

**Evaluating the Complexities of Applying Antitrust Enforcement to the Hospital
Industry**

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Abstract

This paper discusses how the Federal Trade Commission (FTC) applies antitrust enforcement to hospital mergers. The vastly differentiated aspects of hospital service, the unique relationship between hospitals and managed care organizations, and the importance of competition within the industry, add complexity to the application of antitrust enforcement in this area. Through analysis of two critical hospital merger cases that the FTC challenged, this paper creates a discourse on how the FTC approaches hospital consolidation. Specifically, it addresses the merits and shortcomings of the efficiency and failing firm arguments and discusses how the FTC needs to alter its methodology to better measure improvements in quality of care.

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Introduction

In the 1990s, the landscape of the health care industry began to undergo dramatic consolidation. Previously independent hospitals transformed into large health systems. One study estimates that from 1994-2000, there were more than 900 hospital mergers. Additionally, major metropolitan areas such as Boston, Pittsburg, Minneapolis, Philadelphia, St. Louis and San Francisco are now dominated by two or three large hospital systems (Gaynor 2). The consolidated systems have advantages and drawbacks. Consolidation can have the benefit of increasing efficiency through streamlining communication, service coordination and other complementarities. These benefits can be offset by the negative impact of potential price increases that result from increased market concentration.

Antitrust policy in the US is meant to prevent companies from using anti-competitive practices to gain an advantage over their competitors. Such practices include policies that limit competition, increase prices, prevent firms from entering the market, or in any other way impede free trade. Within the United States, The Federal Trade Commission (FTC) and Department of Justice (DOJ) work correspondingly to monitor mergers and acquisitions of companies across all industries. In regard to the hospital industry, the FTC has struggled to maintain consistent antitrust policy enforcement. In part, the FTC's trouble stems from the complexities of the industry. Hospital care is a highly differentiated category, because services vary significantly across hospitals. The ability of a hospital to capture patients' preferences, affords the hospital more market power because patients will view it as more valuable than its competitors.

Beginning in the 1990s, hospital mergers became more prevalent. Simultaneously, from 1990-2000, attempts to enjoin hospital mergers were the most unsuccessful feats of antitrust enforcement, largely because of the intricacies of analyzing the differentiated market. During that time, both the FTC and the Court applied economic modeling that sometimes mishandled the diversified characteristics of the hospital industry (Groebe 1618). Consequently, the Court often rendered a relevant market that was significantly broad, thereby diminishing the anticipated effect on competition (Haas-Wilson 3). As such, the FTC found it difficult to prove that a merger between two hospitals would have a negative impact and many merging hospitals successfully defended themselves against the FTC's challenges. The majority of the proposed hospital mergers consummated and widespread consolidation occurred (Groebe 1618).

When it comes to antitrust enforcement for the hospital industry, economists have questioned if the typical antitrust paradigm can be adequately applied. Firstly, antitrust is meant to ensure that no company (or companies) achieves too much market power. From an antitrust perspective, large hospital systems can be harmful in that they may be able to extract higher prices for their services. On the other hand, hospitals claim that through merging they will be able to increase their efficiency and improve patient outcomes. It is widely accepted that large, individual hospitals, will be more efficient due to their size and scale (Lo Sasso). However, we have not necessarily seen that pattern transfer over to large hospitals systems. In fact, studies show that consolidation has increased the cost of health care a minimum of 5% and a maximum of 40% since the 1990s (Groebe 1618). Additionally, a study conducted on the hospital industry of Massachusetts shows that pricing for services was positively correlated with market power, but that there was no

significant relationship between higher prices and quality (Groebe 1619). A similar result came from a study conducted in California, discussed later in this paper, that shows that diminishing competition actually correlates with diminishing quality of care (Schneider). These studies, and more like them, indicate that the rampant consolidation often lead to higher prices, but not necessarily to a realization of the proposed efficiencies.

Hospitals often maintain that merging will improve the coordination of care, minimize unnecessary procedures, increase response time, or improve facilities. This is known as the ‘efficiency argument.’ The goal of the FTC is to determine if the proposed efficiencies will outweigh the negative effect of diminished competition.

In addition to the efficiency argument, hospitals have used the ‘failing firm argument.’ Under this argument, hospitals claim that without merging, they will be forced to cut services, lay off staff, or close their doors entirely, thereby negatively impacting the quality of care offered. In typical antitrust enforcement, the authorities focus on whether or not the behavior of a firm creates an anticompetitive market; they are generally not concerned about the welfare of a particular company or competitor. Accordingly, the FTC has stated that it is not immediately concerned with the financial future of a particular company; it is concerned first and foremost with continuing competition in the market. Thus, the FTC has historically found that the failing firm argument is not valid because the potentialities of financial hardship do not outweigh the negative effects consolidation may have on competition.

The efficiency argument and failing firm argument bring up the issue of quality of care, a crucial component to a successful health care market. The FTC’s decision to enjoin mergers, and its resulting success or failure, is likely to have lasting effects on the

services hospitals provide and the prices they receive. While hospitals often use the efficiency argument as justification for consolidation, there is little empirical evidence to suggest that consolidation will result in said efficiencies (Schneider). In general, the FTC does not place much weight on the efficiency and failing firm arguments, because it is difficult to prove that the efficiencies could only occur with the merger. Furthermore, because the competitor is not the focus of antitrust, the FTC maintains that the financial hardship of a single hospital is not reason enough to allow an anticompetitive merger.

This paper conducts a close analysis of two high profile antitrust cases in an effort to gain further insight as to how the FTC and the Court have recently approached the efficiency and failing firm arguments. Through doing so, I explore the disconnect between the FTC's goal of stopping anticompetitive consolidation and the hospital's claims that increased size creates long term benefits to efficiency and patient outcome. The first section of this paper will provide an overview of antitrust origin and application in the United States, and some of the complexities that arise for hospital antitrust cases. The second section of this paper provides an in depth analysis of two high profile hospital merger cases: *ProMedica Health Systems, Inc. v. the Federal Trade Commission* and a case involving the Evanston Healthcare Corporation. Through my analysis, I identify unique outcomes of the two cases and highlight similarities and differences to better understand how the Court approaches the efficiency and failing firm arguments. The third section uses a recent policy put forth in the *Patient Protection and Affordable Care Act* to draw important parallels between consolidation within the health care industry and resulting effects on quality of care. It includes a literature review of an econometric study analyzing the importance of competition when it comes to care standards.

I focus on the misalignment between hospitals' conviction that consolidation increases quality of care to the benefit of the consumer, and the FTC's belief that consolidation reduces competition, creating harm for the consumer. One of my conclusions is that a hospital industry without competition is likely to experience a long-term decline in the provision of care. Thus, competition policies play a crucial role in the future of the industry, and proper antitrust enforcement will be paramount to ensure quality, affordable, and widely available care in this country. I also conclude that in order to properly address the complexities of the health care industry, the FTC may have to more explicitly consider the efficiency and failing firm arguments that hospitals purport.

Section I: Overview of Antitrust Enforcement

A Brief Outline of Antitrust Enforcement within the Hospital Industry

Antitrust law was first established in the US in 1890 with the passage of The Sherman Act. The Sherman Act was to serve as a “comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade” (Guide). It is still a fundamental part of antitrust law today; however, for the scope of this paper, the Clayton Act, passed in 1914, plays a larger role. The Clayton Act further defines the scope of antitrust and provides additional substance to the Sherman Act. Section 7 of the Clayton Act states that mergers that “may be substantially to lessen competition or to tend to create a monopoly” are illegal (Guide). The purpose of the FTC’s scrutiny is to determine if the merger has the “potential for creating, enhancing or facilitating the exercise of market power – the ability of one or more firms to raise prices above competitive levels for a significant period of time” (Groebe 1620). Antitrust law is challenging to apply because the Court does not have the benefit of hindsight knowledge and cannot definitively know if a merger will increase price. As a result, the Court relies on economic models and expert testimony to determine if there is reasonable evidence to suspect a merger would create a high degree of market concentration and lead to a probable price increase.

To examine market power, the Court must first decide what the relevant market is. The relevant market is made up of the product market and the geographic market and is vital to any antitrust case because it estimates the market power that the merging companies currently have, and more importantly what they would collectively have post-merger. A narrow relevant market means that companies will have appear to have more

market power, a larger market means companies will appear to have a less market power.

