which many of the hospitals were managed by respondent, without adding other areas equally distant from Chattanooga, in which other parties owned and managed the hospitals. *Id.* at 470. This market excluded a number of hospitals located within a 45-minute driving radius of Chattanooga. *See id.* at 463-64.

253. *Id.* at 468. *See* United States v. Carilion Health System, 707 F. Supp. 840, 844, 848 (W.D. Va. 1989) (larger geographic market for tertiary care than for primary and secondary care services), *appeal filed,* No. 89-2625 (4th Cir. 1989); *cf. American Medical International,* 104 F.T.C. at 196-97 (patient flow statistics vary with the service rendered).

254. United States v. Rockford Memorial Corp., No. 88-C-20186, slip op. at 32-68 (N.D. Ill. Feb. 23, 1989), *appeal filed.* The court defined a geographic market such that "the defendants compete with four other hospitals for the group of patients representing about 90% of the admissions of the defendants." *Id.* at 67. Because there was little difference in the LIFO and LOFI statistics across alternative geographic market proposals, *id.* at 54-55, the court chose the smallest area satisfying the Elzinga-Hogarty test. *Id.* at 56. Moreover, there was little variation between patient flow statistics computed from admissions data and statistics computed from discharges data. *Id.* at 47. *Cf. Carilion,* 707 F. Supp. 840, 848 (W.D. Va. 1989) (broadening market beyond the immediate vicinity of

were broader than those for primary and secondary care, so it ignored competition from tertiary care providers.[255] Similarly, the court discounted patient travel from outside the metropolitan area because a majority of the distant patients were attracted by the opportunity to obtain specialized service unavailable in their local hospitals.[256]

Older hospital merger decisions, written prior to the promulgation of the 1982 Guidelines,[257] have relied on the political boundaries of Health Service Areas as a basis for geographic market definition.[258] This approach is unlikely to be employed today, except insofar as patient flow statistics may be kept in terms of these regions, because these areas bear no apparent relation to competitive conditions or the substitutability considerations of the DOJ Guidelines.[259]

Even taking into account the potential competition from hospitals not currently serving the patients of a local area, courts have generally concluded that geographic markets for most hospital services are small. For most hospital services, courts typically delineate markets no larger than a metropolitan area or the county surrounding a city, except for the specialized care available at teaching hospitals, for which geographic markets are thought to be broader.[260] The geographic market was the San Luis Obispo area in *American Medical International,* the Chattanooga area in *Hospital Corp. of America,* and the New Orleans area in *Hospital Affiliates.*[261] Moreover, a recent systematic study of geographic markets is consistent with the view that the metropolitan area should be the size of a typical market for secondary care

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Roanoke, Virginia, to include surrounding counties based on patient flow statistics), *appeal filed*, No. 89-2625 (4th Cir. 1989).

255. *Rockford,* No. 88-C-20186, slip. op. at 62-63, *appeal filed.*

256. *Id.* at 33-38, 65. Patient inmigration statistics should also be discounted if distant patients are attracted by the opportunity to obtain better care than their local hospitals would provide. Werden, *Patient Migration, supra* note 243.

257. 1982 MERGER GUIDELINES, *supra* note 51.

258. United States v. Hospital Affiliates Int'l, Inc., 1980-81 Trade Cas. (CCH) ¶ 63,721, at 77,853 (E.D. La. 1980) (geographic market of New Orleans and surrounding areas); American Medicorp. v. Humana, Inc., 445 F. Supp. 589, 604 (E.D. Pa. 1977). However, the court in *Hospital Affiliates* supported its decision based upon the location of most psychiatrist's offices and patient flow statistics. *Hospital Affiliates,* at 77,852-53.

259. *See Hospital Corp. of Am.,* 106 F.T.C. at 471; *but see* Schramm & Renn, *Hospital Mergers, Market Concentration and the Herfindahl-Hisrchman Index,* 33 EMORY L.J. 869, 873 (1984).

260. *See* Rule, *supra* note 115, at 127 ("In most cases the geographic market [for hospital services] will be highly localized."); *cf.* United States v. National Medical Enter., 1987-1 Trade Cas. (CCH) ¶ 67,640 (E.D. Cal. 1987) (Modesto area geographic market, roughly one county) (consent judgement). Courts defining geographic markets in non-merger antitrust cases involving hospital services have defined markets of similar small size. Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984) (New Orleans metropolitan area); Seidenstein v. National Medical Enter., 769 F.2d 1100, 1106 n.1 (5th Cir. 1985) (city of El Paso); Weiss v. York Hosp., 745 F.2d 786, 825 (3d Cir. 1984) (most of York County, Pennsylvania), *cert. denied,* 470 U.S. 1060 (1985); *but see* Robinson v. Magovern, 521 F. Supp. 842, 881 (W.D. Pa. 1981) (16-county geographic market in three states surrounding Pittsburgh), *aff'd,* 688 F.2d 824 (2d Cir.), *cert. denied,* 459 U.S. 971 (1982).

261. *See also Rockford,* No. 88-C-20186, slip op. at 32-68 (N.D. Ill. Feb. 23, 1989) (three-county area around Rockford, Illinois with roughly a 30-mile radius), *appeal filed*; *but cf. Carilion,* 707 F. Supp. 840, 847-48 (W.D. Va. 1989) (19-county market around Roanoke, Virginia, for primary and secondary services with roughly a 50-mile radius; much larger market for tertiary care services), *appeal filed*, No. 89-2625 (4th Cir. 1989).

services in urban regions, although its authors interpret the results as demonstrating that geographic markets are broader than Standard Metropolitan Statistical Areas (SMSA's).[262] This study also suggests that the typical rural market might have a radius no larger than fifty miles.[263]

The delineation of geographic markets is likely to be contested because the hospital industry is often highly concentrated within SMSA's, while not concentrated within broader regions.[264] In consequence, geographic market definition can be expected to determine the outcome of many hospital merger cases.

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262. Morrisey, Sloan & Valvona, *supra* note 246, at 175-88. This study of hospital concentration in Birmingham, Omaha, Philadelphia, and Phoenix found that residents of each SMSA seldom left their metropolitan area for inpatient care. In three of these cities many treated cases came from outside the SMSA, so a strict application of the Elzinga-Hogarty approach to geographic market definition would require expanding the market beyond the SMSA. (For Philadephia, patient inflows were more limited.)

However, some urban hospitals likely provide better care than most or all rural hospitals in these regions, and thus likely offer a superior product. For example, of the 44 hospitals in a broadly defined Washington, D.C., metropolitan area, eleven were rated of superior quality by one consumer group (and five could not be rated). *Hospitals*, 6 WASHINGTON CONSUMERS' CHECKBOOK 13, 20-21 (1987). All but one of the 11 high quality hospitals were within Washington's city limits or its close-in suburbs. (The exception, Johns Hopkins, is a tertiary care provider in Baltimore.) Five out of 14 hospitals within city limits were rated top quality, while only two hospitals were found high quality of the 11 rated for the Virginia suburbs. This evidence suggests that even if the flow of rural patients into urban hospitals is large, these patients are among those likely to have the most inelastic demand for urban care. *Cf. Rockford*, No. 88-C-20186, slip. op. at A30 (N.D. Ill. Feb. 23, 1989) (finding of fact 120) (most patients who travel to Rockford, Illinois, hospitals from out of town come "to receive services that are not available at the hospitals closest to them" or "because they believe that the Rockford hospitals provide higher quality."), *appeal filed*.

Under these circumstances, geographic markets for urban hospitals will be more narrow than the area from which patients are drawn. *See generally* Werden, *Patient Migration*, *supra* note 243. Hence, the more narrow area of patient outflows is likely to provide a better indicator of geographic market bounds than the area of patient inflow. *But cf. Rockford*, No. 88-C-20186, slip. op. at 54-55 (N.D. Ill. Feb. 23, 1989) (LIFO statistic is greater than LOFI in narrow geographic market), *appeal filed*. Although the authors attempt to control for this difficulty with a measure of case complexity, their measure at best controls for whether rural patients are obtaining specialized tertiary care services in urban areas, and not for the relative quality of urban versus rural hospital care.

263. Morissey, Sloan & Valvona, *supra* note 246, at 190-91. Based on evidence from patient flows in rural Nebraska counties, the authors conclude that typical markets extend six counties, generally reaching to include the nearest urban area. As the typical Nebraska county with one or two hospitals has no more than 1000 square miles, U.S. DEP'T OF COMMERCE, BUREAU OF THE CENSUS, COUNTY AND CITY DATA BOOK 340, 342, 354, 356 (1983), a four- to nine-county region might have a radius of 35 to 55 miles. If local hospitals do not offer close substitutes for more specialized care available in urban areas, then these aggregate statistics suggest that rural markets may be smaller than six counties for primary care.

Similarly sized markets defined by patient flows were found in a recent study of hospital markets in the six New England states. Wennberg & Gittelson, *Variations in Medical Care among Small Areas*, 246 SCI. AM., Apr. 1982, at 120. Wennberg and Gittelson identify 193 hospitals areas in these states as regions "whose residents were most likely to go to a particular community to be treated." The typical market area defined for Vermont, a largely rural state, has a radius of less than 50 miles. A companion study of Iowa identified over 100 markets. Wennberg, *Dealing With Medical Practice Variations: A Proposal for Action*, HEALTH AFFS., Summer 1984, at 6, 16.

264. *See infra* note 285 and accompanying text. *Cf.* Werden, *Patient Migration*, *supra* note 243, at note 13 (hospital mergers in small cities far from large cities raise the greatest competitive concern).

C. Concentration Measures

Courts and antitrust enforcers compute market shares in order to determine concentration and the increase in concentration resulting from a merger in a relevant market. When concentration rises, collusion becomes more likely because the fewer the number of firms, the easier it is for them to coordinate a reduction in industry output and to monitor and police cheating.[265] Thus, a high level of concentration creates a rebuttable presumption of anticompetitive effect.[266]

The available data often do not permit government enforcers and courts to choose the units in which concentration is measured.[267] When a choice of units is possible, it is usually between an output measure and a capacity measure.[268] For example, in an acute inpatient hospital care product cluster market, the number of hospital beds available is a measure of hospital capacity while the number of patient days or total patient revenues measures hospital output.[269]

The DOJ Guidelines suggest that when a choice can be made, output measure should be used to compute concentration for markets involving differentiated products, while capacity measured should be employed to compute concentration for markets involving homogeneous goods.[270] In the recent hospital merger decisions, however, neither the Federal Trade Commission nor the courts have discovered significant practical difference among the various measures for determing the competitive significance of hospitals within acute care inpatient cluster markets.[271] If instead individual services constitute product markets, it is likely that the number of patients, an

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265. *See supra* notes 121-25 and accompanying text. Adjustments to the inferences of market power derived from market shares are considered *infra* notes 286-336 and accompanying text (facilitating factors).

266. United States v. General Dynamics Corp., 415 U.S. 486, 498 (1974) (presumption rebutted by non-market share evidence); United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 363 (1963).

267. 1984 MERGER GUIDELINES, *supra* note 51, § 2.4.

268. *See generally* HORIZONTAL MERGERS, *supra* note 35, at 153-161.

269. Hospital Corp. of Am., 106 F.T.C. 361, 487 (1985), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 55 U.S.L.W. 3746 (1987).

270. 1984 MERGER GUIDELINES, *supra* note 51, § 2.4. Firm capacity measures the competitive significance of producers of homogeneous goods because each firm can readily expand production to the limits of capacity. However, when goods are differentiated, firms may be unable to increase sales even if additional units can be produced at low marginal cost. In this case, firm output rather than capacity is likely the better measure of competitive significance. This adjustment is rough at best. Other ways of taking into account the significance of product differentiation are discussed *supra* notes 133-35 and accompanying text (direct competition). The role of excess capacity as a factor frustrating collusion is considered *infra* note 319 and accompanying text, and its role as a barrier to entry is considered *infra* note 302 and accompanying text.

271. *Hospital Corp. of Am.*, 106 F.T.C. at 487 (beds, inpatient days, and patient revenues); American Medical Int'l, 104 F.T.C. 1, 201 & n.11 (1984) (inpatient days and revenues); United States v. Hospital Affiliates Int'l, Inc., 1980-81 Trade Cas. (CCH) ¶ 63,721 (E.D. La. 1981) (beds and patient days); *Rockford*, No. 88-C-20186, slip op. at 72-73 (N.D. Ill. Feb. 23, 1989) (beds, inpatient admissions, and inpatient days), *appeal filed*.

output measure, will be the only information available from which to estimate market shares.[272]

Hospital management contracts raise a question for the calculation of market shares: Should separately owned hospitals managed by the same firm be aggregated in the market share calculation? In *Hospital Corp. of America,* the FTC treated commonly managed hospitals as an aggregate entity in determining firm market shares. The Commission recognized that commonly managed firms have a reduced incentive to compete independently and thus have an increased incentive to coordinate output reductions and price increases.[273] This argument would seem equally applicable to contracts among nonprofit hospitals.[274]

The DOJ Guidelines measure concentration in the relevant market with the Herfindahl-Hirschman Index (HHI), derived by summing the square of firm market shares.[275] The Department of Justice has attempted to create bright line standards to identify concentration levels and increases which create a dangerous likelihood of collusion. In particular, the Justice Department is likely to challenge acquisitions which lead to post-merger HHI's above 1800 if the HHI increase exceeds 50, or acquisitions which lead to post-merger HHI's above 1000 if the HHI increase exceeds 100.[276]

Courts use similar standards to evaluate the anticompetitive significance of market concentration, whether those standards are expressed in terms of HHI's or four-firm concentration ratios.[277] In *American Medical International*

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272. *See* Robinson v. Magovern, 521 F. Supp. 842, 884-86 (W.D. Pa. 1981) (market shares based on number of adult open heart surgery patients) (monopolization claim), *aff'd,* 688 F.2d 824 (2d Cir.), *cert. denied,* 459 U.S. 971 (1982).

273. *Hospital Corp. of Am.,* 106 F.T.C. at 476-78 & 477 n.13. After finding a violation of the antitrust laws in this case, the FTC ordered a curative divestiture of a hospital management contract as well as the divestiture of two hospitals. *Id.* at 521. *See* Bresnahan & Salop, *Quantifying the Competitive Effects of Production Joint Ventures,* 4 INT'L J. INDUS. ORG. 155 (1986); *cf. Rockford,* No. 88-C-20186, slip op. at 73 (N.D. Ill. Feb. 23, 1989) (calculating concentration both taking into account and not taking into account affiliation by management contract and through common ownership by a religious order), *appeal filed.*

274. Nonprofit firms with common managements are unlikely to have different objectives. *See supra* note 96 and accompanying text.