One of the contributing reasons the FTC suffered its losing streak throughout the 1990s was because it failed to make a compelling argument for a narrow market (Groebe 1617-1618). Thus, the Court largely accepted the broader markets provided by the hospital's counsel, which indicated that hospitals had much less market power and suggested that a merger between the hospitals in question would not significantly increase consolidation. Once the relevant product market is determined, economic analysis is used to estimate the positive or negative effects that the merger will have on the consumer.

Understanding the consumer is crucial because it is the consumer specifically that antitrust authorities in the US are trying to protect from anticompetitive markets. Typically, the consumer is the individual who directly purchases the product or service. Take for example beverage companies. The consumer is the individual who goes to the store or vending machine and purchases the beverage. Now suppose that Coca Cola and Pepsi merged and the price of soda sold by the new combined entity doubled the previous price. The individual shopping at the grocery store would be directly affected by having to choose between paying the higher price, buying a different and cheaper brand they may not prefer, or not buying soda at all. In regards to the hospital industry, the consumers that the FTC is most immediately concerned with are insurance companies, or managed care organizations (MCOs), not individuals. MCOs are health insurance institutions that have contracted with health care providers to provide care for their plan participants at a reduced cost.

Managed Care Organizations

MCOs act as a third party between hospitals and patients and negotiate the reimbursement rates that hospitals will receive for their services. The patients who get insurance through MCOs, or MCO participants, will be subject to pay premiums, typically on a monthly basis. They will also pay deductibles or co-pays as needed according to the services they receive. The premium is a set rate that patients pay in order to be on the MCOs plan. Deductibles are the amount that a patient will be responsible to cover out of pocket before the insurance will begin covering costs. Suppose that a patient goes to the doctor for a procedure that costs \$15,000. If the patient's deductible is \$10,000, then the patient will pay \$10,000 and the MCO will cover the remaining \$5,000. MCOs are divided into various networks, and participants' premiums and deductibles are determined by which network and plan they are in. There are three primary kinds of plans within MCOs¹: health management organizations (HMOs), preferred provider organizations (PPOs) and point-of-service (POS) plans.

1. **HMO:** The patient will be given a list of doctors covered by their network. From that list they will choose a primary care doctor that will coordinate all of their care. If a health condition arises that requires a specialist, the patient will have to get preapproval from their primary physician in order for insurance to cover the specialist visit. The primary physician will recommend or refer the participant to a specialist within the network. By going to the preapproved doctor, the participant will be eligible for more insurance coverage and their costs will be less. If a participant of an HMO health plan sees a doctor outside of their network, they will likely be subject to pay 100% of the cost of care out of pocket (Consumer 3).
2. **PPO:** Under PPO plans, the participant is not required to choose a doctor within their network in order to be eligible for coverage; nonetheless, they will receive the lowest priced coverage if they do. The monthly premium for

¹ Not every MCO will offer all three plans. Some may offer a combination of the three, or only one (Consumer 3).

PPO's is higher than HMO's, but PPO participants do not need approval from their primary care doctor prior to seeing specialists. Therefore, participants are thought to have more flexibility and access to needed care (Consumer 3).

3. **POS:** POS plans are a hybrid of HMO and PPO plans. Participants will choose a primary care doctor, much like they would in an HMO. Like a PPO plan, they are also able to see doctors outside of their network, but will face a higher cost unless they have a referral from their primary care doctor (Consumer 3).

After the MCOs negotiate rates with hospitals, they negotiate with employers and the employers choose which plans to offer their employees. Thus, there is another layer of negotiation and price setting that takes place before patients get their final health insurance package. As health care providers seek higher reimbursements rates, the MCOs are willing to cover a smaller percentage of the total end cost. Because MCOs are not willing to cover the entire increase of cost themselves, they pass the cost off to the employers. As a result, company insurance plans have become more expensive and employers have taken a number of steps to save cost, such as offering tiered plans, which passes more of the cost onto the employee (Consumer 36). Under tiered plans, insurance companies rank providers, medications, procedures and other facets of health care. The highest ranked tier is the most expensive, with lower tiers, such as hospitals or doctors with lower quality ratings, or generic brand medications, being the cheapest. This is an issue for employees with more severe medical conditions because the higher level of care they require comes at a much higher cost (Consumer 36). In a 2002 study conducted by RAND Corporation, a not-for-profit research group, it was found that utilizing tiered plans saved the employer \$220 per employee annually, but only saved the employee \$3. It was found that the \$3 savings employees experienced was because they dramatically

cut back on seeking necessary care due to the higher costs. Of the 420,000 workers included in the study, the majority of them found that the tiered system diminished their access to necessary treatment (Consumer 36). Data taken from *Consumer Reports*, illustrates how patients who recently experienced increase in cost for insurance plans are dissatisfied with lack of access to proper health care, particularly patients that suffer from more severe health conditions. In MCOs with lower rankings, 21% of all severely ill patients did not have access to needed care. This number goes down, but remains high at 12% for high-ranking MCOs (Consumer 36). The data implies that for every 500,000 severely ill participants in top MCOs, 60,000 of them go without needed treatment. For every 500,000 participants at low-ranked MCOs, 105,000 of severely ill patients are not receiving needed treatment. These statistics illustrate how rising costs sometimes correspond to inadequate access of care.

Additionally, in a survey of six developed nations, patients in the US were more likely than patients in other countries to report mistakes or gaps in doctor recommendations. In fact, the US had the highest rate of incorrect dosage for drugs used to treat chronic medical conditions. Furthermore, patients in the US, more so than any other developed nation surveyed, felt that their doctors did not take adequate time to listen to their health concerns and proscribe appropriate treatment (Docteur and Bereson 8). It is the rising cost of care, in conjunction with the simultaneous decrease in quality that has some economist questioning what the future of health care looks like (Lo Sasso). Some economists believe that much of the increase we see in health care costs is born out of the imbalance of power between MCOs and hospitals in their negotiation process.

In the price negotiation process, MCOs benefit from lower reimbursement rates and hospitals benefit from higher ones. The success of an MCO depends, partly, on how many participants it is able to contract with. In order for MCOs to have a large participant base, they need to have a comprehensive contract. Meaning, MCO plans should cover a wide range of services and be available in multiple geographical regions. The need for all-inclusive services tilts the balance of power in favor of the hospitals. Large hospital systems that take up much of the market for a particular region can refuse to partner with an MCO unless they receive reimbursement at a specific price point. In order for the MCO to remain competitive, they will be forced to accept the higher rate. It is the ability of large hospital systems to demand higher rates that the FTC is trying to prevent through antitrust policy application.

The relationship between hospitals and MCOs is crucial in hospital mergers because the determination of market power is largely based off how much leverage a hospital has in its negotiations with MCOs. If a merger shifts market power such that the new hospital system cannot be feasibly left out of an MCO network, then that hospital will be in a unique position to extract higher reimbursement rates from the MCO, and is said to have more leverage. In turn, the MCO will pass the higher rate onto the employers it contracts with. Eventually the higher price will trickle all the way down to the end consumer, or the patient.

At this juncture we have established that the FTC will challenge a merger of two or more hospitals if it believes the merger could create a significant and nontransitory increase in reimbursement rates. Because the vast majority of mergers are challenged prior to the merger, there is not often post-merger data to be evaluated. Thus, the FTC

relies on models and hypothetical outcomes carefully constructed through technical econometric analysis and expert testimony. The Court will determine a relevant product market that will be composed of both the product market and geographic market. The geographic market is the geographic area that the two companies compete in. The product market is the specific service or product that is the focus of the competition.

Defining the Product Market

In the hospital industry, the relevant product market encompasses the types of care offered. The Court has set a precedent that accepts general acute care (GAC) inpatient services as the relevant market. Within GAC inpatient services, there are four different tiers of care based on the service provided. There is much debate as to what tiers should be included in the GAC inpatient services for each individual merger case. The different tiers of care include primary, secondary, tertiary, and quaternary. Primary services are generally considered to be the most basic. Secondary services require a higher level of specialization, for example a hip replacement. Tertiary services are defined as those that require an even higher degree of specialization and resources, such as burn units or brain surgery. Quaternary services are the most advanced, such as organ transplants (ProMedica 3). In general, patients are typically willing to travel the furthest for quaternary services.

It is important to note that not all hospitals in the area will provide the same services. For example, a hospital may provide only primary and secondary services but not tertiary and quaternary services. Not to mention, some care options, such as inpatient obstetrical (OB) services, which fall under the scope of primary services, may be looked

at entirely separately if not all hospitals in the area offer that particular service (ProMedica 3). The varying degrees of services offered by all hospitals in the area, not just the ones involved in the merger, are considered when identifying the proper market definition. If the merger of two hospitals would give a monopoly in only one area of service, the Court will approach the case differently than if the merger would give a monopoly in all areas of service offered. For example, if all area hospitals offer primary and secondary services, but only the two merging hospitals offer tertiary services, then the relevant market concentrations for primary and secondary services would be evaluated separately from the market concentration of tertiary services.