275. 1984 MERGER GUIDELINES, *supra* note 51, § 3.1.

276. *Id.* § 3.11. However, in the second term of the Reagan Administration the Department of Justice has effectively raised the 1000 threshold to at least 1600. Baxter, *Counseling Your Client on Monopolization, Mergers and Joint Ventures,* 55 ANTITRUST L.J. 321, 328 (1986); *cf.* Krattenmatter & Pitofsky, *Antitrust Merger Policy and the Reagan Administration,* 33 ANTITRUST BULL. 211, 226-27 (1988).

Acquisitons are also likely to be challenged if they satisfy the "leading firm proviso" of the DOJ Guidelines, which frowns upon the acquisition of a 1% competitor by any firm with a 35% or greater market share. 1984 MERGER GUIDELINES, *supra* note 51, § 3.12.

The empirical evidence connecting concentration with collusion is ambiguous, and the critical concentration levels selected for increased antitrust scrutiny appear influenced at least as much by precedent and a desire for a bright line standard as by economic learning. *Cf.* HORIZONTAL MERGERS, *supra* note 35, at 182-89 (reviewing economic studies). However, it is difficult to suggest any generally applicable superior alternative to relying on concentration as an indicator of collusive potential, and the critical concentration levels currently employed are not implausible. *But cf.* Bresnahan, *supra* note 47 (surveying new empirical techniques for measuring market power).

277. The Federal Trade Commission measured concentration in *Hospital Corp. of Am.* using three statistics: the two-firm concentration ratio, the four-firm concentration ratio, and the HHI. *Hospital Corp. of Am.,* 106 F.T.C. at 487-89. In most cases, all measures of concentration will lead to similar

the Federal Trade Commission proscribed a merger which raised the HHI from 3818 to 6025.[278] The FTC found a violation of Clayton Act section 7 when the HHI rose approximately 400 points to exceed 2400 in the acquisitions considered in *Hospital Corp. of America.*[279] A federal court has prohibited a hospital merger that raised the HHI from the 2,500 to 3,000 range to the 4,600 to 5,600 range.[280]

By these standards, hospital markets generally appear concentrated if the typical geographic market is a metropolitan area.[281] One study computed HHI statistics by hospital diagnosis,[282] for the Columbia, South Carolina, metropolitan area (SMSA), and for Orangeburg County, a rural region with one general hospital.[283] In both cases, HHI's typically exceeded 2000.[284] Another study computed concentration levels for 336 urban areas. It found that the vast majority of HHI statistics exceeded 1800 if the geographic markets were metropolitan areas.[285] In combination with the high reported concentration levels in the extant sample of hospital merger antitrust cases, these results suggest that many if not most hospital mergers will be subject to a high level of scrutiny by the courts and antitrust enforcers.

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conclusions for a given relevant market. *See* HORIZONTAL MERGERS, *supra* note 35, at 181-82; *see generally id.* at 175-201.

278. *American Medical Int'l,* 104 F.T.C. at 201. In a narrower geographic market, the HHI increased from 4,370 to 7,775. With market shares based on revenues rather than inpatient days, the increase in the HHI was from 3,518 to 5,507 in one geographic market, and from 3,996 to 7,097 in the other. *Id.* at 201 n.12.

279. *Hospital Corp. of Am.,* 106 F.T.C. at 487-88.

280. *Rockford,* No. 88-C-20186, slip op. at 73 (N.D. Ill. Feb. 23, 1989), *appeal filed.*

281. *Cf.* Rule, *supra* note 105, at 127-28 (hospital markets in towns and smaller cities typically have HHI's exceeding 1800, while HHI's below 1800 may be observed in large metropolitan areas). A similar conclusion arises from reviewing market concentration in non-merger antitrust cases involving hospitals. In Robinson v. Magovern, 521 F. Supp. 842, 878 (W.D. Pa. 1981) (refusal to deal and monopolization claims), *aff'd,* 688 F.2d 824 (2d Cir.), *cert. denied,* 459 U.S. 971 (1982), the court found that six hospitals offered adult heart surgery in the Pittsburgh area. The HHI for this market must equal or exceed 1667, as that is the HHI for six identically sized firms. Five hospitals offered invasive cardiology services in the El Paso market, implying an HHI of at least 2000. Seidenstein v. Nat'l Medical Enter., Inc., 769 F.2d 1100, 1106 (5th Cir. 1985) (monopolization claim). However, over 20 hospitals in the New Orleans area offer the anesthesiology services at issue in Jefferson Parish Hosp. Dist. v. Hyde, 466 U.S. 2, 7 (1984).

282. Over 20 diagnoses were studied, including obstetrics and surgical procedures for opthalmology, vascular/cardiac, hernia repair, orthopedic, plastic surgery, urological, nervous system, and procto-surgery.

283. Wilder & Jacobs, *Antitrust Considerations for Hospital Mergers: Market Definition and Market Concentration,* 7 ADVANCES IN HEALTH ECON. 245 (1987).

284. This study should be treated with caution, however. It is difficult to be confident that these statistics correctly represent the concentration ratios that will be found in markets for most hospital services. It is also uncertain whether these regions are representative of hospital concentration in most localities; whether the areas studied constitute geographic markets; and whether hospitals lack production flexibility among the various procedures (so that each diagnosis identifies a product market). *See* Frech, *Comments on Antitrust Issues,* 7 ADVANCES IN HEALTH ECON. AND HEALTH SERVICES RES. 263, 266 (1987).

285. Morissey, Sloan & Valvona, *supra* note 246, at 186. However, in three out of four SMSA's chosen for closer study, the HHI fell below 1800 if the geographic market was broadened beyond the metropolitan area. *Id.* The appropriate geographic market is discussed *supra* note 262.

D. Factors Facilitating or Frustrating Collusion

In the DOJ Guidelines merger analysis, the inference about likelihood of collusion in the relevant market obtained from concentration statistics is adjusted based on an examination of entry conditions and other factors affecting the ability of the firms to collude. These factors may be sufficient to rebut the inference of anticompetitive effect created by a high degree of concentration.[286]

1. *Entry Conditions*[287]

Along with the courts,[288] the DOJ Guidelines recognize that no proposed market has antitrust significance if entry is easy.[289] In a market without entry barriers,[290] any price rise undertaken by a firm or group of firms would immediately be competed away by a new entrant into the industry. Even if limited entry difficulties exist, the threat of entry may nevertheless be

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286. United States v. General Dynamics Corp., 415 U.S. 486, 498 (1974) (concentration creates a rebuttable presumption of anticompetitive effect).

287. The term "entry" in the DOJ Guidelines refers to one form of new competition that may discipline incumbent firms from exercising market power. Other forms of new competition are also recognized in antitrust analysis. Production flexibility (supply substitutabilty) is taken into account in market definition: The relevant market is broadened when production substitution is likely to occur within one year. 1984 MERGER GUIDELINES, *supra* note 51, § 2.21. Production substitution requiring significant modification of existing facilities, so likely to occur within two years, is treated as entry along with the construction of new facilities. *Id.* § 3.3. The ability of incumbent firms to expand at low marginal cost is taken into account in defining market shares, *see id.* § 2.4, and for small incumbent firms is considered an independent factor frustrating collusion, *id.* § 3.43.

288. United States v. Waste Management, Inc., 743 F.2d 976 (2d Cir. 1984); Echlin Mfg. Co., 105 F.T.C. 410 (1985); United States v. Calmar, Inc., 612 F. Supp. 1298 (D.N.J. 1985).

289. 1984 MERGER GUIDELINES, *supra* note 51, § 3.3. The Justice Department may require that potential defendants satisfy a higher evidentiary burden in demonstrating ease of entry than the courts require. *Compare* Rule, *Merger Enforcement Policy: Protecting the Consumer* (Remarks of Charles Rule Before the 1987 National Institute of the American Bar Association Section of Antitrust Law (October 9, 1987)), *reprinted in* 56 ANTITRUST L.J. 739, 745 (1988), *with* United States v. Waste Management, Inc., 743 F.2d 976 (2d Cir. 1984).

A market characterized by "ease of entry" in the antitrust literature is termed "contestable" in the economics literature. *See generally* W. BAUMOL, J. PANZAR & R. WILLIG, CONTESTABLE MARKETS AND INDUSTRY STRUCTURE (1962); Baumol & Willig, *Contestability: Developments Since the Book*, in STRATEGIC BEHAVIOUR AND INDUSTRIAL CONCENTRATION (D. Morris, P. Sinclair, M. Slater & J. Vickers eds. 1986). In such a market, even a single firm would be incapable of raising price to supracompetitive levels for an instant because that price increase would attract hit and run entry. An entrant would find it profitable to enter if prices were even slightly above competitive levels, and would compete just long enough to drive prices back down to their competitive level before exiting. For a market to be contestable, either entrants must bear no sunk costs (costs unrecoverable upon exit) or incumbent producers who are charging a supracompetitive price must be unable to increase output in response to entry for long enough to allow the entrant to recover its sunk costs through prices above entrant marginal cost. Farrell, *How Effective is Potential Competition*, 9 ECON. LETTERS 67 (1986); Schwartz & Reynolds, *Contestable Markets: An Uprising in the Theory of Industry Structure: Comment*, 73 AM. ECON. REV. 488 (1983); *see* Stiglitz, *Technological Change, Sunk Costs, and Competition*, 1987 BROOKINGS PAPERS ON ECON. ACTIVITY 883; *see generally* Spence, *Contestable Markets and the Theory of Industry Structure: A Review Article*, 21 J. ECON. LITERATURE 981 (1983).

290. Entry is relevant to merger analysis insofar as the prospect of new competition deters incumbent producers from anticompetitive actions. Thus, whether entry difficulties are classified as Stiglerian "barriers" or as "impediments" has little practical consequence for merger review. *See Echlin*, 105 F.T.C. at 485-87. In this article the term "entry barriers" encompasses both Stiglerian barriers and impediments. The Department of Justice similarly accepts a definition of entry barriers broader than Professor Stigler's. Rule, *supra* note 289, at 749-50.

sufficient to create an effective deterrent to anticompetitive behavior. The DOJ Guidelines treat the possibility of entry as too remote to discipline the anticompetitive behavior of incumbent firms if entry will take more than two years.[291]

One entry barrier into providing medical services is created by the regulatory process. Certificate-of-need ("CON") legislation, intended to limit the tendency of hospitals serving insured patients to over-provide medical care,[292] has an unintended by-product: it makes new competition more difficult.[293] In states where they are required, CON proceedings impose both barriers to entry and impediments to expansion by incumbent producers.[294] Under most state rules, de novo entry into the hospital industry or a major expansion by an incumbent competitor must be approved by the local CON board. Examples from the states show that this process can easily take at least two years, and thus create an entry barrier under the DOJ Guidelines definitions.[295] The empirical economic evidence on the effect of CON laws is also consistent with the conclusion that they make entry difficult.[296] This

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291. The longer it will take before entry can compete away the exercise of market power, the more likely is an incumbent firm to exercise that power rather than be deterred from doing so. The DOJ Guidelines in effect presume that the prospect of entry within two years will deter the exercise of market power by incumbent firms. 1984 MERGER GUIDELINES, *supra* note 51, § 3.3. Although the period within which entry must occur to have this effect depends on a variety of factors including the potential gains from collusion, the real rate of interest, and the extent of entrant cost disadvantages, the two year horizon of the DOJ Guidelines appears to represent a reasonable rule of thumb.

292. *See supra* notes 16-17 and accompanying text.

293. Under the capture theory of regulation, this by-product is not unintended. *Cf.* Miller, *Antitrust and Certificate of Need: Health Systems Agencies, the Planning Act, and Regulatory Capture,* 68 GEO. L. REV. 873 (1980) (recommending statutory interpretation to limit possibility of capture).

294. *See generally* Hospital Corp. of Am., 106 F.T.C. 361, 489-96 (1985) (Georgia and Tennessee CON laws make speedy entry impossible), *aff'd,* 807 F.2d 1381 (7th Cir. 1986), *cert. denied,* 55 U.S.L.W. 3746 (1987); American Medical Int'l, Inc., 104 F.T.C. 1, 201 (1984) (California's CON procedure created "very high" barriers to entry).

295. The Federal Trade Commission found that the Tennessee CON process takes at minimum several months. If opposed by a competitor, as may often occur following a merger, the process may require several years even for a CON application that is ultimately approved. Administrative appeals and judicial review can add additional years to the process. *Hospital Corp. of Am.,* 106 F.T.C. at 492. Similarly, in the late 1970's, once the state of Massachusetts began applying its CON laws in more than a pro forma manner, CON approval for major hospital bed projects took more than three years for a sample of hospitals. Howell, *Evaluating the Impact of Certificate-Of-Need Regulation Using Measures of Ultimate Outcome: Some Cautions from the Experience in Massachusetts,* 19 HEALTH SERVICES RES. 587, 607 (1984). Further, if state CON boards are "captured" by the incumbent hospitals, procompetitive entry and expansion could run a substantial risk of failing to obtain regulatory approval. *See* Miller, *supra* note 293, at 873; *cf.* American Medicorp, Inc. v. Humana, Inc., 445 F. Supp. 573, 602 n.9 (E.D. Pa. 1977) (plaintiff claimed that a competing hospital acted to delay or prevent issuance of plaintiff's CON).

296. CON laws appear to raise both hospital prices and hospital expenses. M. NOETHER, *supra* note 25, at 38, 74, 77. This evidence suggests that entry barriers are raised, but that the hospitals studied dissipated their potential monopoly profits through expensive quality competition. Furthermore, using nationwide data from 1977 and 1978, Noether found that prices rose roughly over 4% on average in response to CON laws, just under the 5% level suggested as a deterrent to entry by the DOJ Guidelines. This average level is consistent with the view that CON laws form a high entry barrier in some states. *Cf.* Howell, *supra* note 295, at 587, 607 (differential enforcement of same laws over time in Massachusetts); *see Hospital Corp. of Am.,* 106 F.T.C. at 494 (terming empirical

barrier appears to be declining in significance over time, however, as states repeal their CON laws.[297]

Even absent CON requirements, entry into the hospital industry may be difficult. For many hospital services, the technological requirements of modern medical care demand buildings constructed or extensively remodeled to unusual specifications, including wide corridors and doorways, large elevators, strongly supported flooring, and extensive plumbing. In consequence, even without need for CON approval, once a decision is made to construct a new hospital building, planning may require two to six years, and construction may require an additional two to three years.[298] Thus, de novo entry is unlikely to occur within the two years suggested by the DOJ Guidelines as an indicator of the significance of new entry. Moreover, a new hospital may be unable to achieve minimum efficient scale quickly, and thus may be unwilling to enter even if colluding hospitals raise prices above competitive levels.[299]

These entry difficulties are less important to the extent it is easy to create new institutions offering some medical services in competition with hospitals, such as free standing emergency centers and ambulatory care centers.[300] Under such circumstances, the prospect of entry may significantly limit the possibility of anticompetitive conduct in the market for some medical services, while offering no restraint in other product markets.

In the current hospital environment, in which hospital occupancy rates have fallen dramatically in response to the introduction of reimbursement caps,[301] excess capacity may strongly deter new hospital entry in many geographic markets even if incumbent hospitals raise price substantially. Excess capacity will deter entry if it suggests to prospective entrants that the marketplace will be very competitive following entry, with little profit opportunity.[302]

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studies surveyed "ambiguous"). Evidence on the effect of CON laws in reducing health care costs is discussed *supra* note 22.

Other evidence of the effect of CON laws in limiting new competition comes from the states where CON barriers were recently removed. "In at least two states, a surge in notices of intent to build [followed] . . . abolition of the entry program." M. NOETHER, *supra* note 25, at 37.

297. *See supra* note 24 and accompanying text.

298. Howell, *supra* note 295, at 587, 601 n.22.

299. *See generally* Salop, *Measuring Ease of Entry*, *supra* note 47. Government enforcers also consider scale economies an entry barrier into hospital markets. Winslow, *supra* note 103; Rule, *supra* note 115, at 128; *see infra* notes 346-47 and accompanying text (scale economies in the hospital industry).

300. These institutions may need time to develop a reputation among patients (or doctors, acting as patient agents) for reliable health care, however, and thus may not be able to expand output quickly to compete away incumbent hospital market power. Further, they may not be able to achieve minimum efficient scale quickly, and thus may be unwilling to enter unless colluding hospitals raise price far above competitive levels. *See generally* Salop, *Measuring Ease of Entry*, *supra* note 47.

301. *See supra* note 28.

302. Any credible threat of post-entry competition can deter entry. Salop, *Strategic Entry Deterrence*, *supra* note 47.

Excess capacity is double-edged in antitrust analysis, however. Although it may deter new entry, it may also make collusion difficult by encouraging cheating on a cartel. *See infra* note 319 and accompanying text.

In its recent hospital merger cases, the Federal Trade Commission readily found high entry barriers based on state certificate-of-need processes.[303] It was not required to investigate whether barriers would have been high in the absence of certificates of need.[304] Furthermore, because it defined product markets based on a cluster analysis, the Commission did not investigate the entry difficulties facing providers of some but not all services in the cluster. These issues will likely be contested in future hospital merger litigation as more states repeal certificate-of-need laws.

2. *Other Factors*

In evaluating the significance of concentration as a predictor of anticompetitive actions, the courts and the DOJ Guidelines take into account a variety of factors in addition to concentration and entry that affect the ease and profitability of collusion.[305] Factors facilitating or frustrating collusion generally influence cartel decisions through one or more of three mechanisms. First, some factors alter the potential profits from collusion, by affecting cartel revenues or by affecting the costs of cooperative action. Second, some factors influence the ease of interfirm coordination, altering the ability of potential cartel members to agree on the cartel price and the allocation of cartel production among firms. Finally, some factors affect the ability of cartel members to police their arrangement by monitoring rival prices and outputs for compliance with the cartel agreement, and by punishing rival deviations from that agreement. The remainder of this section will discuss several such factors that might arise in antitrust litigation in the hospital industry, but will not attempt to create an exhaustive list.[306]

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303. *See supra* note 295; *accord Rockford*, No. 88-C-20186, slip op. at 77-80 (N.D. Ill. Feb. 23, 1989), *appeal filed*.

304. *Cf. Rockford*, No. 88-C-20186, slip op. at 80 (N.D. Ill. Feb. 23, 1989) (a shrinking market would deter entrants from building new capacity even if CON regulation did not exist) (not analyzing whether this deterrent would be overcome if incumbent firms colluded to raise price), *appeal filed*; *Carilion*, 707 F. Supp. 840, 843-44, 845 (W.D. Va. 1989) (expansion of existing hospitals is not difficult because of current excess capacity and the likely removal of state limitations on hospital beds), *appeal filed*, No. 89-2625 (4th Cir. 1989).

305. 1984 MERGER GUIDELINES, *supra* note 51, § 3.4 (1986); B.F. Goodrich Co., 1988 Trade Reg. Reports (CCH) ¶ 22,519 (F.T.C. 1988); *see generally* F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 169-227 (2d ed. 1980) (cataloguing factors facilitating and limiting oligopolistic coordination); R. CLARKE, INDUSTRIAL ECONOMICS 56-63 (1985) (same); HORIZONTAL MERGERS, *supra* note 35, at 171-72 (collecting cases), 201-263 (cataloguing factors); Salop, *Practices that (Credibly) Facilitate Oligopolistic Co-Ordination*, in NEW DEVELOPMENTS IN THE ANALYSIS OF MARKET STRUCTURE (J. Stigliz & G. Mathewson eds. 1986) (price protection provisions as facilitating practices).

306. Four structural factors facilitating or frustrating collusion that are not discussed in the remainder of this section will be briefly mentioned here. First, if seller cost functions differ substantially across firms, coordination of the colluding industry's output reduction may be difficult because simple rules (such as holding constant market share) may mean that some disfavored firms will gain little from the cooperative agreement. This factor might make it difficult for hospitals to collude with outpatient clinics. Hospitals may have high fixed costs and low marginal costs, while clinics may have low fixed costs but higher marginal costs for providing the same services. Under these circumstances, a perfectly coordinated cartel would obtain a higher price by reducing clinic output rather than hospital output, and the clinics would share in the anticompetitive gains through a

a. Market demand elasticity. The incentives of firms to collude are small if the market demand curve is elastic because the potential monopoly profits are limited. Thus, hospitals are more likely to collude to raise the price of services patients are unable to do without and less likely to collude to raise the price of elective services.[307]

b. Service homogeneity or heterogeneity. Collusion is generally more difficult when sellers produce heterogeneous products than when they produce undifferentiated goods, because coordination becomes more complex and cheating is more difficult to police.[308] In *Hospital Corp. of America,* the defendant hospitals unsuccessfully argued that the need for hospital administrators to coordinate prices across a large number of services made collusion unlikely, regardless of concentration.[309] This argument is stronger when the product market is defined as a cluster of services, as it was in *Hospital Corp. of America,* than when individual services comprise relevant products.[310] Furthermore, the prospective payment system in operation for Medicare provides hospitals with a well-defined classification of services over which to collude. In consequence, product heterogeneity will be unlikely to rescue defendant hospitals from the anticompetitive inferences created by high concentration.

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side payment from hospitals. However, a tacit cartel may find it difficult to work out such a complex agreement.

Second, if transactions are open to the view of rival firms, collusion is more likely than if transactions are secret, because rivals cannot easily monitor secret purchases. This factor is no deterrent to hospital collusion. It would be prohibitively expensive for hospitals to undertake numerous secret negotiations with patients and hospital negotiations with government owned or regulated insurers cannot be kept from public knowledge.

Third, if hospitals in a region have a history of cooperation, future cartel coordination may be facilitated. Finally, frequent and substantial instability in market prices and market output may suggest that industry demand or supply is unstable. Collusion is less likely under this circumstance because frequent recoordination among cartel members may be necessary and cheating may be difficult to detect.

307. *Cf.* 1984 MERGER GUIDELINES, *supra* note 51, § 3.412 (significance of degree of difference between the products and locations in the market and the next-best substitutes).

308. 1984 MERGER GUIDELINES, *supra* note 51, § 3.411. The DOJ Guidelines state that this factor will rarely be taken into account because heterogeneity is difficult to measure. In practice, the enforcement agencies appear to give this factor somewhat more weight than the DOJ Guidelines suggest. *But cf. supra* notes 133-35 and accompanying text (profitability of pairwise collusion increases with differentiation).

309. Hospital Corp. of Am., 106 F.T.C. 361, 506-508 (1985), *aff'd,* 807 F.2d 1381 (7th Cir. 1986), *cert. denied,* 55 U.S.L.W. 3746 (1987).

310. Quality of care may differ across hospitals providing the same service, and thus form a basis for product differentiation among hospitals. *See Hospitals,* 6 WASHINGTON CONSUMERS' CHECKBOOK 13 (1987) (large quality differentials among hospitals in one metropolitan area). A cartel recognizing this must allow hospitals with a reputation for offering superior care to charge more for each service than is charged by other cartel members, by an amount reflecting the quality differential, in order to preserve identical prices in quality adjusted units. This will not unduly complicate the cartel coordination task when pre-cartel prices reflect the necessary differential.

A cartel among sellers offering products of differing quality must also police cheating on the collusive arrangement that takes the form of raising perceived service quality. *See supra* note 31 (quality competition). Although most ways of raising hospital service quality are time-consuming, involving improved facilities and staff, hospital cartels presumably must agree to limit advertising, as this activity could allow hospitals to increase consumer quality perceptions more rapidly.

c. Role of nonprofits. Under some circumstances, the presence of nonprofit sellers in a market may make collusion unlikely. For example, if a seller cooperative maximizes sales rather than profits, it has no incentive to participate in a collusive agreement.[311] Indeed, if it has excess capacity and the product is homogeneous, such a cooperative will likely undercut any cartel formed by its competitors.[312] In practice, however, the nonprofit hospitals studied have behaved like for-profit hospitals.[313] Hence, the presence of nonprofit hospitals in a market should rarely (if ever) mitigate an inference of market power obtained from market shares.[314]

d. Large buyers. Any seller wishing to cheat on a seller cartel can quickly and secretly achieve a large increase in output by contracting with a large buyer. As a result, the presence of large buyers can make a seller's cartel impossible to police. In addition, a large buyer may be more likely to recognize when sellers have colluded and act aggressively to encourage some sellers to cheat.[315]

In *Hospital Corp. of America,* the Federal Trade Commission found that the presence of Blue Cross, a large buyer of hospital services in the Chattanooga market, did not materially affect the FTC's inferences of collusion derived from market shares.[316] The FTC argued that Blue Cross had no particular ability to detect seller collusion relative to any other insurer, and, most tellingly, that the insurer had no ability to shift patients to non-colluding hospitals in the event a hospital wished to cheat on the seller's cartel.[317] In other geographic markets, however, it is possible that a large HMO with the ability to shift a great number of patients away from a colluding hospital would be able to deter collusion among hospitals.

e. Excess capacity. Firms with excess capacity have strong incentives to compete away high prices, because they are able to increase output at low marginal cost. Hospital industry over capacity, presently common,[318] may

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311. Proving that the cooperative would sacrifice profits for sales may be difficult. At a minimum, it must be demonstrated that both the cooperative and its members would be incapable of withholding goods from the marketplace. This may be the case for cooperatives selling agricultural products likely to spoil.

Similarly, because public hospitals have missions of community service and charitable care, it is possible although unlikely that they will be managed in ways that limit their incentive to collude.

312. However, a multiproduct seller cooperative may have an incentive to raise price above marginal cost for inelastically demanded products in order to expand output of elastically demanded products through below-cost pricing of these goods. Lynk, *supra* note 156, at 68.

313. *Hospital Corp. of Am.*, 106 F.T.C. at 502-04; Pauly, *Nonprofit Firms in Medical Markets*, 77 AM. ECON. REV. 257 (Papers & Proceedings 1987).

314. *Rockford*, No. 88-C-20186, slip op. at 84-93 (N.D. Ill. Feb. 23, 1989), *appeal filed*; *but see Carilion*, 707 F. Supp. 840, 849 (W.D. Va. 1989) (nonprofit hospital's board of directors, composed of business leaders, will ensure that cost savings are passed on to consumers), *appeal filed*, No. 89-2625 (4th Cir. 1989).

315. *See* Scheffman & Spiller, *Buyers and Entry Barriers*, working paper no. 154 (F.T.C. Aug. 1987).

316. *Hospital Corp. of Am.*, 106 F.T.C. at 508-10.

317. *Cf.* Staten, Dunkelberg & Umbeck, *Market Share and the Illusion of Power*, 6 J. HEALTH ECON. 43 (1987) (Blue Cross is unable to force hospitals to discount rates in Indiana).

318. *See supra* note 27.

therefore operate to reduce the likelihood of collusion inferred from market concentration.[319] Moreover, persistent excess capacity in a stagnant or declining market may make plausible a claim of financial weakness of the merging parties.[320]

f. Product complementarity. Although a theoretical case can be made for the effects of strong complementarity in frustrating some types of hospital collusion, in most cases these effects will not be large. Therefore, antitrust enforcers and courts should not give these effects much weight in the review of hospital mergers absent a careful cost or demand study quantifying them. A brief review of the relevant considerations relying on the earlier analysis of the role of complementarity in product market definition is set forth below.

If several goods or services are strong supply complements, firms will profit more by colluding over the provision of all than in the provision of just one. But if collusion is difficult or impossible in the market for some joint products, for example if another technology allows single product sellers to compete successfully in that market, then the multiproduct producer of supply complements likely has a reduced incentive to collude in the other joint products. This qualification is unlikely to be significant, however, unless the products are strong supply complements. Even if complementarity makes a cartel concerning some but not all joint products less profitable, it is unlikely to make collusion unprofitable.[321] Thus, if a cartel can be expected to cover some but not all of the complementary goods or services, strong supply complementarity should be treated as a factor slightly reducing the incentive of firms to collude. In the hospital context, this issue may arise if outpatient clinics compete with hospitals in markets for some types of primary care, so long as inpatient hospital care has scope economies for the provision of those types of primary care.[322]

Strong complementarity in demand may complicate the coordination task of a cartel among the sellers of some but not all such goods because the single product sellers will desire a higher cartel price than the multiproduct sellers.[323] This divergence of interest is the most difficult to reconcile when the goods are strong complements and when multiproduct producers have substantially more sales revenues coming from the complementary good than from the cartelized product.[324] In such a case, demand complementarity would provide a strong force frustrating collusion. However, with the possible exception of simple surgery and inpatient care, health care services that are demand complements are typically performed by the identical firms,

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319. However, excess capacity may also operate as an entry barrier, making collusion more likely. *See supra* note 302 and accompanying text.