Furthermore, as briefly discussed in the introduction, the services offered in health care are highly differentiated. This means that patients will prefer hospitals that match their unique preferences. For instance, some patients might value doctors that take extensive time to discuss their case and learn about their lifestyle, while others may prefer minimal interaction to facilitate shorter appointments. Some patients may be willing to pay more for additional and potentially unnecessary testing, while others are not. Furthermore, hospital processes can vary themselves. For example, when it is time to discharge a patient, the hospital could simply provide a booklet or pamphlet of detailed instructions with a number to call with questions, or the physician could sit down with the patient and thoroughly explain the recovery process (Lo Sasso). Patients will go to the hospital that best fits their preferences, including preferences on how far they are willing to travel. The less substitutable patients view a hospital, the more market power the hospital will have.

Defining the Relevant Geographic Market

Up to the early 2000s, the courts used the patient flow analysis, also known as the Elzinga-Hogarty Test, to determine the geographic market. Kenneth Elzinga and Thomas Hogarty created the patient flow analysis model based on their study of the market for coal. The original model measured the inflows of outflows of coal from a geographic area. The model was later adapted to measure the inflows and outflows of patients from a proposed geographic market, using zip codes from patient discharge data. Under this test, relevant geographic markets must meet two criteria. The zip codes must indicate that a small percentage of patients from outside of the geographic area come into the area for treatment and the data must indicate that patients within the area are not treated outside of the area (Haas-Wilson 125). The use of the patient flow analysis often allows hospitals to claim that they compete in considerably large regions, which increases the size of the overall market and decreases hospital's individual market shares. In the 1990s, when the Court accepted the patient flow analysis as a reasonable measure of the geographic market, the FTC kept losing cases primarily because the size of the market made hospitals appear to have small market shares and little market power.

Ironically, the precedent of using patient flow analysis began with a victory for the FTC. In *U.S. v. Rockford Memorial*, the defendants proposed a geographical area that encompassed ten counties. The FTC countered the defendant's proposed market with a significantly smaller, three county market that had the same statistic of inflows and higher outflows. The court ruled that the defendant's notion of a ten county geographical market was much too large. It chose a market that consisted of the county that the hospitals operated in, as well a number of zip codes from neighboring counties that had a

nontrivial rate of patient outflows to the county with the merging hospitals (Dranove).

Under this narrowed geographic market, the court found that the merging hospitals involved in the case would have between 64% and 72% of market share post-merger; thus, the Court enjoined the merger (Dranove).

While the FTC had a victory with the initial application of the patient flow analysis, the tides quickly changed. The adaptation of the model began to allow broad geographic markets that resulted in small market shares. In one instance, in *Long Island Jewish Medical Center*, it was determined by the Court that two hospitals on Long Island were in competition with hospitals throughout New York City. In a different study, one economist determined that under the patient flow analysis, the state of California would be considered a single, competitive market (Dranove). In the landmark case of Evanston Northwestern Healthcare Corporation (ENH), which is discussed in detail later in this paper, the Elzinga-Hogarty patient flow analysis was discredited as a useful mechanism for analyzing the geographic market. This set an important precedent for future cases and was viewed as a victory for the FTC.

In ENH, the use of the patient flow analysis for hospital mergers was discredited due to testimony from Kenneth Elzinga himself. Elzinga testified that the Elzinga-Hogarty model does not apply to the flow of patients in the health care industry. The model was originally designed to measure the movement of coal shipments, a homogenous product, where as the flow of patients is heterogeneous and differentiated (Dranove). Given this, Elzinga believed that the application of patient flow analysis to the hospital industry fell victim to “the silent majority fallacy” (Dranove). That is, the patient flow analysis determines if there is a group of patients, or ‘travelers,’ that are willing to

go a farther distance for medical services. But for each group of travelers, there is often a larger group of 'non-travelers' whose preferences make them less willing or able to travel. Consequently, the percentage of travelers that would be willing to seek treatment else where in the face of a price increase, does not represent the 'silent majority' of non-travelers that would be adversely affected by the increase (Haas-Wilson 126).

Consequently, assumptions that can be applied across the entire homogenous coal market cannot be transferred to the highly differentiated market of health care. Given this, the patient flow analysis has been largely discredited as a relevant measure of the geographic market for the hospital industry. In addition to the silent majority fallacy, a significant problem with the patient flow analysis was that it was centered only on the behavior of the patients and did not consider MCOs (Haas-Wilson 125). The willingness to pay (WTP) model proves much more efficient in both regards.

The WTP model focuses on how patients value certain hospitals and how those preferences will be reflected in the MCOs network building. For example, if a hospital is convenient, has a friendly staff, or is a newer facility, patients may be willing to pay more to have it in their network (Lo Sasso). If a patient is willing to pay more for a particular hospital, then the MCO will be willing to pay a higher reimbursement rate in order to get a contract with the hospital. Essentially, the WTP model measures the substitutability of hospitals in the eyes of the patients. If patients feel that Hospital A is superior to Hospital B and does not consider the two hospitals to be substitutable, then their willingness to pay for Hospital A would be larger than their willingness to pay for Hospital B. Thus, Hospital A is more valuable for MCOs to contract with. Alternatively, suppose that patients make no distinction between Hospital A and B and would go to either one

without much thought. In such a case, a network with Hospital A would have the same value as a network with Hospital B, and a competitive MCO could have contracts with either one (Haas-Wilson 126). While patients are not the primary consumer in question for antitrust enforcement, the patients are the customers of MCOs. Thus, the patients' preferences are important in determining the competitive advantage of an MCO. MCOs will not be able to compete if they do not have patients' preferred hospitals in their network. By using the WTP model, economists use patient preferences as a starting point to understand what hospitals must be included in any viable network. Then, the Court can determine which hospitals MCOs need to contract with and in turn can better estimate the potential impact a merger might have on MCOs' ability to negotiate. Based on the results of the model, the Court can estimate the narrowest, competitive market for hospital services.

After determining the relevant market (both geographic and product market) the Court uses economic models and expert testimony to determine how the merger could increase consolidation or shift market power. To do so, the Court uses pre-established merger guidelines, economic theory, and evaluations of market concentration.

2010 Merger Guidelines

The FTC's renewed success of challenging hospital merges can be in part attributed to the *2010 Horizontal Merger Guidelines*, commonly referred to as the *2010 Guidelines*. The *2010 Guidelines* were released in a coordinated effort by the FTC and DOJ to infuse more transparency into antitrust application. In regards to hospital mergers, the *2010 Guidelines* make several important distinctions. They state that when

determining the market, the smallest relevant market must be evaluated. By narrowing the market definition, the court evaluates the potential maximum impact that the merger would have on the defined relevant market (Groebe 1628).

The *2010 Guidelines* concede that mergers may enhance efficiency but that improved efficiency is not enough to allow a merger. Furthermore, the claimed efficiencies must not be vague or unverifiable by traditional, empirical methodology (Groebe 1631). *FTC v. OSF Healthcare Systems* serves as a good lens to examine the efficiency argument. In the case, the defendant hospitals claimed the proposed merger was not harmful to consumers because it would drastically improve hospital efficiency. The hospitals estimated that costs would be decreased by as much as \$3.6 million annually (Groebe 1631). This vast reduction in cost was presumed to be achieved through an elimination of redundant services, namely on call doctors, trauma center staff, and helicopter crews. However, the defendants failed to specify how the redundancies would be eliminated, specifically, they failed to explain where the new trauma center would be located, and provided no reasoning for why the relocation would improve care or decrease cost (Groebe 1631). Given this, the FTC believed the claims of efficiency were speculative. Furthermore, under the *2010 Guidelines*, hospitals must address why their claims of efficiency are merger specific, meaning, the merger is the only, or best way, to achieve them. The hospitals failed to address why the improvements could only be made in conjunction with the merger (Groebe 1631). Thus, in accordance with the *2010 Guidelines*, the Court agreed with the FTC and stated that efforts of “good faith” were not enough to support the required presence of clearly identifiable, and merger specific, efficiencies (Groebe 1631). Similarly, in order for a company to successfully use the

failing firm argument, the hospital must demonstrate why the merger provides the best outcome to the hospital's financial condition. More importantly, they need to show why that outcome is related to improving patient care (Groebe 1631). In many ways, the failing firm argument and efficiency argument go more or less together. Hospitals often claim that without the merger, they are not in a financial condition to realize efficiencies in patient care.