320. *See infra* notes 348-54 and accompanying text.

321. *See supra* notes 188-92 and accompanying text.

322. *But see supra* note 175 (hospital scope economies may not exist).

323. *See supra* notes 193-200 and accompanying text.

324. This situation is the most likely to occur in the context of vertical integration. *See supra* note 195.

namely hospitals. While demand complementarity may reduce a hospital's incentive to collude with outpatient surgical clinics over the price of simple surgical services, this force is unlikely to affect the hospital's incentive to collude with rival hospitals in other product markets.[325]

Finally, firms may need to collude over strong transactions complements in order to reduce the ability of rivals to cheat.[326] If collusion concerns some but not all transactions complements, it may be frustrated. Although most hospital services may be transactions complements, it is difficult to gauge the strength of this complementarity. Furthermore, to the extent patient charges are quoted based on diagnostic categories, as under Medicare reimbursement schemes,[327] hospitals have no opportunity to cheat on a cartel concerning one service, such as coronary bypass surgery, by lowering the price of another service such as the room charge. Nevertheless, it is possible that transactions complementarity may frustrate hospital collusion if the cartel is limited to a small group of services excluding some complements.

g. Opposition of competitors. It is sometimes suggested that when competitors of the merging firms oppose an acquisition, the transaction is likely to be procompetitive. According to this theory, firms can be expected to oppose acquisitions that lower their competitor's costs, and to favor mergers likely to lead to higher prices through facilitating industry collusion. Under this view, the fact of opposition by competitors should weigh against finding an antitrust violation.[328] Indeed, this information has probative weight in the merger enforcement decisions of the Antitrust Division and the Federal Trade Commission.[329]

There are two problems associated with making these inferences. First, the raising rivals' costs literature demonstrates that some forms of anticompetitive conduct harm rivals.[330] Because competitors may foresee private harm from anticompetitive mergers, as well as from procompetitive acquisitions, it is inappropriate to reason that an acquisition opposed by rivals necessarily creates efficiencies. More importantly, this theory invites a court or enforcement agency to avoid its responsibility to decide the case on the evidence because it substitutes a third party's judgment as to competitive consequences for the decisionmaker's own analysis. While the third party at issue, a competing seller, is familiar with the industry, a court likely has at least as much information about the relevant aspects of the industry and the transaction in question when the record is complete. Similarly, the

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325. Presumably, the major restraint on collusion in the provision of simple surgery is ease of entry by new outpatient surgical clinics, and not this problem with demand complementarity.

326. *See supra* notes 201-04 and accompanying text.

327. *See supra* notes 19-24 and accompanying text.

328. Although not strictly speaking a factor facilitating collusion, this consideration is sometimes treated as a factor tending to weigh against the influence of anticompetitive harm raised by market concentration. *Cf. infra* note 339 (inferences from the support of customers).

329. This theory has also been influential in shaping the procedural requirement that a private plaintiff show antitrust injury.

330. *See supra* note 45.

enforcement agencies likely know substantially more about both topics than do rivals after reviewing party responses to a request for additional information under the Hart-Scott-Rodino Act. For this reason, courts reviewing hospital mergers have found no probative value in the identity of third parties favoring or opposing the transaction.[331]

3. *Applying Facilitating Factors to Hospital Mergers*

In its *Hospital Corp. of America* decision the Federal Trade Commission recognized the influence of several factors facilitating or frustrating hospital collusion, including some not discussed above. The FTC concluded that the low elasticity of demand for hospital services raised the incentives of firms within the relevant market to collude, making collusion more likely.[332] The Commission also noted that the inability of hospital patients to resell hospital services could help hospitals collude to raise prices for readily identifiable groups of consumers, such as the patients reimbursed by one insurance company.[333] The Commission further relied upon hospital industry traditions of limited price competition and cooperative problem solving through voluntary health planning, as well as a past history of collusion and a pattern of information exchange among the hospitals at issue, as factors facilitating collusion.[334]

The FTC rejected defendant's arguments that a variety of structural factors which might frustrate hospital collusion were significant on the facts of the case. These included a history of hospital competition; service heterogeneity; the alleged likely procompetitive behavior of nonprofit hospitals; the instability of demand and supply; and the presence of a larger insurer as a major customer.[335]

E. Defenses

Two factors mitigating the possible competitive harm from an acquisition are treated as defenses: the creation of efficiencies, and the acquired firm's financial condition.[336] Both defenses are strictly construed, and thus are rarely successful.

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331. *Hospital Corp. of Am.*, 807 F.2d at 1392 (competitor's opposition to acquisition is just one firm's opinion not shared by the court); *Rockford*, No. 88-C-20186, slip op. at 93-94 (N.D. Ill. Feb. 23, 1989) (rival may fear merged entity will act to raise rival's costs), *appeal filed*.

332. Hospital Corp. of Am., 106 F.T.C. 361, 499 (1985), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 55 U.S.L.W. 3746 (1987).

333. *Id.* at 500. This factor reduces coordination difficulties for cartel members.

334. *Id.* at 500-01.

335. *Id.* at 501-11.

336. Defendants have been unsuccessful in advancing the view that hospital acquisitions should be given more relaxed antitrust scrutiny than acquisitions in other industries because of the unique character and importance of health care. *Id.* at 512; *cf. supra* notes 71-73 and accompanying text (Congress did not impliedly repeal application of antitrust laws to health care).

1. *Efficiency Defense*

Historically substantial efficiencies, such as a significant reduction in production costs, would not save an acquisition with potential for collusion. In three decisions in the 1960's, the Supreme Court refused to consider possible efficiencies as a defense, on the ground that Congress had proscribed increases in concentration regardless of whether consumers might benefit.[337] In accordance with the modern emphasis on construing antitrust rules to promote economic efficiency, however, the DOJ Guidelines treat efficiencies as a relevant consideration in merger enforcement.[338] The DOJ Guidelines recognize that efficiencies are often easy to allege and difficult to prove, and therefore require "clear and convincing evidence" as a predicate for considering them in deciding whether to challenge a merger.[339] Similarly, the Federal Trade Commission recognizes economic efficiencies as a relevant factor in assessing the competitive impact of an acquisition, but requires that they be established by substantial evidence and insists that defendant demonstrate that the efficiencies could not be achieved within a comparable period of time through a merger that threatens less competitive harm.[340] In addition, the antitrust enforcement agencies will seek to find ways of

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337. FTC v. Procter & Gamble Co., 386 U.S. 568, 580 (1967); United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 371 (1963); Brown Shoe v. United States, 370 U.S. 294, 344 (1962). These decisions attempted to harmonize political and social goals of antitrust law with economic efficiency goals. *See supra* notes 35-61 and accompanying text (changing goals). As the dominant view of the 1980's emphasizes economic efficiency to the exclusion of other goals, these decisions will likely be reconsidered by the Court in a future merger case along lines recently suggested by the FTC. American Medical Int'l, 104 F.T.C. 1, 215-20 (1984) (earlier Court statements are dicta; recent Court emphasis on economic evidence allows consideration of efficiencies); *see* Muris, *The Efficiency Defense Under Section 7 of the Clayton Act*, 30 CASE W. RES. L. REV. 381, 409-10 (1980) (Supreme Court has reserved the question of whether an efficiency gain in the same market as the merger could offset an anticompetitive outcome in that market). *Cf.* Broadcast Music, Inc. v. Columbia Broadcasting System, Inc., 441 U.S. 1 (1979) (production efficiency gain immunizes cooperative pricing policy from Sherman Act challenge despite per se prohibition of horizontal price fixing).

338. 1984 MERGER GUIDELINES, *supra* note 51, § 3.5. However, "no court has yet found the anticompetitive effects of a merger to be outweighed by countervailing public interest factors." ABA ANTITRUST SECTION, ANTITRUST LAW DEVELOPMENTS 166 n.146 (2d ed. 1982).

339. 1984 MERGER GUIDELINES, *supra* note 51, § 3.5.

> Cognizable efficiencies include, but are not limited to, achieving economies of scale, better integration of production facilities, plant specialization, lower transportation costs, and similar efficiencies relating to specific manufacturing, servicing, or distribution operations of the merging firms. The Department may also consider claimed efficiencies resulting from reductions in general selling, administrative, or overhead expenses, or that otherwise do not relate to specific manufacturing, servicing, or distribution operations of the merging firms, although as a practical matter, these types of efficiencies may be difficult to demonstrate.

Id. But cf. Rule, *supra* note 115, at 128 (The DOJ may exercise discretion "not to sue in a case where the efficiency gains substantially outweigh the competitive harm.").

The enforcement agencies often consider support for an acquisition by customers of the merging firms (such as health insurers in the case of hospital mergers) as evidence that the transaction generates cost savings rather than market power. Winslow, *supra* note 103, at 4-5; Rule, *supra* note 115, at 128-29. This argument is subject to similar criticisms as were raised in the discussion of the view that opposition by rivals implies that a transaction is socially beneficial. *See supra* notes 328-31 and accompanying text.

340. *American Medical Int'l*, 104 F.T.C. at 218-20.

structuring the transactions through curative divestitures to preserve efficiencies while removing likely anticompetitive concerns.[341]

In both of its recent hospital merger cases, the Federal Trade Commission held that defendants failed to establish substantial efficiencies on the facts. The merging hospitals in *American Medical International* presented a cost study, but the Commission found the savings to be minimal.[342] The alleged efficiency benefits in *Hospital Corp. of America* were quickly dismissed because defendants made no attempt to quantify them.[343] Similarly, a recent federal district court decision rejected allegations that a hospital merger would save $41 million because the proposed savings were not established by clear and convincing evidence, the reorganization costs of achieving those savings were excluded from the calculation, and some of the proposed savings were achievable by the firms unilaterally, without merger.[344] In contrast, another district court upheld a challenged hospital merger in part because of evidence that the acquisition would save $40 million through "capital avoidance and other clinical and administrative efficiencies."[345] Merging hospitals seeking to claim efficiencies must also overcome the economic literature questioning the extent of scale and scope economies resulting from merger.[346]

Government enforcers ignore efficiency claims arising from shared support services (such as laundry, data processing, or laboratory operations) or from lower capital costs on the view that these cost savings can be achieved through joint ventures short of merger. However, the government will

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341. For a Department of Justice description of the "fix-it-first" policy, see Remarks Before the 1987 National Institute of the American Bar Association Section of Antitrust Law (Oct. 9, 1987), *reprinted in* Rule, *supra* note 289, at 745-46. An FTC description is found in Clark, *Merger Investigations at the Federal Trade Commission: An Insider's View*, 56 ANTITRUST L.J. 765, 773-77 (1988).

342. The company alleged it would save at most 5.6% per year. Much of the estimated savings could not be defended, and even if significant cost savings would have occurred, they would not have been passed on to consumers through lower prices given the nature of industry regulation. *American Medical Int'l*, 104 F.T.C. at 219-20. The merging hospitals also alleged that the acquisition would improve quality of care, by permitting the acquirer to maintain one of its hospitals as a "first-rate hospital." The FTC cited with approval the conclusion of its Administrative Law Judge finding this claim implausible on the record evidence. *Id.* at 213-15. While an efficiency defense could in principle be based on increases in quality as well as on reductions in cost, plaintiffs are unlikely to be able to offer "clear and convincing evidence" that a merger will increase quality of care.

343. Hospital Corp. of Am., 106 F.T.C. 361, 512-13 (1985), *aff'd*, 807 F.2d 1381 (7th Cir. 1986), *cert. denied*, 55 U.S.L.W. 3746 (1987).

344. *Rockford*, No. 88-C-20186, slip op. at 96, 98-103 (N.D. Ill. Feb. 23, 1989), *appeal filed*.

345. *Carilion*, 707 F. Supp. 840, 845 (W.D. Va. Feb. 13, 1989), *appeal filed*, No. 89-2625 (4th Cir. 1989).

346. Lave & Lave, *Hospital Cost Functions*, 5 AM. REV. PUB. HEALTH 193 (1984) (scale economies absent); Eakin & Kniesner, *Estimating a Non-Minimum Cost Function for Hospitals*, 54 S. ECON. J. 583, 593-96 (1988) (typical hospital has overall diseconomies of scale, although many exhibit overall economies of scale); F. SLOAN & B. STEINWALD, INSURANCE, REGULATION, AND HOSPITAL COSTS 196 (1980) (evidence on scale economies ambiguous); *cf.* Grannemann, Brown, & Pauly, *Estimating Hospital Costs*, 5 J. HEALTH ECON. 107 (1986) (finding scale economies in emergency room care but not in other outpatient care); *but see* Vitaliano, *On the Estimation of Hospital Cost Functions*, 6 J. HEALTH ECON. 305 (1987) (scale economies present); Luft, Bunker & Enthoven, *Should Operations be Regionalized?*, 301 NEW ENG. J. MED. 1364 (1979) (same); Carr & Feldstein, *The Relationship of Cost to Hospital Size*, 4 INQUIRY 45 (June 1967) (same); *cf. supra* note 35 (efficiencies arising from multihospital systems). Further, the limited literature on scope economies suggests they are not prevalent. *See supra* note 175.

investigate a claim that a merger will lower costs through improved use of fixed assets or the elimination of duplicative services.[347] Thus, in two recent cases the Department of Justice permitted hospital mergers to occur unchallenged in concentrated markets when efficiencies appeared likely to result and when excess capacity made eventual exit likely otherwise.[348]

2. *Failing Firm Defense*

An anticompetitive merger may be allowed if one of the firms is in poor financial condition in order to preserve the failing firm's assets as a competitive force and to limit the loss to company shareholders and to the communities in which the failing firm operates.[349] To the extent competitive pressures lead hospitals to exit from the industry, this defense may become important in hospital merger cases.[350]

The failing firm defense is strictly construed to minimize the anticompetitive danger: The firm must be on the verge of insolvency, the acquiring company must be the least anticompetitive purchaser available, and the acquired firm must have made unsuccessful efforts to seek alternative buyers to preserve its assets in the marketplace while reducing the danger to competition.[351] The Department of Justice has suggested that this defense might apply to permit the merger of the only two hospitals in a market that, as a result of the introduction of cost-based reimbursement, can only support one hospital. If, however, an outsider is willing to acquire the purportedly failing hospital at a price in excess of liquidation value, the outside purchaser will be preferred.[352] The DOJ Guidelines allow a similar defense for a failing division which might apply to the sale of an unsuccessful hospital from an

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347. Rule, *supra* note 115, at 128; Winslow, *supra* note 103. The Justice Department apparently presumes that scale economies are exhausted once a hospital reaches 300 to 600 beds, Rule, *supra* note 115, at 128, although it is willing to treat efficiency claims based on scale economies more generously in hospital merger cases than in most merger investigations for fear that competitive pressures will lead a failing hospital to provide inadequate care. *Id.* at 129.