In addition to its expansion on the efficiency argument, the *2010 Guidelines* provide clarification as to how market concentration should be measured. High market concentration indicates that there is not a significant degree of competition. The Herfindahl-Hirschman Index (HHI) is a commonly accepted tool used to measure market concentration. To determine the HHI of a market, economists first determine the market share of each individual firm. They then square and sum together all of individual market shares. The resulting number is the HHI. The HHI accounts for the relative size of all the competing firms. If the market is made up of a large number of firms with equal market share, the HHI index will be close to zero. If the market is made up largely of a single firm, the HHI will get much larger, with a maximum of 10,000 points. In terms of interpretation, the DOJ generally considers an HHI between 1,500 and 2,500 points to be moderately concentrated. If a market is in excess of 2,500 points it is highly concentrated (Department). Typically, if the relevant market is highly concentrated, an increase of 200 points or more indicates an increase in market power. The median HHI of US hospitals as of 2000 was 3,995 points, indicating that on average, hospitals across the country were highly concentrated in their defined markets (Gaynor 2).

The level of market concentration, shift of market power, and any other potentially anticompetitive outcome that the *2010 Guidelines* seek to identify are fundamental in antitrust enforcement. The Evanston Northwestern Healthcare Corporation case, as well as *ProMedica Health Care System Inc. v The Federal Trade Commission*, serve as a good mediums to analyze many of the complex factors of hospital antitrust enforcement discussed up to this point. Specifically, these cases facilitate an perceptive discussion of how the FTC and DOJ apply the *2010 Guidelines*, and more specifically, how they approach the efficiency argument and failing firm argument.

Section II: Analysis of Antitrust Enforcement

The Case of Evanston Northwestern Healthcare Corporation

The Evanston Northwestern Healthcare (ENH) Corporation case is a landmark case for hospital mergers. It was the first case, following a long series of losses, that the FTC won. The case was particularly impactful because the FTC successfully challenged a merger that had consummated seven years prior, in addition to the fact that the case discredited the patient flow analysis model. Given the case occurred post-merger, the FTC and ENH had the ability to use both pre and post-merger data.

ENH merged with Highland Park Hospital in 2000. At the time of the merger, ENH owned two hospitals: Evanston Hospital and Glenbrook Hospital. Evanston Hospital offered primary, secondary, and tertiary services. Glenbrook's service plan was somewhat more limited, offering only primary and secondary services (Majoras 12). Two years after the merger consummated, the FTC announced it would investigate the merger of ENH and Highland Park as part of a larger effort to explore the outcome of numerous mergers that occurred from 1990 to 2000. In 2004 the FTC filed a three-count complaint challenging the merger, alleging that it violated Section 7 of the Clayton Act. The FTC's three-count complaint was as follows:

- Count I:** The Commission charged that the merger violated the Clayton Act in regards to the relevant product and geographic market.
- Count II:** The Commission alleged that the merger violated the Clayton Act because it enabled ENH to increase its prices for MCO's more than it would have done in absence of the merger.
- Count III:** The Commission argued that ENH engaged in price fixing for its affiliated physicians. However, this count was resolved on May 17,

2005 through a consent agreement and was not an issue on appeal, thus it is not discussed in this paper (Majoras 3).

In an initial decision, the Court ruled in favor of the FTC. The Court found that the merger resulted in anticompetitive prices and ordered a divestiture. On appeal, the FTC argued that while the merger was anticompetitive, the initial ruling of divestiture would prove to be too costly due to the level of integration the hospitals had achieved over the previous seven years. Opposed to divestiture, the FTC requested a conduct remedy that would require ENH to set up separate and independent contract negotiation teams for each hospital under its purview. Ultimately, the Appellate Court agreed with the FTC and granted the FTC's proposed behavioral remedy (Rosch 3).

In the initial ruling, Complaint counsel argued that the relevant product market was GAC inpatient services. ENH agreed that GAC inpatient services should be included in the product market but also wanted to include outpatient services. The court rejected ENH's proposed market because the rates for inpatient services are not influenced by rates for outpatient services. Thus, the relevant product market was determined to be the GAC inpatient services, as proposed by Complaint counsel. More specifically, the geographic market proposed by Complaint counsel was the "triangle immediately surrounding the three merging hospitals, which contained only the ENH hospitals" (Majoras 6). Counsel for ENH then used the patient flow analysis to argue that a much broader geographic market was at play and wanted the three ENH hospitals, as well as 6 other hospitals included in the market². Testimony from Elzinga discredited the patient

² The six other hospitals the Respondent wanted to be in the geographic market include: Lake Forest, Advocate Lutheran General, Rush North Shore, St. Francis, Condell and Resurrection (Majoras 6).

flow analysis and the defendants proposed geographic market was proven invalid.

Because this case was examined with post-merger data, the Court ultimately decided to define the market based on the triangle of hospitals that MCOs were not able to exclude from their networks after the merger (Haas-Wilson). The Court ruled that the proper geographical market was an area that spanned the three ENH hospitals, as well as Lake Forest, Advocate Lutheran General, Rush North Shore and St. Francis (Majoras 6).

After determining the relevant market, the Court addressed the question of market concentration. Prior to the merger, ENH had 35% of market share based on the inpatient revenue of the seven hospital market, with an HHI of 2,355 points. After the merger, the HHI increased to 2,739 points, an increase of 384 points. By the *2010 Guidelines* this increase was significant enough to presume that the merger created or enhanced market power. Additionally, testimony from both sides proved that a primary goal of the merger was to gain negotiation leverage. Mark Neaman, CEO of ENH stated that the hope of the merger with Highland Park was to enhance negotiating power with MCOs and increase the cost of care (Majoras 14). Furthermore, Mark Newton, a former senior official at Highland Park, had compiled a briefing that indicated Highland Park hoped to gain higher prices from the merger. Inter-office communications indicated that Newton believed the merger with ENH would provide Highland Park with the most negotiation power (Majoras 15).

After the merger, ENH required that MCO contracts include all three of its hospitals: Evanston, Glenbrook and Highland Park. Through this tactical negotiation, MCOs that were not willing to pay a higher price would have to walk away from contracts at all three of the ENH hospitals, not just one. Thus, data indicates that ENH's

strategy was highly successful in increasing negotiation power and subsequently lead to a significant increase in price. The exact size of the increase in price changes depending on which metric is considered. According to Deborah Haas-Wilson, expert economist for the Complaint counsel, the per day average net price increase was 48% for all patients from 1998 through 2002. On a per case basis, Haas-Wilson estimated an average price increase of 30% for the same time period (Majoras 17)³. The below chart illustrates the price increases that were applied to each MCO contracted with ENH post-merger on a per case basis. As the chart shows, each MCO experienced a price increase post-merger.

Per Case Average Net Price Increases in Contracts between ENH and MCO's

| MCO | Percentage Increase |
|-------------------------------|----------------------------|
| Aetna | 28% to 89% |
| Blue Cross Blue Shield | 10% to 27% |
| Great West | 42% |
| Humana | 27% to 73% |
| United Healthcare of Illinois | 62% to 128% |

**The ranges account for the difference in reimbursement rate for each service provided*

In addition to empirical evidence, the Court heard expert testimony from Private Healthcare Systems (PHCS). PHCS developed networks of hospitals, doctors and other groups to market insurance companies and was in a unique position to speak about how the shift in market concentration affected its ability to negotiate. Jane Ballengee was PHCS's Regional Vice President for Network Development and testified about PHCS's post-merger negotiations with ENH. According to Ballengee's testimony, prior to the merger, PCHS believed that it could select either Evanston or Highland Park in their

³ Haas-Wilson believed that the per case basis was a better metric than the per day basis because MCOs typically measure their revenue in terms of cases, not days. Throughout her analysis, she continued to provide numbers for both per day and per case basis, but we will rely only on her preferred metric of per case for this paper.

contracts, which allowed PCHS to leverage the two hospitals against each other.

Although PCHS had never threatened to drop either hospital, they felt confident that the hospitals understood PCHS could proscribe that tactic if needed, and gained much negotiation leverage from that fact. Ballengee attributed the small price increase of 4% to 8% for each renegotiation to the fact the PCHS had leverage between the two hospitals (Majoras 18). After the merger, many MCOs and other clients of PHCS's such as third party administrators and employers, told PHCS's that they could not market an insurance plan that did not include ENH in the network. These claims corresponded with ENH increasing their reimbursement rates an average of 60% (Majoras 18).