348. Rule, *supra* note 115, at 129. The influence of firm financial condition on merger analysis is taken up *infra* at notes 349-54 and accompanying text.

349. United States v. General Dynamics Corp., 415 U.S. 486, 507 (1974); International Shoe Co. v. FTC, 280 U.S. 291, 302 (1930).

350. *See supra* note 30 and accompanying text (exit statistics and competitive pressures); *supra* text accompanying note 320 (significance of excess capacity).

351. Citizens Publishing Co. v. United States, 394 U.S. 131, 137-38 (1969); 1984 MERGER GUIDELINES, *supra* note 51, § 5.1. One district court rejected the application of the failing firm defense to a "failing market" where future consolidation was said to be likely to occur but the acquired firm was not presently unhealthy. *Rockford*, No. 88-C-20186, slip op. at 96-97 (N.D. Ill. Feb. 23, 1989), *appeal filed*.

An alternative purchaser is less likely to be available in declining or stagnant markets with persistent excess capacity than in growing markets, but even in the former case the assets may be preserved in the industry by a purchaser who obtains them for a low liquidation price. It is unclear whether the Justice Department requires that a seller actively pursue alternative purchases under such circumstances. Felt & Brooks, *Critique of Department of Justice Review of Mergers and Other Corporate Combinations*, 21 J. HEALTH AND HOSP. L. 131, 132 (1988).

352. Rule, *supra* note 115, at 129. The Department of Justice has approved mergers when exit seems likely and efficiencies will arise. *See supra* note 348 and accompanying text.

otherwise healthy chain.[353] Even when the failing firm defense is unavailable, the enforcement agencies will discount the market shares of weakened competitors in inferring competitive effects from concentration statistics.[354]

V

CONCLUSION

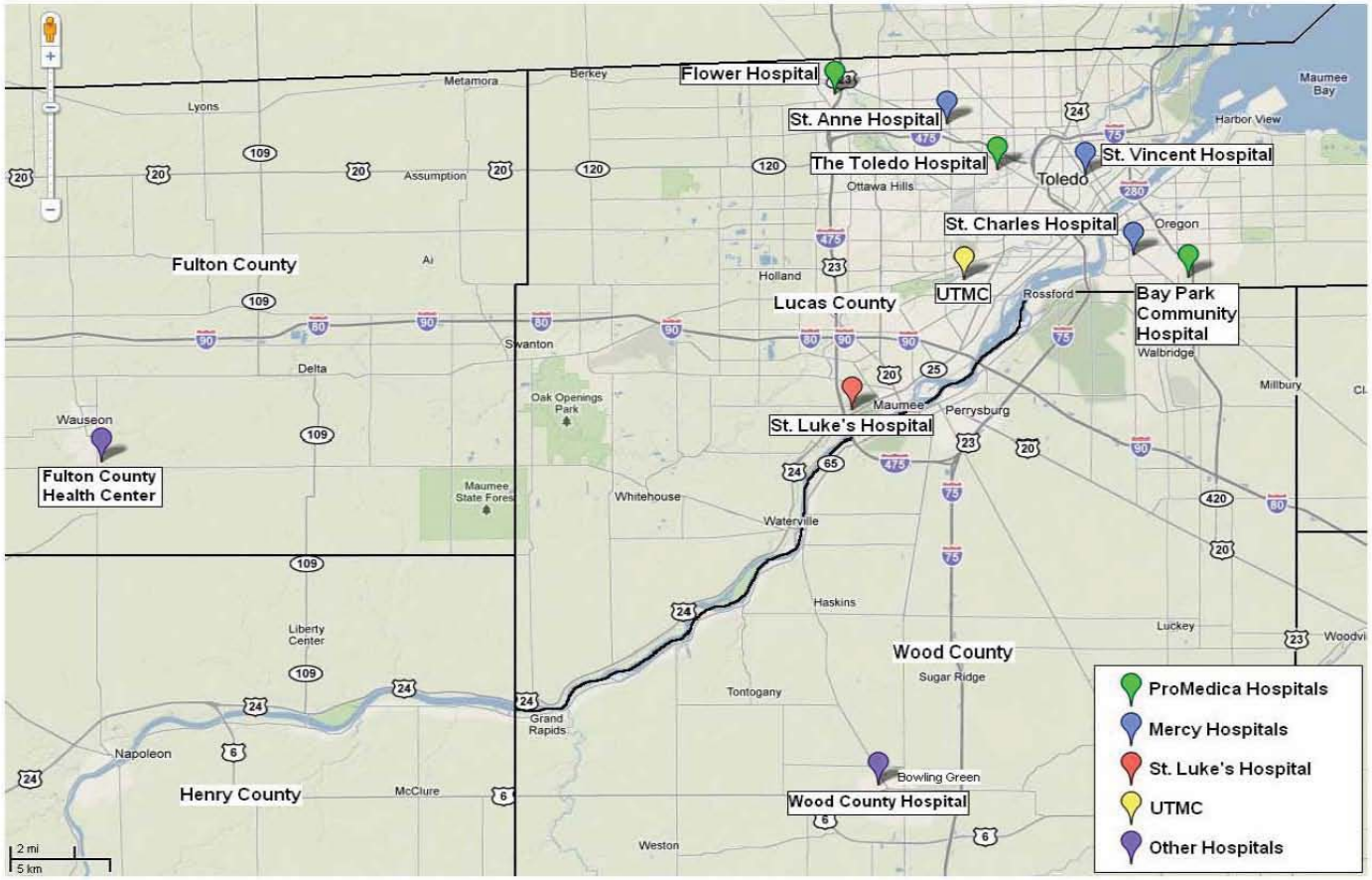
Antitrust law applies to hospital mergers just as to any other industry. In the current environment created by changing regulatory mandates and the resulting growth of competitive pressures, such mergers are occurring with increasing frequency.

Antitrust enforcement agencies and the courts will likely give hospital acquisitions careful scrutiny because of several structural characteristics of the hospital industry. Most importantly, entry barriers are often high and market concentration within metropolitan areas is likely substantial for many individual hospital services. Under these circumstances, whether a merger is enjoined will most likely turn on the extent to which hospitals not presently offering procedures and services can quickly add them, and the distance patients will likely travel in response to a hospital price rise. If supply substitutability will expand the product markets for various concentrated hospitals services sufficiently, or if urban geographic markets are found to be significantly broader then metropolitan areas, then concentration may be reduced to less troublesome levels and hospital mergers may generally avoid antitrust challenge. In consequence, market definition is likely to remain an important battleground in hospital merger litigation under the antitrust laws.

353. 1984 MERGER GUIDELINES, *supra* note 51, § 5.2; *cf.* FTC, Statement Concerning Horizontal Mergers § 5 (June 14, 1982) (failing division arguments will be taken into account, but bear a high burden because of difficulties of proof).

354. 1984 MERGER GUIDELINES, *supra* note 51, § 3.22.

ATTACHMENT B



PX00900-001

ATTACHMENT C

ORDER

I.

IT IS ORDERED that, as used in this Order, the following definitions shall apply:

A. "ProMedica" means ProMedica Health System, Inc., its directors, officers, employees, agents, representatives, successors, and assigns; and its joint ventures, subsidiaries (including, but not limited to, ProMedica Health Insurance Corporation), divisions, groups, and affiliates controlled by ProMedica Health System, Inc., and the respective directors, officers, employees, agents, representatives, successors, and assigns of each.

B. "St. Luke's Hospital" means the Acute Care Hospital operated at 5901 Monclova Road, Maumee, Ohio 43537.

C. "Commission" means the Federal Trade Commission.

D. "Acquirer" means the Person that acquires, with the prior approval of the Commission, the St. Luke's Hospital Assets from ProMedica pursuant to Paragraph II, or from the Trustee pursuant to Paragraph VII of this Order.

E. "Acquirer Hospital Business" means all activities relating to general Acute Care Hospital services and other related health care services to be conducted by the Acquirer in connection with the St. Luke's Hospital Assets.

F. "Acute Care Hospital" means a healthcare facility licensed as a hospital, other than a federally-owned facility, having a duly organized governing body with overall administrative and professional responsibility, and an organized professional staff, that provides 24-hour inpatient care, that may also provide outpatient services, and having as a primary function the provision of General Acute Care Inpatient Hospital Services.

G. "Direct Cost" means the cost of direct material and direct labor used to provide the relevant assistance or service.

H. "Divestiture Agreement" means any agreement, including all exhibits, attachments, agreements, schedules and amendments thereto, that has been approved by the Commission pursuant to which the St. Luke's Hospital Assets are divested by ProMedica pursuant to Paragraph II, or by the Divestiture Trustee pursuant to Paragraph VII of this Order.

I. "Divestiture Trustee" means the Person appointed pursuant to Paragraph VII of this Order to divest the St. Luke's Hospital Assets.

J. "Effective Date Of Divestiture" means the date on which the divestiture of the St. Luke's Hospital Assets to an Acquirer pursuant to Paragraph II or Paragraph VII of this Order is completed.

K. "General Acute Care Inpatient Hospital Services" means a broad cluster of basic medical and surgical diagnostic and treatment services for the medical diagnosis, treatment, and care of physically injured or sick persons with short term or episodic health problems or infirmities, that includes an overnight stay in the hospital by the patient. General Acute Care Inpatient Hospital Services include what are commonly classified in the industry as primary, secondary, and tertiary services, but exclude: (i) services at hospitals that serve solely military and veterans; (ii) services at outpatient facilities that provide same-day service only; (iii) those services known in the industry as specialized tertiary services and quaternary services; and (iv) psychiatric, substance abuse, and rehabilitation services.

L. "Hospital Provider Contract" means a contract between a Payor and any hospital to provide General Acute Care Inpatient Hospital Services and related healthcare services to enrollees of health plans.

M. "Intangible Property" means intangible property relating to the Operation Of St. Luke's Hospital including, but not limited to, Intellectual Property, the St. Luke's Hospital Name and Marks, logos, and the modifications or improvements to such intangible property.

N. "Intellectual Property" means, without limitation: (i) all patents, patent applications, inventions, and discoveries that may be patentable; (ii) all know-how, trade secrets, software, technical information, data, registrations, applications for governmental approvals, inventions, processes, best practices (including clinical pathways), formulae, protocols, standards, methods, techniques, designs, quality-control practices and information, research and test procedures and information, and safety, environmental and health practices and information; (iii) all confidential or proprietary information, commercial information, management systems, business processes and practices, patient lists, patient information, patient records and files, patient communications, procurement practices and information, supplier qualification and approval practices and information, training materials, sales and marketing materials, patient support materials, advertising and promotional materials; and (iv) all rights in any jurisdiction to limit the use or disclosure of any of the foregoing, and rights to sue and recover damages or obtain injunctive relief for infringement, dilution, misappropriation, violation, or breach of any of the foregoing.

O. "Joinder" means the Operation Of St. Luke's Hospital by ProMedica pursuant to the Joinder Agreement.

P. "Joinder Agreement" means the agreement by and among Promedica Health System, Inc., OhioCare Health System, Inc., St. Luke's Hospital, and St. Luke's Hospital Foundation, Inc., dated May 25, 2010, and all subsequent amendments thereto, including, but not limited to the First and Second Amendments, each dated August 18, 2010, the Third Amendment, dated August 31, 2010, and the Side Agreement, dated September 1, 2010.

Q. "Licensed Intangible Property" means Intangible Property licensed to ProMedica or to St. Luke's Hospital from a third party relating to the Operation Of St. Luke's Hospital including, but not limited to, Intellectual Property, software, computer programs, patents, know-how, goodwill, technology, trade secrets, technical information, marketing information, protocols, quality-control information, trademarks, trade names, service marks, logos, and the modifications or improvements to such intangible property that are licensed to ProMedica or to St. Luke's Hospital ("Licensed Intangible Property" does not mean modifications and improvements to intangible property that are not licensed to ProMedica).

R. "Monitor" means the Person appointed pursuant to Paragraph VI of the Order and with the prior approval of the Commission.

S. "Monitor Agreement" means the agreement ProMedica enters into with the Monitor and with the prior approval of the Commission.

T. "Operation Of St. Luke's Hospital" means all activities relating to the business of St. Luke's Hospital, operating as an Acute Care Hospital, including, but not limited to, the activities and services provided at [outpatient facilities].

U. "Ordinary Course Of Business" means actions taken by any Person in the ordinary course of the normal day-to-day Operation Of St. Luke's Hospital that is consistent with past practices of such Person in the Operation Of St. Luke's Hospital, including, but not limited to, past practice with respect to amount, timing, and frequency.

V. "Paramount" means the family of ProMedica Insurance Corporation insurance companies, including Paramount Insurance Company of Ohio, Paramount Preferred Options, Paramount Care, Inc., and Paramount Care of Michigan. ProMedica Insurance Corporation is a wholly-owned subsidiary of ProMedica Health System, Inc.

W. "Payor" means any Person that purchases, reimburses for, or otherwise pays for medical goods or services for themselves or for any other person, including, but not limited to: health insurance companies; preferred provider organizations; point-of-service organizations; prepaid hospital, medical, or other health-service plans; health

maintenance organizations; government health-benefits programs; employers or other persons providing or administering self-insured health-benefits programs; and patients who purchase medical goods or services for themselves.

X. "Person" means any natural person, partnership, corporation, association, trust, joint venture, government, government agency, or other business or legal entity.

Y. "Physician" means a doctor of allopathic medicine ("M.D.") or a doctor of osteopathic medicine ("D.O.").

Z. "ProMedica Medical Protocols" means medical protocols promulgated by ProMedica, whether in hard copy or embedded in software, that have been in effect at any ProMedica Hospital, excluding St. Luke's Hospital, at any time since Joinder; *provided, however*, that "ProMedica's Medical Protocols" does not mean medical protocols adopted or promulgated, at any time, by any Physician or by any Acquirer, even if such medical protocols are identical, in whole or in part, to medical protocols promulgated by ProMedica.