While the above testimony suggests ENH had an anticompetitive advantage in negotiations, in order to measure the full impact of the merger, it must be determined if ENH charged prices higher than what they would have been able to charge in absence of the merger. Furthermore, if prices were higher, it must be determined if the price increases were due solely to the merger. A three-step econometric analysis was employed by both sides to address this issue (Majoras 27):

1. Economists calculated the average amount of net price increases that ENH had with their MCOs post-merger.
2. Economists conducted a difference in difference analysis (DID), which compared ENH's pre and post-merger price changes to the average net prices pre and post-merger of various control groups.
3. Economists conducted a series of linear regressions using the same control groups.

Haas-Wilson, assumed that changes in cost, demand, and regulation would equally impact all of the area hospitals. Thus, she used three control groups to perform a DID analysis and determine if the per case price increase she identified post-merger could have been caused by issues unrelated to the merger (Majoras 32). Her control groups are as follows:

1. All GAC inpatient services offered at hospitals within the Chicago primary service area.
2. All GAC hospitals in the Chicago primary service area that were not involved in any merger between 1996 and 2002.
3. All GAC hospitals in the Chicago primary service area involved in some teaching activity (Majoras 32).

Haas-Wilson found that the price increase in most of the MCOs' contracts with ENH did not coincide with equal price increases for the control groups. In fact, all but one of the price increases in contracts between MCOs and ENH were statistically significant beyond the price increase of the control group. Blue Cross Blue Shield's Point of Service Plan is the only plan ENH renegotiated that did not experience a statistically significant price increase after the merger. Furthermore, Haas-Wilson conducted an analysis to determine if the percentage of patients on government insurance, the complexity and type of case, and the number of resident interns changed significantly between the control groups and ENH (Majoras 33).

In all of her regressions, Haas-Wilson found that the actual post-merger price increases were statistically significantly greater than the predicted price increase prior to the merger. Furthermore, the price increases experienced in ENH's contracts with MCOs

did not coincide with similarly significant increases in prices within the various control groups (Majoras 34).

Jonathan Baker, the Respondent's economist, used a similar methodology as Haas-Wilson in his econometric analysis. Like Haas-Wilson, Baker also found that in almost all instances, the prices post-merger were statistically significantly more than pre-merger estimations. Additionally, the price increases were statistically greater than increases seen within the control groups (Majoras 6). The Court found that the work of both Baker and Haas-Wilson gave reasonable proof that the price increases ENH was able to negotiate with MCOs were a direct result of increased market power post-merger. While there were small differences in the methods used by Haas-Wilson and Baker, the methods employed were largely similar and each analysis lead the Court to the same conclusion: that the merger of ENH and Highland Park produced undue market power. Furthermore, the Court found that the increased market power allowed ENH to increase prices. Baker attempted to argue that data used was 'imperfect' and as a result the output of the econometric analysis was not a valid indicator of market power. The court disagreed, and stated that data in such cases is frequently imperfect but felt that both sides were able to find sufficiently reliable data (Majoras 39).

The Appellate Court then found the FTC was right to feel that the remedy of divestiture did not apply in this case. Due to the fact that the merger had been consummated for seven years at this point, the Court, as well as the FTC, did not feel it was in the best interest of the merged hospitals to force a full divestiture. In particular, the Court felt that divestiture would harm the efficiencies created by the cardiac surgery department and the state-of-the art medical records system implemented at Highland Park

(Rosch 11). It was believed that separating the hospitals at this point would create high costs and that a behavioral remedy was more appropriate. Thus, the FTC proposed that ENH must establish and negotiate separate contracts for the three hospitals, which the Court agreed with. As such, MCOs would maintain their ability to exclude a single hospital without excluding all of ENH from their networks. Several crucial aspects of the final Court Order are as follows:

- 1.) ENH must negotiated contracts for Evanston, Glenbrook and Highland Park separately from each other.
- 2.) ENH is prohibited from requiring that a contract is contingent on an MCO entering into a contract with one of the other hospitals under ENH's purview.
- 3.) ENH is prohibited from making any individual component, such as a single reimbursement rate, contingent on agreeing to certain terms with one of the other hospitals.
- 4.) ENH is allowed to negotiate with all the hospitals in a single contract if the MCO expresses that they would prefer to construct negotiations in this way.
- 5.) ENH must allow MCOs that have pre-existing contracts to reopen negotiations and obtain separate contracts for the three ENH hospitals, should they wish.
- 6.) As is consistent with standard policy, the above provisions will terminate after twenty years (Rosch 10).

The precedent set for the behavioral remedy was important in that it recognized an efficient outcome of a merger that should have been found illegal in the first place. Interestingly, shortly after this case, the FTC argued for a structural remedy in *ProMedica Health Systems, Inc v. The Federal Trade Commission*, a case that has several similarities to the ENH case. A close analysis of the similarities between the two cases, in

addition to the difference of applied remedy, creates a discussion on how the FTC approaches arguments of improved efficiency and unstable financial condition.

An Evaluation of *ProMedica Health Systems, Inc v. The Federal Trade Commission*:

This case involves the proposed merger between ProMedica Health System, Inc. (ProMedica) and St. Luke's Hospital (St. Luke's), two hospitals in Toledo, OH. ProMedica is a multi-hospital system that owns three hospitals in Northwest Ohio and Southeast Michigan. At the time of the merger, St. Luke's was a community owned hospital in a suburb of Toledo. In 2009, it was facing financial hardship that led it to pursue a merger with ProMedica that consummated in 2010. Shortly afterward, the FTC filed a formal Complaint that the merger would drastically shift market power in favor of ProMedica and found it probable that ProMedica would be in a position to set higher prices.

The Court determined that the relevant geographic market for the merger was Lucas County⁴. At the time of the merger, there were two other hospitals in Lucas County in addition to ProMedica and St. Luke's: Mercy Health Partners (Mercy) and The University of Toledo Medical Center (UTMC). All parties involved agreed that GAC inpatient service was the relevant product market, but there was disagreement as to what tiers of service should be included. The Complaint counsel argued that the GAC market should be defined by the overlapping services provided by each hospital in Toledo. For example, surgeries that were offered at both ProMedica and St. Luke's should be

⁴ It would be relevant to conduct a more thorough discussion of the how the geographic market was determined. However, in this particular case, there was not much discussion or contention surrounding the geographic market. The FTC established that the Lucas County was the relevant geographic market and ProMedica's counsel made no strong attempt to rebut that claim.

included, where as surgeries or services offered only at one or the other should be excluded. Furthermore, they argued to include only the services that were also offered by UTMC and Mercy (ProMedica 9). Their approach was meant to clearly define a market that could be easily observed through competitive comparison. In other words, they sought a model that allowed the frequency of costs and services at the various hospitals to be easily broken down and compared individually, but more importantly, clearly aggregated in terms of the hospital as a whole. Complaint's counsel argued that because tertiary services are not offered at St. Luke's there would be no new effect due to overlap of services from the merger, and wanted tertiary services to be evaluated under their own market. They made the same argument for OB services, which were not offered at UTMC (ProMedica 9). By including only services that all the hospitals offered in the GAC market, Complaint counsel defined a narrow and easily analyzed market.

In contrast, the Respondent wanted services within the GAC to be compiled based on the 'transactional components' or the 'package deal approach'. As such, the markets would be defined by combined services that are typically grouped, or packaged, when negotiating with MCOs. Under these guidelines, obstetrical services (OB) and tertiary services would be included in the GAC market, because MCOs regularly enter into contracts that encompass OB services as a primary service, along with tertiary services. In the end, the Court, found that the concept of a 'package deal' does not apply to the hospital market (ProMedica 11). The package deal theory states that there are certain products that consumers are willing to pay monopoly prices for, in order to have the convenience of getting them together. However, in this regard, there was no evidence that MCOs would be willing to pay higher reimbursements rates just for the convenience of a

single, all encompassing contract (ProMedica 11). While it is true that the most competitive MCOs will provide patients with access to a wide array of services, it is not the case the MCOs need those services to come from the same hospital (ProMedica 11). Thus, the Court rejected the Respondent's proposed market definition and defined the GAC inpatient market as consisting of only of primary and secondary services, with OB services and tertiary services to be analyzed independently, as Complaint counsel suggested. The below chart illustrates the market shares of the decided product market of GAC inpatient services for the Toledo hospitals as of 2009.

GAC Inpatient Services for the Lucas County Hospital Market as of 2009

| Hospital | Details | Service | GAC Market Share |
|---|--|--|------------------|
| ProMedica | <ul style="list-style-type: none"> Operates 3 private hospitals in the area | <ul style="list-style-type: none"> Primary Services (including OB) Secondary Services Tertiary Services | 46.8% |
| Mercy Health Partners | <ul style="list-style-type: none"> Operates 3 private hospitals in the area | <ul style="list-style-type: none"> Primary Services (including OB) Secondary Services Tertiary Services | 28.7% |
| The University of Toledo Medical Center | <ul style="list-style-type: none"> One teaching and research hospital | <ul style="list-style-type: none"> Tertiary Services Quaternary Services | 13% |
| St. Luke's Hospital | <ul style="list-style-type: none"> One not-for-profit hospital | <ul style="list-style-type: none"> Primary Services (including OB) Secondary Services | 11.5% |

As indicated above, prior to the merger, ProMedica had the largest market share, with just shy of 50%. Prior to the merger, ProMedica and St. Luke's had a total combined market share of 58.3% (ProMedica 11).

At the time of the merger ProMedica had 18% more of the market share than the next leading hospital, Mercy at 28.7%. Before the merger, with 46.8% of the market share, ProMedica had prices that were on average 32% higher than Mercy's, 51% higher than UTMC's and 74% higher than St. Luke's (ProMedica 14). After the merger,

ProMedica saw a marginal increase of 4.2% in market share for GAC services. Its share in OB services went up to 80%, from 76.4% largely due to the fact that UTMC does not offer OB services, now only Mercy's and ProMedica provide that service (ProMedica 14).

To give meaning to the above, it is important to consider what specifically the increased market share would mean for consumers. To understand the effect of the shift in market allocation, we would need to examine the relationship between hospitals in the relevant market and the MCOs operating in Ohio. Between 2001 and 2008, the primary MCO in Toledo, Medical Mutual of Ohio, had contracts with three of the four hospitals. Mercy, St. Luke's and UTMC had deals with Medical Mutual, while ProMedica was excluded. Beginning in 2000, there was not an MCO operating in Toledo that did not have a contract with either ProMedica or St. Luke's. This means that a merger between the two hospitals would give ProMedica an influence over all MCOs in the Toledo area. Additionally, ProMedica had its own insurance company, Paramount Health Care, which was one of the largest MCOs in Toledo and did not have contracts with St. Luke's at the time of the merger (Brill 7-9).

St. Luke's considered ProMedica to be its largest competitor at the time. According to ProMedica, it considered St. Luke's to be a strong competitor, but not a primary one. Nonetheless, ProMedica, on more than one occasion, offered to decrease its reimbursement rate by 2.5% for any MCO that agreed not to partner with St. Luke's (ProMedica 4). In comparison, St. Luke's, being a relatively small community hospital, had little negotiation power with MCOs, and its reimbursement rates often did not cover the cost of service.

Testimony from MCOs during the trial provided further insight. Expert witnesses affiliated with local MCOs expressed that a merger between St. Luke's and ProMedica would leave MCOs with Mercy and UTMC as the only other commercial providers in their networks; consequently, they would have little power or ability to resist further increases in ProMedica's reimbursement rate (ProMedica 17).

St. Luke's lack of negotiation power and low reimbursements rates contributed to the financial difficulty it faced between 2007 and 2009. After losing over \$25 million in the two-year time range, the hospital made multiple administrative changes, most prominently it hired Daniel Wakeman as the new CEO in 2008. Over the next two years, Wakeman increased St. Luke's inpatient revenue by \$3.5 million more than its annual average goal. For its outpatient average annual goal, it increased revenue by \$5 million over the expected level (Brill 11).

By 2010, St. Luke's was in better condition, although still not entirely stable. The hospital experienced an increase in patient volumes, decrease in expenses, and had an operating margin of \$7,000 on \$36.7 million in gross revenue. In fact, Wakeman had been quoted as saying that St. Luke's "built up [it's] volume up to a point where [it] can produce an operating margin and keep [it's] variable expenses under control" (Brill 11). Nonetheless, prior to getting back in the black, the Board had considered many alternative ways to keep the hospital open, including service cuts and mergers with surrounding hospitals. After rejecting any service cuts, the Board agreed with Wakeman's recommendation that St. Luke's should merge with ProMedica. One of the primary reasons cited by the Board was the increased negotiating leverage that St. Luke's would have with MCOs if it were affiliated with ProMedica. This was primarily due to

the fact that a merger with ProMedica would give St. Luke's access to Paramount Health Care, which would make the hospital more preferable to patients and increase patient volume (ProMedica 5). Upon consummation of the merger, a hold separate agreement was activated, which dictated that ProMedica could not terminate contracts, alter clinical services provided to patients, or fire employees without cause (ProMedica 6). Thus, while the FTC worked to file its former complaint, the two hospitals began to merge, with certain restrictions in place.

Ultimately, the FTC was successful in its challenge of the merger, and the two hospitals were ordered to divest. In addition to the testimony of MCO affiliates discussed above, the success of the FTC was partly attributed to the result of the Herfindahl Hirschman Index (HHI), which was so high that the Court felt the FTC was right in presuming illegality of the merger. The results of the HHI test made it clear that the merger of ProMedica and St. Luke's would lead to an over-concentrated market for both GAC and OB services. The merger dramatically exceeded the commonly accepted thresholds set forth by the *2010 Guidelines* (ProMedica 13). In the GAC market, the HHI increased by 1,078 points, or five times more than 200 point increase needed to presume illegality of a merger. The HHI used to measure the effect of the merger on OB services, increased by 1,323 points, which is seven times the number needed to presume illegality, or triple the threshold for a highly concentrated market (ProMedica 13).

In April of 2014, two years after the merger was consummated, ProMedica was ordered to divest St. Luke's. While ProMedica and St. Luke's both argued that the merger was necessary to keep St. Luke's from going bankrupt, the FTC was not convinced that the merger was the only remedy. Although St. Luke's had experienced

financial hardship from 2008 to 2009, it had done a successful job improving its financial condition as of 2010. To the FTC, this demonstrated St. Luke's ability to compete in the market. Furthermore, its patient volumes had increased, and as stated previously, it had an operating margin of \$7,000 on \$36.7 million in gross revenue (Brill 110).

Furthermore, the FTC felt that a primary reason St. Luke's chose to merge with ProMedica over Mercy and UTMC was because of the negotiation leverage that would come with it. The FTC maintained that while St. Luke's was financially strapped, it was not in such a dire situation as to allow an anticompetitive merger, especially given that UTMC and Mercy had offered to buy St. Luke's, thus the merger with ProMedica was not the only option (Harris-Taylor).

Given the high market share that would result from the merger, the drastic increase in HHI and testimony from expert witnesses, the Court found that the FTC was right to file its complaint. ProMedica was given six months to determine the appropriate strategy for divestiture and on March 5, 2016, St. Luke's announced that as of summer 2016 it will once again be its own independent hospital. Over the past 5 years while the merger was in place under the hold separate agreement, ProMedica spent \$30 million on improving the infrastructure of St. Luke's, including improvements to the heart and vascular center, as well as the emergency room (Harris-Taylor). The FTC facilitated negotiations between St. Luke's and ProMedica during the divesting process. ProMedica did not want to continue including St. Luke's in its Paramount Health Care contracts. However, the FTC believes that without access to Paramount, St. Luke's would have a challenging time existing as its own independent entity. According to Wakeman, the contract with Paramount has increased St. Luke's patient volume by 11%. As such, the

FTC has required as a condition of the divestiture that St. Luke's continue to have contracts with Paramount for five more years. Over those five years, St. Luke's will need to also repay ProMedica the \$30 million that ProMedica invested (Harris-Taylor).

Prices at St. Luke's since the merger have increased since the hold separate agreement went into place; however, Wakeman expects that St. Luke's will be forced to lower their prices after the divestiture is complete. Although, he anticipates that the price points will still be above the 2010 level (Harris-Taylor). Additionally, in an effort to help St. Luke's get back on solid footing, the FTC has required that ProMedica not directly compete with St. Luke's for a given number of years⁵. This means that ProMedica cannot build any medical center within a seven mile radius of St. Luke's until the period of non-compete ends (Harris-Taylor).