AA. "Post-Joinder Hospital Business" means all activities relating to the provision of General Acute Care Inpatient Hospital Services and other related healthcare services conducted by ProMedica after Joinder including, but not limited to, all health care services, including outpatient services, offered in connection with the St. Luke's Hospital Business.

BB. "Pre-Joinder St. Luke's Hospital Business" means all activities relating to the provision of General Acute Care Inpatient Hospital Services and other related healthcare services that St. Luke's Hospital was offering as an Acute Care Hospital prior to Joinder.

CC. "Real Property Of St. Luke's Hospital" means all real property interests (including fee simple interests and real property leasehold interests including all rights, easements and appurtenances, together with all buildings, structures, facilities) that ProMedica acquired pursuant to the Joinder Agreement, whether or not located at St. Luke's Hospital or whether or not related to the Operation Of St. Luke's Hospital. Real Property Of St. Luke's Hospital includes, but is not limited to, the assets identified at Appendix 1 to this Order.

DD. "St. Luke's Hospital Assets" means all of ProMedica's right, title, and interest in and to St. Luke's Hospital and all related healthcare and other assets, tangible or intangible, business, and properties, including any improvements or additions thereto made subsequent to Joinder, relating to the operation of the Post-Joinder Hospital Business, including, but not limited to:

1. All Real Property Of St. Luke's Hospital;

2. All Tangible Personal Property, including Tangible Personal Property related to the Operation Of St. Luke's Hospital, whether or not located at St. Luke's Hospital, and Tangible Personal Property located at the Real Property Of St. Luke's Hospital;

3. All consumable or disposable inventory, including but not limited to, janitorial, office, and medical supplies, and at least thirty (30) treatment days of pharmaceuticals;

4. All rights under any contracts and agreements (*e.g.,* leases, service agreements such as dietary and housekeeping services, supply agreements, procurement contracts), including, but not limited to, all rights to contributions, funds, and other provisions for the benefit of St. Luke's Hospital pursuant to the Joinder Agreement;

5. All rights and title in and to use of the St. Luke's Hospital Name and Marks on a permanent and exclusive basis;

6. St. Luke's Medicare and Medicaid provider numbers, to the extent transferable;

7. All Intellectual Property; *provided, however*, that St. Luke's Hospital Medical Protocols do not include ProMedica Medical Protocols;

8. All governmental approvals, consents, licenses, permits, waivers, or other authorizations to the extent transferable;

9. All rights under warranties and guarantees, express or implied;

10. All items of prepaid expense; and

11. Books, records, files, correspondence, manuals, computer printouts, databases, and other documents relating to the Operation Of St. Luke's Hospital, electronic and hard copy, located on the premises of St. Luke's Hospital or in the possession of the ProMedica Employee responsible for the Operation Of St. Luke's Hospital (or copies thereof where ProMedica has a legal obligation to maintain the original document), including, but not limited to:

    a. documents containing information relating to patients (to the extent transferable under applicable law), including, but not limited to, medical records, including, but not limited to, any electronic medical records system,

    b. financial records,

c. personnel files,

d. St. Luke's Hospital Physician Contracts, Physician lists, and other records of St. Luke's Hospital dealings with Physicians,

e. maintenance records,

f. documents relating to policies and procedures,

g. documents relating to quality control,

h. documents relating to Payors,

i. documents relating to Suppliers, and

j. copies of Hospital Provider Contracts and contracts with Suppliers, unless such contracts cannot, according to their terms, be disclosed to third parties even with the permission of ProMedica to make such disclosure.

EE. "St. Luke's Hospital Contractor" means any Person that provides Physician or other healthcare services pursuant to a contract with St. Luke's Hospital or ProMedica (including, but not limited to, the provision of emergency room, anesthesiology, pathology, or radiology services) in connection with the Operation Of St. Luke's Hospital.

FF. "St. Luke's Hospital Physician Contracts" means all agreements to provide the services of a Physician in connection with the Operation Of St. Luke's Hospital, regardless of whether any of the agreements are with a Physician or with a medical group, including, but not limited to, agreements for the services of a medical director for St. Luke's Hospital and "joiner" agreements with Physicians in the same medical practice as a medical director of St. Luke's Hospital.

GG. "St. Luke's Hospital Employee" means any individual who was employed by St. Luke's Hospital prior to Joinder or was employed by ProMedica after Joinder in connection with the Operation Of St. Luke's Hospital, and who has worked part-time or full-time on the premises of St. Luke's Hospital at any time since Joinder, regardless of whether that individual has also worked on the premises of ProMedica.

HH. "St. Luke's Hospital License" means: (i) a worldwide, royalty-free, paid-up, perpetual, irrevocable, transferable, sublicensable, exclusive license under all Intellectual Property owned by or licensed to St. Luke's Hospital relating to operation of the Post-Joinder Hospital Business at St. Luke's Hospital (that is not included in the St. Luke's Hospital Assets) and (ii) such tangible embodiments of the

licensed rights (including, but not limited to, physical and electronic copies) as may be necessary or appropriate to enable the Acquirer to utilize the rights.

II. "St. Luke's Hospital Medical Protocols" means medical protocols promulgated by St. Luke's Hospital, whether in hard copy or embedded in software, that were in effect at any time prior to Joinder with ProMedica.

JJ. "St. Luke's Hospital Medical Staff Member" means any Physician or other healthcare professional who: (1) is not a St. Luke's Hospital Employee and (2) is a member of the St. Luke's Hospital medical staff, including, but not limited to, any St. Luke's Hospital Contractor.

KK. "St. Luke's Hospital Name and Marks" means the name "St. Luke's Hospital" and any variation of that name, in connection with the St. Luke's Hospital Assets, and all other associated trade names, business names, proprietary names, registered and unregistered trademarks, service marks and applications, domain names, trade dress, copyrights, copyright registrations and applications, in both published works and unpublished works, relating to the St. Luke's Hospital Assets.

LL. "Software" means executable computer code and the documentation for such computer code, but does not mean data processed by such computer code.

MM. "Supplier" means any Person that has sold to ProMedica any goods or services, other than Physician services, for use in connection with the Operation Of St. Luke's Hospital; *provided, however*, that "Supplier" does not mean an employee of ProMedica.

NN. "SurgiCare" means OhioCare Ambulatory Surgery Center, LLC d/b/a Surgi+Care, a joint venture providing ambulatory surgery services at St. Luke's Hospital.

OO. "Tangible Personal Property" means all machinery, equipment, spare parts, tools, and tooling (whether customer specific or otherwise); furniture, office equipment, computer hardware, supplies and materials; vehicles and rolling stock; and other items of tangible personal property of every kind whether owned or leased, together with any express or implied warranty by the manufacturers, sellers or lessors of any item or component part thereof, and all maintenance records and other documents relating thereto.

PP. "Transitional Administrative Services" means administrative assistance with respect to the operation of an Acute Care Hospital and related health care services, including but not limited to assistance relating to billing, accounting, governmental regulation, human resources management, information systems, managed care contracting, and purchasing.

QQ. "Transitional Clinical Services" means clinical assistance and support services with respect to operation of an Acute Care Hospital and related healthcare services, including but not limited to cardiac surgery, oncology services, and laboratory and pathology services.

RR. "Transitional Services" means Transitional Administrative Services and Transitional Clinical Services.

II.

IT IS FURTHER ORDERED that:

A. ProMedica shall:

1. No later than one hundred and eighty (180) days from the date this Order becomes final and effective, divest absolutely and in good faith, and at no minimum price, the St. Luke's Hospital Assets to an Acquirer that receives the prior approval of the Commission and in a manner, including pursuant to a Divestiture Agreement, that receives the prior approval of the Commission;

2. Comply with all terms of the Divestiture Agreement approved by the Commission pursuant to this Order, which agreement shall be deemed incorporated by reference into this Order; and any failure by ProMedica to comply with any term of the Divestiture Agreement shall constitute a failure to comply with this Order. The Divestiture Agreement shall not reduce, limit or contradict, or be construed to reduce, limit or contradict, the terms of this Order; *provided, however,* that nothing in this Order shall be construed to reduce any rights or benefits of any Acquirer or to reduce any obligations of ProMedica under such agreement; *provided further,* that if any term of the Divestiture Agreement varies from the terms of this Order ("Order Term"), then to the extent that ProMedica cannot fully comply with both terms, the Order Term shall determine ProMedica's obligations under this Order. Notwithstanding any paragraph, section, or other provision of the Divestiture Agreement, any failure to meet any condition precedent to closing (whether waived or not) or any modification of the Divestiture Agreement, without the prior approval of the Commission, shall constitute a failure to comply with this Order.

B. Prior to the Effective Date Of Divestiture, ProMedica shall not rescind the Joinder Agreement or any term of the Joinder Agreement necessary to comply with any Paragraph of this Order.

C. Prior to the Effective Date Of Divestiture, ProMedica shall restore to St. Luke's Hospital any assets of St. Luke's Hospital as of the date of Joinder that were

removed from St. Luke's Hospital at any time from the date of Joinder through the Effective Date Of Divestiture, other than Inventories consumed in the Ordinary Course Of Business. To the extent that:

1. The St. Luke's Hospital Assets as of the Effective Date Of Divestiture do not include (i) assets that ProMedica acquired on the date of Joinder, (ii) assets that replaced those acquired on the date of Joinder, or (iii) any other assets that ProMedica acquired and has used in or that are related to the Post-Joinder Hospital Business, then ProMedica shall add to the St. Luke's Hospital Assets additional assets (of a quality that meets generally acceptable standards of performance) to replace the assets that no longer exist or are no longer controlled by ProMedica;

2. After the date of Joinder and prior to the Effective Date Of Divestiture, ProMedica terminated any clinical service, clinical program, support function, or management function (i) performed by the Pre-Joinder St. Luke's Hospital Business, or (ii) performed by the Post-Joinder Hospital Business, then ProMedica shall restore such service, program, or function (of a quality that meets generally acceptable standards of care or performance), no later than the Effective Date Of Divestiture of the St. Luke's Hospital Assets or any other date that receives the prior approval of the Commission.

Provided, however, that ProMedica shall not be required to replace any asset or to restore any service, program, or function described by Paragraphs II.C.1. or II.C.2. of this Order if and only if in each instance ProMedica demonstrates to the Commission's satisfaction: (i) that such asset, service, program, or function is not necessary to achieve the purpose of this Order; and (ii) that the Acquirer does not need such asset, service, program, or function to effectively operate the Acquirer Hospital Business in a manner consistent with the purpose of this Order, and if and only if the Commission approves the divestiture without the replacement or restoration of such asset, service, program, or function.

D. No later than the Effective Date Of Divestiture, ProMedica shall grant to the Acquirer a St. Luke's Hospital License for any use in the Acquirer Hospital Business, and shall take all actions necessary to facilitate the unrestricted use of the St. Luke's Hospital License.

E. ProMedica shall take all actions and shall effect all arrangements in connection with the divestiture of the St. Luke's Hospital Assets necessary to ensure that the Acquirer can conduct the Acquirer Hospital Business in substantially the same manner as St. Luke's Hospital has operated as the Post-Joinder Hospital Business, and in full compliance with the March 29, 2011, order issued by Judge Katz in *Federal Trade Commission, et al. v. ProMedica Health System*, Civil No. 3:11 CV 47, at St. Luke's Hospital, with an independent full-service medical staff capable of providing General

Acute Care Inpatient Hospital Services, and an independent full-service hospital staff and management, including, but not limited to, providing:

1. Assistance necessary to transfer to the Acquirer all governmental approvals needed to operate the St. Luke's Hospital Assets as an Acute Care Hospital;

2. Transitional Services;

3. The opportunity to recruit and employ St. Luke's Hospital Employees; and

4. The opportunity to recruit, contract with, and extend medical staff privileges to any St. Luke's Hospital Medical Staff Member, including as provided in Paragraphs II.I, II.J, and II.K of this Order.

F. ProMedica shall convey as of the Effective Date Of Divestiture to the Acquirer the right to use any Licensed Intangible Property (to the extent permitted by the third-party licensor), if such right is needed for the Operation Of St. Luke's Hospital by the Acquirer and if the Acquirer is unable, using commercially-reasonable efforts, to obtain equivalent rights from other third parties on commercially-reasonable terms and conditions.

G. ProMedica shall:

1. Place no restrictions on the use by the Acquirer of the St. Luke's Hospital Assets;

2. On or before the Effective Date Of Divestiture, provide to the Acquirer contact information about Payors and Suppliers for the St. Luke's Hospital Assets;

3. Not object to the sharing of Payor and Supplier contract terms relating to the St. Luke's Hospital Assets: (i) if the Payor or Supplier consents in writing to such disclosure upon a request by the Acquirer, and (ii) if the Acquirer enters into a confidentiality agreement with ProMedica not to disclose the information to any third party; and

4. With respect to contracts with St. Luke's Hospital Suppliers, at the Acquirer's option and as of the Effective Date Of Divestiture:

   a. if such contract can be assigned without third-party approval, assign its rights under the contract to the Acquirer; and

   b. if such contract can be assigned to the Acquirer only with third-party approval, assist and cooperate with the Acquirer in obtaining:

(1) such third-party approval and in assigning the contract to the Acquirer; or

(2) a new contract.

H. At the request of the Acquirer, for a period not to exceed twelve (12) months from the Effective Date Of Divestiture, except as otherwise approved by the Commission, and in a manner (including pursuant to an agreement) that receives the prior approval of the Commission:

1. ProMedica shall provide Transitional Services to the Acquirer sufficient to enable the Acquirer to conduct the Acquirer Hospital Business in substantially the same manner that ProMedica has conducted the Post-Joinder Hospital Business at St. Luke's Hospital; and

2. ProMedica shall provide the Transitional Services required by this Paragraph II.H. at substantially the same level and quality as such services are provided by ProMedica in connection with its operation of the Post-Joinder Hospital Business.

Provided, however, that ProMedica shall not (i) require the Acquirer to pay compensation for Transitional Services that exceeds the Direct Cost of providing such goods and services, (ii) terminate its obligation to provide Transitional Services because of a material breach by the Acquirer of any agreement to provide such assistance, in the absence of a final order of a court of competent jurisdiction, or (iii) include a term in any agreement to provide Transitional Services that limits the type of damages (such as indirect, special, and consequential damages) that the Acquirer would be entitled to seek in the event of ProMedica's breach of such agreement.