The scrutiny of the merger serves as an excellent example to highlight many important discussion points of hospital mergers. According to St. Luke's, the hospital would have not have been able to survive without drastic cuts in service had it not merged with ProMedica. Undoubtedly, the merger under the hold separate agreement had many financial benefits for St. Luke's. The 11% increase in patient volume in addition to the \$30 million in infrastructure upgrades alone illustrate how ProMedica helped St. Luke's further improve its financial standing. Furthermore, ProMedica made a significant contribution to St. Luke's pension fund and paid off a large portion of its long-term debt (Harris-Taylor).

⁵ This case is still being actively reviewed by the FTC and DOJ. The divestiture announcement that St. Luke's will become its own entity was released by a local newspaper in March 2016. Thus, the sensitive information and specific details of this case, such as the length of the non-compete, are still sealed.

Even with those contributions from ProMedica, the FTC acknowledges that St. Luke's faces an uphill battle as it becomes its own entity in the coming months (Harris-Taylor). Nonetheless, the point of antitrust is not to protect the competitors, it is to protect the consumers. Thus, the interest of the FTC is not to save St. Luke's but rather to protect the MCOs that it partners with. In this instance, the FTC did not feel that the merger between ProMedica and St. Luke's would create enough benefits to outweigh what the FTC viewed as obvious anticompetitive effects.

Yet, if St. Luke's is unable to maintain strong financial footing as an independent hospital, it may be forced to cut services (Harris-Taylor). In such a circumstance, the effect on the consumer would not be more expensive care, but rather inferior care or lack of access to care. The FTC has made it clear that under only exceptional circumstances it will consider the efficiency argument and the failing firm argument as evidence of a merger's merit. Given this, the fact that St. Luke's was in financial hardship was not a primary consideration when the FTC chose to file its complaint. Nonetheless, the FTC is not completely without understanding of St. Luke's situation and it seems that it has taken several measures in an effort to maximize the probability of St. Luke's success. Firstly, it has required ProMedica to continue including St. Luke's in Paramount. Secondly, it has required that ProMedica not directly compete with St. Luke's in the coming years. And thirdly, it has expressed an on going commitment to St. Luke's success by agreeing to reevaluate the hospital's situation in five years and help it find a new buyer if need be (Harris-Taylor). The FTC's commitment to St. Luke's is likely not born out of a desire for St. Luke's specifically, as much as a desire to keep St. Luke's as a

strong competitor in the market. Nonetheless, it seems that, at least for now, the FTC has a strong interest in the financial future of St. Luke's.

Section III: Evaluating the Relationship Between Quality of Care and Antitrust Enforcement

Determining the Appropriate Remedy

The Court's different application of remedy in ProMedica and ENH is important to note. Divestiture is the most extreme remedy to antitrust violations. It is for precisely this reason that divestiture was not considered a suitable remedy in the case of ENH. Through a close analysis we can identify various points that contextualize why the remedies may have varied so drastically. I will start by examining similarities between the cases. For instance, both cases determined GAC inpatient service to be the relevant product market. Additionally, there was documentation in both cases that made it perfectly clear the intention of the merger was to increase negotiation power with MCOs. Testimony from expert witnesses expressed in both cases that the MCOs could not have a network that excluded one of the hospitals involved in either merger. Additionally, the parties involved attempted to use the failing firm and efficiency arguments as reasons surrounding their need to merge, however, the circumstances surrounding these arguments did vary.

As discussed previously, St. Luke's was financially stressed for two years prior to the merger. As of 2010, when the merger went into effect under the hold separate agreement, St. Luke's was on much better financial footing, but not entirely back on its feet. But the FTC was not convinced that the only possible remedy for St. Luke's was a merger with ProMedica (Harris-Taylor). Likewise, Highland Park also argued that the merger with ENH was needed for financial security. Yet, much of Highland's Park financial evidence at the time suggested the hospital was financially sound, especially

compared to other not-for-profit hospitals (Majoras 80). For instance, in 1998, Highland Park had cash on hand of \$218 million and long-term debt of \$120.5 million. Just one year later, its cash on hand increased to \$260 million, while its long-term debt decreased to \$116.7 million. Furthermore, while it was in contract negotiations for the merger with ENH, Highland Park contributed \$100 million to establish a community foundation (Majoras 80). Lastly, it put forth a financial plan for 1999-2003 that included plans should the merger not go through. In these plans, Highland Park had several capital budgets that allowed for strategic initiatives and investments (Majoras 80). While Highland Park experienced some minor losses in 1999, management was not concerned about its long-term ability to compete in the market. Highland Park's attempt to use the failing firm argument was unsuccessful because all evidence suggested that even in the absence of the merger, the hospital would continue to be competitive.

Even though the Court did not accept St. Luke's failing firm argument, it does seem that there is more financial evidence supporting St. Luke's financial instability than Highland Park's. In fact, even after having been merged with ProMedica for the past six years, the FTC acknowledges that St. Luke's has an uphill fight after it divests. This leads to the question of why the FTC would have chosen a drastic structural remedy for ProMedica, but not for Highland Park, who in many ways may have been in a better position to support the cost of divestiture. Given that St. Luke's was financially strapped prior to the merger it may seem surprising that the Court would require a divestiture. However, because the primary purpose of antitrust in the United States is to protect the consumer, St. Luke's financial condition would not be as important as ProMedica's presumed market power from the merger.

Additionally, in the case of Highland Park, while the Court agreed that the cardiac center and the medical records system would likely fail if the hospitals divested, it rejected the Respondent's argument of improved efficiency. The Respondents argued that because the case had merged seven years prior, the Court could see the efficiency benefits and cost cutting methods that occurred as a result of the merger (Majoras 78). The FTC and Court however, felt that the presence of efficiencies post-merger is not enough to suggest that the alleged increased efficiencies are merger specific. Given that Highland Park was prepared to make a \$100 million donation to a facility just prior to the merger, the Court concluded that Highland Park likely had the resources needed for improvements in its own right and rejects the notion that the merger was needed to achieve said efficiencies (Majoras 89). Nonetheless, the court recognized that while the efficiencies at play do not save the merger from illegality under Section 7 of the Clayton Act, it does change how the Court must approach the remedy. Given that Highland Park was dependent on ENH's assistance to bring patients to its new cardiac center, the Court and the FTC felt that divestiture would leave Highland Park in a worse off spot than it was prior to the merger. It expected that cardiac surgery would be cut and that the hospital would have to turn away patients (Majoras 89). Given this, the Court and FTC believed that the behavioral remedy was most appropriate. Although antitrust laws do not require, or necessarily even encourage the Court to consider the financial well being of Highland Park, we see that Highland Park's future was taken into consideration. While the Court's decision to implement behavioral remedies over structural remedies was formed from a concern about patient's access to care, not out of empathy for Highland Park, it no less had a positive effect on the hospital. Consequently, we see that the FTC has considered

the future success of specific hospitals, if for no other reason than to encourage continued competition. This speaks to how the FTC and DOJ may be able to align their interests in such a way that the competitor receives a certain amount of support in antitrust cases, in so far as there is a measurable benefit to the consumer.

In the ProMedica case, we again see the FTC working to help preserve financial success of an individual hospital, although it manifests itself somewhat differently. While St. Luke's and ProMedica had merged five years prior to the final ruling, the integration of the two hospitals was limited due to the hold separate agreement that remained in place. The question many economists debate is whether or not divestiture was the most appropriate remedy to hand down, especially given that there was precedent set for behavioral over structural remedies. Similar to the improvements made at Highland Park, ProMedica contributed \$30 million to making upgrades at St. Luke's. The difference is that those upgrades went toward paying down long-term debt, putting more money in to the pension fund and making infrastructural improvements, such as upgrades to the emergency room (Harris-Taylor). An important difference is that much of the money ProMedica contributed went toward one-time upgrades, not on going projects that would require assistance and support from ProMedica. Where as in the case of Highland Park, the relationship with ENH was vital for the continuation of the cardiac center and medical records program. As previously identified, St. Luke's access to Paramount was one positive outcome of the merger that could only be achieved through a continued partnership of some kind with ProMedica. Given this, the FTC has required that St. Luke's inclusion in Paramount continue after the divestiture (Harris Taylor). Once again, the FTC's primary motive was not the financial stability of St. Luke's specifically, as

much as facilitating continued competition in the area. Regardless, at the moment, the success of St. Luke's is important to the FTC and we once again see the FTC moving into a somewhat nontraditional area of antitrust, and putting more emphasis on the success of individual competitors.