I. ProMedica shall allow the Acquirer an opportunity to recruit and employ any St. Luke's Hospital Employee in connection with the divestiture of the St. Luke's Hospital Assets so as to enable the Acquirer to establish an independent, full-service medical staff, hospital staff and management, including as follows:

1. No later than five (5) days after execution of a divestiture agreement, ProMedica shall (i) identify each St. Luke's Hospital Employee, (ii) allow the Acquirer an opportunity to interview any St. Luke's Hospital Employee, and (iii) allow the Acquirer to inspect the personnel files and other documentation relating to any St.Luke's Hospital Employee, to the extent permissible under applicable laws.

2. ProMedica shall (i) not offer any incentive to any St. Luke's Hospital Employee to decline employment with the Acquirer, (ii) remove any contractual impediments that may deter any St. Luke's Hospital Employee from accepting employment with the Acquirer, including, but not limited to, any non-compete or confidentiality provisions of employment or other contracts with ProMedica that

would affect the ability of the St. Luke's Hospital Employee to be employed by the Acquirer, and (iii) not otherwise interfere with the recruitment of any St. Luke's Hospital Employee by the Acquirer, including, but not limited to, by refusing or threatening to refuse to extend medical staff privileges at any ProMedica Acute Care Hospital.

3. ProMedica shall (i) vest all current and accrued pension benefits as of the date of transition of employment with the Acquirer for any St. Luke's Hospital Employee who accepts an offer of employment from the Acquirer no later than thirty (30) days from the Effective Date Of Divestiture and (ii) if the Acquirer has made a written offer of employment to any key personnel, as identified at Confidential Appendix 2, provide such key personnel with reasonable financial incentives to accept a position with the Acquirer at the time of the Effective Date Of Divestiture, including, but not limited to (and subject to Commission approval), payment of an incentive equal to up to three (3) months of such key personnel's base salary to be paid only upon such key personnel's completion of one (1) year of employment with the Acquirer.

4. For a period ending two (2) years after the Effective Date Of Divestiture, ProMedica shall not, directly or indirectly, solicit, hire, or enter into any arrangement for the services of any St. Luke's Hospital Employee employed by the Acquirer, unless such St. Luke's Hospital Employee's employment has been terminated by the Acquirer; *provided, however,* this Paragraph II.I.4 shall not prohibit ProMedica from: (i) advertising for employees in newspapers, trade publications, or other media not targeted specifically at the St. Luke's Hospital Employees, (ii) hiring employees who apply for employment with ProMedica, as long as such employees were not solicited by ProMedica in violation of this Paragraph II.I.4, or (iii) offering employment to a St.Luke's Hospital Employee who is employed by the Acquirer in only a part-time capacity, if the employment offered by ProMedica would not, in any way, interfere with that employee's ability to fulfill his or her employment responsibilities to the Acquirer.

J. ProMedica shall allow the Acquirer an unimpeded opportunity to recruit, contract with, and otherwise extend medical staff privileges to any St. Luke's Hospital Medical Staff Member in connection with the divestiture of the St. Luke's Hospital Assets so as to enable the Acquirer to establish an independent, complete, full-service medical staff, including as follows:

1. No later than the date of execution of a divestiture agreement, ProMedica shall (i) identify each St. Luke's Hospital Medical Staff Member, (ii) allow the Acquirer an opportunity to interview any St. Luke's Hospital Medical Staff Member, and (iii) allow the Acquirer to inspect the files and other documentation relating to any St. Luke's Hospital Medical Staff Member, to the extent permissible under applicable laws.

2. ProMedica shall (i) not offer any incentive to any St. Luke's Hospital Medical Staff Member to decline to join the Acquirer's medical staff; (ii) remove any contractual impediments that may deter any St. Luke's Hospital Medical Staff Member from joining the Acquirer's medical staff, including, but not limited to, any non-compete or confidentiality provisions of employment or other contracts with ProMedica that would affect the ability of the St. Luke's Hospital Medical Staff Members to be recruited by the Acquirer; and (iii) not otherwise interfere with the recruitment of any St. Luke's Hospital Medical Staff Member by the Acquirer, including, but not limited to, by refusing or threatening to refuse to extend medical staff privileges at any ProMedica Acute Care Hospital.

K. With respect to each Physician who has provided services to St. Luke's Hospital pursuant to any St. Luke's Hospital Physician Contract in effect at any time preceding the Effective Date Of Divestiture ("Contract Physician"), ProMedica shall not offer any incentive to the Contract Physician, the Contract Physician's practice group, or other members of the Contract Physician's practice group to decline to provide services to St. Luke's Hospital, and shall eliminate any confidentiality restrictions that would prevent the Contract Physician, the Contract Physician's practice group, or other members of the Contract Physician's practice group from using or transferring to the Acquirer of the St. Luke's Hospital Assets any information relating to the Operation Of St. Luke's Hospital.

L. Except in the course of performing its obligations under this Order, ProMedica shall:

1. not provide, disclose, or otherwise make available any trade secrets or any sensitive or proprietary commercial or financial information relating to the Acquirer or the Acquirer Hospital Business to any Person other than the Acquirer, and shall not use such information for any reason or purpose;

2. disclose trade secrets or any sensitive or proprietary commercial or financial information relating to the Acquirer or the Acquirer Hospital Business to any Person other than the Acquirer (i) only in the manner and to the extent necessary to satisfy ProMedica's obligations under this Order and (ii) only to Persons who agree in writing to maintain the confidentiality of such information;

3. enforce the terms of this Paragraph II.L as to any Person and take such action as is necessary, including training, to cause each such Person to comply with the terms of this Paragraph II.L., including any actions that ProMedica would take to protect its own trade secrets or sensitive or proprietary commercial or financial information.

M. No later than the Effective Date Of Divestiture, ProMedica shall assign to the Acquirer any Hospital Provider Contract for the provision of services in connection

with the Operation Of St. Luke's Hospital that is in effect as of the date the divestiture provisions of this Order become final and effective; *provided, however,* that nothing in this Paragraph II.M. shall preclude ProMedica from completing any post-termination obligations relating to any Hospital Provider Contract.

N. From the date this Order becomes final and effective until one (1) year from the Effective Date Of Divestiture, ProMedica, so long as it offers any Paramount product, shall not terminate any agreement in connection with the Operation Of St. Luke's Hospital between St. Luke's Hospital and Paramount that provides that:

1. St. Luke's Hospital shall become a participating provider in all Paramount products and networks at rates comparable to other member Acute Care Hospitals in the ProMedica Health System, as provided at Section 6.2(i) of the Second Amendment to Joinder Agreement; and

2. SurgiCare shall become a participating provider in all Paramount products and networks at rates comparable to other similarly situated ambulatory surgery centers in the ProMedica Health System, as provided at Paragraph 1 of the Side Agreement.

O. The purpose of the divestiture of the St. Luke's Hospital Assets is to ensure the continued Operation Of St. Luke's Hospital by the Acquirer, independent of ProMedica, and to remedy the lessening of competition resulting from ProMedica's acquisition of St. Luke's Hospital.

III.

IT IS FURTHER ORDERED that:

A. From the date this Order becomes final and effective (without regard to the finality of the divestiture requirements herein) until the Effective Date Of Divestiture, ProMedica shall not:

1. Sell or transfer any St. Luke's Hospital Assets, other than in the Ordinary Course Of Business;

2. Eliminate, transfer, or consolidate any clinical service offered in connection with the Post- Joinder Hospital Business;

3. Fail to maintain the employment of all St. Luke's Hospital Employees or otherwise fail to keep the Post-Joinder Hospital Business staffed with sufficient employees; *provided, however*, that ProMedica may terminate employees for

cause consistent with the Operation Of St. Luke's Hospital on the day before Joinder (in which event ProMedica shall replace such employees);

4. Modify, change, or cancel any Physician privileges in connection with the Post-Joinder Hospital Business; *provided, however*, that ProMedica may revoke the privileges of any individual Physician consistent with the practices and procedures in place in connection with the Operation Of St. Luke's Hospital on the day before Joinder; or

5. Terminate, or cause or allow termination of any contract between any Payor and St. Luke's Hospital. For any contract between a Payor and St. Luke's Hospital that expires during the term of this Order, ProMedica shall offer to extend such contract at rates for services in connection with the Post-Joinder Hospital Business that shall be increased no more than the highest year-over-year escalator percentage as provided in such contract.

IV.

IT IS FURTHER ORDERED that:

A. From the date this Order becomes final and effective (without regard to the finality of the divestiture requirements herein) until the Effective Date Of Divestiture, ProMedica shall take such actions as are necessary to maintain the viability, marketability, and competitiveness of the St. Luke's Hospital Assets and the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets. Among other things that may be necessary, ProMedica shall:

1. Maintain the operations of the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets in the Ordinary Course Of Business and in accordance with past practice (including regular repair and maintenance of the St. Luke's Hospital Assets).

2. Use best efforts to maintain and increase revenues of the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets, and to maintain at budgeted levels for the year 2010 or the current year, whichever are higher, all administrative, technical, and marketing support for the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets.

3. Use best efforts to maintain the current workforce and to retain the services of employees and agents in connection with the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets, including payment of bonuses as necessary, and maintain the relations and goodwill with patients, Physicians, Suppliers, vendors, employees, landlords, creditors, agents, and others having

business relationships with the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets.

4. Assure that ProMedica's employees with primary responsibility for managing and operating the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets are not transferred or reassigned to other areas within ProMedica's organization, except for transfer bids initiated by employees pursuant to ProMedica's regular, established job- posting policy (in which event ProMedica shall replace such employees).

5. Provide sufficient working capital to maintain the Post-Joinder Hospital Business relating to the St. Luke's Hospital Assets as an economically viable and competitive ongoing business and shall not, except as part of a divestiture approved by the Commission pursuant to this Order, remove, sell, lease, assign, transfer, license, pledge for collateral, or otherwise dispose of the St. Luke's Hospital Assets.

B. No later than thirty (30) days from the date this Order becomes final and effective (without regard to the finality of the divestiture requirements herein), ProMedica shall file a verified written report to the Commission that identifies (i) all assets included in the St. Luke's Hospital Assets, (ii) all assets originally acquired or that replace assets originally acquired by ProMedica as a result of Joinder, (iii) all assets relating to the Post-Joinder Hospital Business that are not included in the St. Luke's Hospital Assets, and (iv) all clinical services, support functions, and management functions that ProMedica discontinued at St. Luke's Hospital after Joinder (hereinafter "Accounting").

V.

IT IS FURTHER ORDERED that no later than five (5) days from the date this Order becomes final and effective (without regard to the finality of the divestiture requirements herein), ProMedica shall provide a copy of this Order and Complaint to each of ProMedica's officers, employees, or agents having managerial responsibility for any of ProMedica's obligations under Paragraphs II, III, and IV of this Order.

VI.

IT IS FURTHER ORDERED that:

A. At any time after this Order becomes final and effective (without regard to the finality of the divestiture requirements herein), the Commission may appoint a Person ("Monitor") to monitor ProMedica's compliance with its obligations under this Order, consult with Commission staff, and report to the Commission regarding ProMedica's compliance with its obligations under this Order.

B. If a Monitor is appointed pursuant to Paragraph VI.A of this Order, ProMedica shall consent to the following terms and conditions regarding the powers, duties, authorities, and responsibilities of the Monitor:

1. The Monitor shall have the power and authority to monitor ProMedica's compliance with the terms of this Order, and shall exercise such power and authority and carry out the duties and responsibilities of the Monitor pursuant to the terms of this Order and in a manner consistent with the purposes of this Order and in consultation with the Commission or its staff.

2. Within ten (10) days after appointment of the Monitor, ProMedica shall execute an agreement that, subject to the approval of the Commission, confers on the Monitor all the rights and powers necessary to permit the Monitor to monitor ProMedica's compliance with the terms of this Order in a manner consistent with the purposes of this Order. If requested by ProMedica, the Monitor shall sign a confidentiality agreement prohibiting the use or disclosure to anyone other than the Commission (or any Person retained by the Monitor pursuant to Paragraph VI.B.5. of this Order), of any competitively-sensitive or proprietary information gained as a result of his or her role as Monitor, for any purpose other than performance of the Monitor's duties under this Order.

3. The Monitor's power and duties under this Paragraph VI shall terminate three (3) business days after the Monitor has completed his or her final report pursuant to Paragraph VI.B.8. or at such other time as directed by the Commission.

4. ProMedica shall cooperate with any Monitor appointed by the Commission in the performance of his or her duties, and shall provide the Monitor with full and complete access to ProMedica's books, records, documents, personnel, facilities, and technical information relating to compliance with this Order, or to any other relevant information, as the Monitor may reasonably request. ProMedica shall cooperate with any reasonable request of the Monitor. ProMedica shall take no action to interfere with or impede the Monitor's ability to monitor ProMedica's compliance with this Order.

5. The Monitor shall serve, without bond or other security, at the expense of ProMedica, on such reasonable and customary terms and conditions as the Commission may set. The Monitor shall have the authority to employ, at the expense of ProMedica, such consultants, accountants, attorneys, and other representatives and assistants as are reasonably necessary to carry out the Monitor's duties and responsibilities. The Monitor shall account for all expenses

incurred, including fees for his or her services, subject to the approval of the Commission.

6. ProMedica shall indemnify the Monitor and hold the Monitor harmless against any losses, claims, damages, liabilities, or expenses arising out of, or in connection with, the performance of the Monitor's duties, including all reasonable fees of counsel and other expenses incurred in connection with the preparation for, or defense of, any claim, whether or not resulting in any liability, except to the extent that such losses, claims, damages, liabilities, or expenses result from the Monitor's gross negligence or willful misconduct. For purposes of this Paragraph VI.B.6., the term "Monitor" shall include all Persons retained by the Monitor pursuant to Paragraph VI.B.5. of this Order.

7. If at any time the Commission determines that the Monitor has ceased to act or failed to act diligently, or is unwilling or unable to continue to serve, the Commission may appoint a substitute to serve as Monitor in the same manner as provided by this Order.

8. The Monitor shall report in writing to the Commission (i) every sixty (60) days from the date this Order becomes final, (ii) no later than thirty (30) days from the date ProMedica completes its obligations under this Order, and (iii) at any other time as requested by the staff of the Commission, concerning ProMedica's compliance with this Order.

C. ProMedica shall submit the following reports to the Monitor: (i) no later than twenty (20) days after the date the Monitor is appointed by the Commission pursuant to Paragraph VI.A., a copy of the Accounting required by Paragraph IV.B. of this Order; and (ii) copies of all compliance reports filed with the Commission.

D. ProMedica shall provide the Monitor with: (i) prompt notification of significant meetings, including date, time and venue, scheduled after the execution of the Monitor Agreement, relating to the regulatory approvals, marketing, sale and divestiture of the St. Luke's Hospital Assets, and such meetings may be attended by the Monitor or his representative, at the Monitor's option or at the request of the Commission or staff of the Commission; and (ii) the minutes, if any, of the above-referenced meetings as soon as practicable and, in any event, not later than those minutes are available to any employee of ProMedica.

E. The Commission may, on its own initiative or at the request of the Monitor, issue such additional orders or directions as may be necessary or appropriate to assure compliance with the requirements of this Order.

F. The Monitor appointed pursuant to this Order may be the same Person appointed as Divestiture Trustee pursuant to Paragraph II of this Order.

VII.

IT IS FURTHER ORDERED that:

A. If ProMedica has not divested, absolutely and in good faith, the St. Luke's Hospital Assets pursuant to the requirements of Paragraph II of the Order, within the time and manner required by Paragraph II of this Order, the Commission may at any time appoint one or more Persons as Divestiture Trustee to divest the St. Luke's Hospital Assets, at no minimum price, and pursuant to the requirements of Paragraph II of this Order, in a manner that satisfies the requirements of this Order.

B. In the event that the Commission or the Attorney General brings an action pursuant to § 5(*l*) of the Federal Trade Commission Act, 15 U.S.C. § 45(*l*), or any other statute enforced by the Commission, ProMedica shall consent to the appointment of a Divestiture Trustee in such action. Neither the appointment of a Divestiture Trustee nor a decision not to appoint a Divestiture Trustee under this Paragraph VII shall preclude the Commission or the Attorney General from seeking civil penalties or any other relief available to it, including appointment of a court-appointed Divestiture Trustee, pursuant to § 5(*l*) of the Federal Trade Commission Act, or any other statute enforced by the Commission, for any failure by the ProMedica to comply with this Order.

C. If a Divestiture Trustee is appointed by the Commission or a court pursuant to this Paragraph VII, ProMedica shall consent to the following terms and conditions regarding the Divestiture Trustee's powers, duties, authority, and responsibilities:

1. Subject to the prior approval of the Commission, the Divestiture Trustee shall have the exclusive power and authority to effect the divestiture pursuant to the requirements of Paragraph II and in a manner consistent with the purposes of this Order.

2. Within ten (10) days after appointment of the Divestiture Trustee, ProMedica shall execute an agreement that, subject to the prior approval of the Commission and, in the case of a court-appointed Divestiture Trustee, of the court, transfers to the Divestiture Trustee all rights and powers necessary to permit the Divestiture Trustee to effect the divestiture and perform the requirements of Paragraph II of this Order for which he or she has been appointed.

3. The Divestiture Trustee shall have twelve (12) months from the date the Commission approves the agreement described in Paragraph VII.C.2. of this Order to accomplish the divestiture, which shall be subject to the prior approval of the Commission. If, however, at the end of the twelve-month period the Divestiture Trustee has submitted a plan of divestiture or believes that divestiture can be achieved within a reasonable time, the divestiture period may be extended by the Commission, or, in the case of a court appointed Divestiture Trustee, by the court.

4. ProMedica shall provide the Divestiture Trustee with full and complete access to the personnel, books, records, and facilities related to the assets to be divested, or to any other relevant information, as the Divestiture Trustee may request. ProMedica shall develop such financial or other information as the Divestiture Trustee may reasonably request and shall cooperate with the Divestiture Trustee. ProMedica shall take no action to interfere with or impede the Divestiture Trustee's accomplishment of the divestiture. Any delays in divestiture caused by ProMedica shall extend the time for divestiture under this Paragraph in an amount equal to the delay, as determined by the Commission or, for a court-appointed Divestiture Trustee, by the court.

5. The Divestiture Trustee shall use his or her best efforts to negotiate the most favorable price and terms available in each contract that is submitted to the Commission, but shall divest expeditiously at no minimum price. The divestiture shall be made only to an Acquirer that receives the prior approval of the Commission, and the divestiture shall be accomplished only in a manner that receives the prior approval of the Commission; *provided, however,* if the Divestiture Trustee receives bona fide offers from more than one acquiring entity, and if the Commission determines to approve more than one such acquiring entity, the Divestiture Trustee shall divest to the acquiring entity or entities selected by ProMedica from among those approved by the Commission; *provided, further,* that ProMedica shall select such entity within ten (10) business days of receiving written notification of the Commission's approval.

6. The Divestiture Trustee shall serve, without bond or other security, at the cost and expense of ProMedica, on such reasonable and customary terms and conditions as the Commission or a court may set. The Divestiture Trustee shall have the authority to employ, at the cost and expense of ProMedica, such consultants, accountants, attorneys, investment bankers, business brokers, appraisers, and other representatives and assistants as are necessary to carry out the Divestiture Trustee's duties and responsibilities. The Divestiture Trustee shall account for all monies derived from the divestiture and all expenses incurred. After approval by the Commission of the account of the Divestiture Trustee, including fees for his or her services, all remaining monies shall be paid at the direction of the ProMedica, and the Divestiture Trustee's power shall be terminated. The Divestiture Trustee's compensation may be based in part on a commission arrangement contingent on the Divestiture Trustee's divesting the assets.

7. ProMedica shall indemnify the Divestiture Trustee and hold the Divestiture Trustee harmless against any losses, claims, damages, liabilities, or expenses arising out of, or in connection with, the performance of the Divestiture Trustee's duties, including all reasonable fees of counsel and other expenses incurred in connection with the preparation for, or defense of any claim, whether or not resulting in any liability, except to the extent that such liabilities, losses, damages, claims, or expenses result from gross negligence or willful misconduct by the Divestiture Trustee. For purposes of this Paragraph VII.C.7., the term

"Divestiture Trustee" shall include all Persons retained by the Divestiture Trustee pursuant to Paragraph VII.C.6. of this Order.

8. If the Divestiture Trustee ceases to act or fails to act diligently, the Commission may appoint a substitute Divestiture Trustee in the same manner as provided in this Paragraph VII for appointment of the initial Divestiture Trustee.

9. The Divestiture Trustee shall have no obligation or authority to operate or maintain the assets to be divested.

10. The Divestiture Trustee shall report in writing to the Commission every sixty (60) days concerning the Divestiture Trustee's efforts to accomplish the divestiture.

D. The Commission or, in the case of a court-appointed Divestiture Trustee, the court, may on its own initiative or at the request of the Divestiture Trustee issue such additional orders or directions as may be necessary or appropriate to accomplish the divestiture required by this Order.

E. The Divestiture Trustee appointed pursuant to this Paragraph may be the same Person appointed as the Monitor pursuant to Paragraph VI of this Order.

VIII.

IT IS FURTHER ORDERED that:

A. ProMedica shall file a verified written report with the Commission setting forth in detail the manner and form in which it intends to comply, is complying, and has complied with this Order (i) no later than thirty (30) days from the date this Order becomes final and effective (without regard to the finality of the divestiture requirements herein), and every thirty (30) days thereafter until the divestiture of the St. Luke's Hospital Assets is accomplished, and (ii) thereafter, every sixty (60) days (measured from the Effective Date Of Divestiture) until the date ProMedica completes its obligations under this Order; *provided, however,* that ProMedica shall also file the report required by this Paragraph VIII at any other time as the Commission may require.

B. ProMedica shall include in its compliance reports, among other things required by the Commission, a full description of the efforts being made to comply with the relevant Paragraphs of this Order, a description (when applicable) of all substantive contacts or negotiations relating to the divestiture required by Paragraph II of this Order, the identity of all parties contacted, copies of all written communications to and from such parties, internal documents and communications, and all reports and recommendations concerning the divestiture, the date of divestiture, and a statement that the divestiture has been accomplished in the manner approved by the Commission.

IX.

IT IS FURTHER ORDERED that ProMedica shall notify the Commission at least thirty (30) days prior to (1) any proposed dissolution of ProMedica, (2) any proposed acquisition, merger, or consolidation of ProMedica, or (3) any other change in ProMedica that may affect compliance obligations arising out of this Order, including but not limited to assignment, the creation or dissolution of subsidiaries, or any other change in ProMedica.

X.

IT IS FURTHER ORDERED that, for the purpose of determining or securing compliance with this Order, and subject to any legally recognized privilege, and upon written request with reasonable notice, ProMedica shall permit any duly authorized representative of the Commission:

A. Access, during office hours of ProMedica, and in the presence of counsel, to all facilities and access to inspect and copy all books, ledgers, accounts, correspondence, memoranda, and all other records and documents in the possession, or under the control, of ProMedica relating to compliance with this Order, which copying services shall be provided by ProMedica at its expense; and

B. To interview officers, directors, or employees of ProMedica, who may have counsel present, regarding such matters.

By the Commission.

Donald S. Clark
Secretary

SEAL

ISSUED:

Appendix 1

3113 Dustin Road, Oregon
9246 Dutch Road, Whitehouse
210 South Hallet St., Swanton
5635 Monclova Road, Maumee
5705 Monclova Road, Maumee
5755 Monclova Road, Maumee
5757 Monclova Road, Maumee
5759 Monclova Road, Maumee
5805 Monclova Road, Maumee
5901 Monclova Road, Maumee
5959 Monclova Road, Maumee
6001 Monclova Road, Maumee
6005 Monclova Road, Maumee
6009 Monclova Road, Maumee
6011 Monclova Road, Maumee
8404 Monclova Road, Maumee
3000 Regency Court, Toledo
28442 East River Road, Perrysburg
3900 Sunforest Court, Toledo
1103 Village Square, Perrysburg
900 Waterville-Monclova Road, Waterville

Confidential Appendix 2

REDACTED

APPENDIX

Table 3

Drive Times and Distance to Non-Lucas County Hospitals

Non-Lucas County Hospital (Location)	Drive Time from Toledo (Approx. Minutes)*	Distance from Toledo (Approx. Miles)*
Wood County Hospital (Bowling Green, OH)	30	25
Fremont Memorial Hospital (Fremont, OH)	48	37
Fulton County Health Center (Wauseon, OH)	52	41
H.B. Magruder Memorial Hospital (Port Clinton, OH)	53	48
University of Michigan Medical Center (Ann Arbor, MI)	54	52
Cleveland Clinic (Cleveland, OH)	116	119
Ave. Drive Time - Lucas County Residents (GAC)	11.5	-
95th Percentile Drive Time - Lucas County Residents (GAC)	23.6	-

**Source*: Google Maps, calculating directions from Toledo, Ohio to hospital address.

Merger Guidelines §5.3
*HHI > 2500: Highly Concentrated Market
*ΔHHI > 200: Merger presumed likely to enhance market power

Table 4

GAC Market Shares and HHIs
(Hospitals in Lucas, Wood, and Fulton Counties)

Inpatient General Acute-Care Services		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	44.8%	55.8%
St. Luke's	11.0%	--
Mercy	27.5%	27.5%
UTMC	12.5%	12.5%
WCH	3.0%	3.0%
FCHC	1.2%	1.2%
Pre-Acquisition HHI	3048.4	
Post-Acquisition HHI		4037.2
HHI Increase		988.8

Source: OHA Data; market shares based on commercial patient days (7/09 – 3/10)

Table 5

OB Market Shares and HHIs
(Hospitals in Lucas, Wood, and Fulton Counties)

Inpatient Obstetrical Services		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	66.58%	75.3%
St. Luke's	8.60%	--
Mercy	18.20%	18.2%
WCH	4.16%	4.2%
FCHC	2.30%	2.3%
Pre-Acquisition HHI	4862.9	
Post-Acquisition HHI		6020.2
HHI Increase		1157.3

Source: OHA Data; market shares based on commercial patient days (7/09 – 3/10)

Merger Guidelines §5.3
*HHI > 2500: Highly Concentrated Market
*ΔHHI > 200: Merger presumed likely to enhance market power

Table 6

Inpatient Market Shares and HHIs
(Hospitals in All Zips)

GAC+non-GAC+OB+non-OB		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	35%	43%
St. Luke's	8%	--
Mercy	23%	23%
UTMC	8%	8%
WCH	3%	3%
Univ. of Michigan	2%	2%
Cleveland Clinic	20%	20%
Pre-Acquisition HHI	2295	
Post-Acquisition HHI		2855
HHI Increase		560

Source: RX-71(A) at 165 (Guerin-Calvert Expert Report), *in camera*,
(based on OHA Data; market shares based on commercial discharges (2009)

Merger Guidelines §5.3
*HHI > 2500: Highly Concentrated Market
*ΔHHI > 200: Merger presumed likely to enhance market power

Table 7

Inpatient Market Shares and HHIs
(Hospitals in Toledo CSA)

GAC+non-GAC+OB+non-OB		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	43%	55%
St. Luke's	12%	--
Mercy	29%	29%
UTMC	9%	9%
WCH	4%	4%
Univ. of Michigan	2%	2%
Cleveland Clinic	2%	2%
Pre-Acquisition HHI	2936	
Post-Acquisition HHI		3968
HHI Increase		1032

Source: RX-71(A) at 165 (Guerin-Calvert Expert Report), *in camera*, based on OHA Data; market shares based on commercial discharges (2009)

Merger Guidelines §5.3
*HHI > 2500: Highly Concentrated Market
*ΔHHI > 200: Merger presumed likely to enhance market power

Table 8

Inpatient Market Shares and HHIs
(Beds In Use Less Non-Acute Care)

Beds In Use Less Non-Acute Care		
Hospital/System	**Pre-Acquisition Market Share**	**Post-Acquisition Market Share**
ProMedica	39.4%	47.8%
St. Luke's	8.4%	--
Mercy	31.7%	31.7%
UTMC	8.9%	8.9%
FCHC	1.8%	1.8%
Fremont Memorial	4.4%	4.4%
H.B. Magruder	1.0%	1.0%
WCH	4.5%	4.5%
Pre-Acquisition HHI	2750.9	
Post-Acquisition HHI		3412.8
HHI Increase		661.9

Source: RX-71(A) at 208 (Guerin-Calvert Expert Report), *in camera*, based on OHA Data; market shares based on beds in use for "Total Hospital Less Non-Acute Care" (2009)