Thus, it seems that in both cases the final question of remedy came down not so much to a question of illegality, but rather practicality. The Court felt the merger of ENH and Highland Park was in fact illegal, yet, allowed the merger to continue subject to stipulations due to the dependency and integration of Highland Park and ENH in critical areas of patient care. The Court also felt that the merger of ProMedica and St. Luke's was illegal, but in this instance it applied a structural remedy opposed to a behavioral one because it felt that there was no beneficial integration between St. Luke's and ProMedica that would be undone at a significant cost.

While the FTC does not accept the efficiency argument and failing firm argument as valid reasons for a merger to take place, it does seem to consider the individual competitor more than it may like to overtly admit. Through its facilitation of competition through non-competes, restrictions on negotiation tactics with MCOs, and mandatory inclusions in MCO networks, the FTC has begun to set a precedent for giving more consideration to the success of individual competitors, in so far as there is a beneficial outcome to competition.

This shift is likely due to the high stakes of hospital antitrust. Without proper enforcement, many different outcomes are possible, but two potentially negative outcomes stand out. Anticompetitive mergers could consummate and diminish long-term standards of care while simultaneously increasing price, thereby limiting access to care.

Or, hospitals that are prevented from merging may face ongoing financial hardship requiring them to reduce services or diminish service standards. In either case, we see that quality of care and access to needed service is at stake. Thus the proper monitoring of consolidation within the industry is fundamental. In an effort to improve quality of care and decrease costs, the *Patient Protection and Affordable Care Act (ACA)* was passed. A crucial component of the act focuses on the organization and efficiency of the health care market and facilitates a compelling discussion on how quality of care is measured.

Evaluating Quality of Care:

The ACA was passed by the Obama Administration in 2010 in an effort to make quality care more affordable and increase the number of Americans with comprehensive health insurance. Among its many stipulations, the ACA has worked to encourage Accountable Care Organizations (ACOs), which are organizations formed through the integration of management systems between physician groups, hospitals, and other health care providers. No formal consolidation occurs in terms of assets, the physician groups and other health care providers partner to streamline delivery of care, pricing packages, and communication of patient records. Because ACOs do not combine assets, they are not subject to the *2010 Guidelines* and the FTC's approach to them slightly varies from hospital antitrust enforcement. However, an evaluation of the formation of ACOs highlights compelling issues that the FTC has with properly analyzing quality of care. This problem transcends past ACOs and affects hospital mergers as well. An analysis of the FTC's approach to ACOs lends itself to a providing a better understanding of yet one

more complexity that the FTC face with hospital mergers: how to quantify and predict the proposed efficiencies that hospitals claim their merger will create.

ACOs were initially created to combat the fee-for-service payment model that Medicare used (McGuire)⁶. Under fee-for-service, doctors would get paid for each service they provided to a patient. This gave physicians an incentive to perform unnecessary tests on their Medicare patients in order to receive higher pay. ACOs have attempted to remedy this problem through coordinating care and changing incentives. The benefit of participating in an ACO from a health care provider's standpoint is that ACOs are eligible for a percentage of savings if their annual cost per participant is smaller than the expected cost predetermined by the program. Through consolidated services, ACOs are rewarded for high quality of care and low costs (McGuire).

By nature, ACOs advocate for an integrated network of hospitals, physicians, and other care facilities. Not shockingly, this raises antitrust concerns. As stated above, the reason for their creation was to help cut the cost of Medicare programs. However, as physician groups strengthen relationships, ACOs could begin to exercise their power in price negotiations for private insurance. ACOs remain independently managed organizations and are not subject to the *2010 Guidelines*, but the close relationship they form gives reason to fear that ACOs could engage in price fixing and collusion (Pelnar 1).

In response to these concerns, the FTC and DOJ worked closely with The Center for Medicaid and Medicare Services (CMS) to create guidelines for analyzing if an ACO

⁶ McGuire Woods is listed on the works cited page under "FTC" due to the source title of, "FTC and DOJ Issue Final Antitrust Guidance for ACOs." To avoid confusion between the citation and references to the Federal Trade Commission, this source will be referred to as "McGuire" for in text purposes.

is anticompetitive (Pelnar 1). In an effort to minimize the potential anticompetitive effects of ACOs, the FTC and DOJ developed an *Antitrust Enforcement Policy* to monitor ACO actions. Under the policy, ACOs are required to submit financial data to CMS each year for review. While protecting against collusion, the policy simultaneously acknowledges the potential pro-competitive effects of ACOs and allows independent providers and provider groups to combine practices and share information, so long as there is not a negative impact on competition (McGuire). The *Antitrust Enforcement Policy* outlines under what circumstances ACOs will and will not be subject to further FTC review.

First, the policy makes ACOs subject to the rule of reason standard. Under the rule of reason standard, the anticompetitive effects of an ACO will be compared to the potential pro-competitive effects that may result from increased efficiency among the provider networks. This was a critical inclusion in the policy because when analyzed outside of the rule of reason standard, collaboration among independent providers would be considered per se illegal (McGuire). Under the rule of reason standard, the ACOs are given the opportunity to prove why their collaboration will have positive benefits for the consumers that outweigh potential negative backlash. Furthermore, they have the opportunity to prove why their policies were not born out of an effort to collude, but rather formed from good business sense, which is not considered illegal per se (McGuire).

Nevertheless, some economists fear that the FTC has not clearly defined how the standard will be applied. For instance, the policy says that offsetting efficiencies will be considered in the rule of reason standard, but provides little empirical framework in terms

of how efficiencies will be measured. For example, the policy does not discuss quality-adjusted prices (Pelnar 4). An increase in price might be reflecting the higher degree of service, not an increase in market power. However, the policy statement does not clearly define an analysis or model that will be used to approach a rise in price to determine if the increase is due to increased quality or collusion. Likewise, it is possible an increase in savings could be the result of more efficient provisioning of services and care (Pelnar 2). But an increase in savings does not necessitate an increase in efficiency. Suppose that services are being cut, then savings would increase while quality of care would likely decrease. To fully understand the impact and source of savings a full analysis is required and such an analysis has not been laid out in the policy.

All in all, the policy statement is a step in the right direction, however there are significant shortcomings with the statement that may make application hard. Perhaps the largest deficiency with the policy statement, as well as a continuous problem for antitrust in general, is limitations of the FTC to measure an increase in quality of care against the trade off in price (Pelnar 4). Typically economic models are based in empirical frameworks, and measurements of quality of care do not always fit nicely into the traditional empirical methodology (Lo Sasso). It becomes difficult to differentiate between genuine improvements of care and manipulations of numbers due to a change in practice that makes it appear as though care is improving (Pelnar 4). Without being able to fully understand the outcome on quality of care, the FTC and DOJ cannot fully understand the merits of the efficiency argument.

One measure of quality of care is to examine the length of inpatient hospital stays, with the mindset that long stays indicate lower quality. Another area to examine might be

to look at the number of tests and procedures. It is possible that physician groups, who are aware that their quality of care metrics are being monitored, might change the pools from which they draw patients in an effort to alter their numbers (Pelnar 5). For example, physicians may stop pulling patients from groups that they know have more serious health problems, such as the elderly, who require longer stays and more treatment (Lo Sasso). Although empirical evidence may indicate that quality of care has improved, the elderly patients that are no longer able to get needed treatment would likely disagree. By not treating those who tend to have more serious health conditions, physician groups can artificially over exaggerate the pro-competitive effects of their ACO. This same type of manipulation is also possible with hospital mergers.

Additionally, according to the guidelines that ACOs operate under, it is not uncommon that physicians will offer bonuses to doctors who have decreased the number of tests and resources they devote to a single patient. Given this, doctors that treat severely ill patients are at a disadvantage to those that treat more mild conditions (Pelnar 6). This provides an incentive to the doctor to change the types of services they are offering and creates a misalignment between doctor incentives and patient needs.

While ACOs do not fully integrate assets and management the way hospital mergers do, the difficulty in measuring the resulting improvements in quality are similar to the difficulties of measuring improved efficiency and quality of care from hospital mergers. Thus, our analysis of how the FTC approaches ACOs gives a good insight of the similar issues that plague the FTC in their efforts to evaluate quality of care for hospitals.

Antitrust insists that competition within markets benefits the consumers and hospitals argue that the higher prices consolidation facilitates will lead to better care, thus

benefiting the consumer. Currently, there is little direct evidence to support a positive correlation between pricing and patient outcome (Schneider). That is, there is little evidence to universally suggest that higher prices will increase hospital efficiency or standards of care. Many studies have found that while mergers increase prices, the mergers do not create a simultaneous increase in quality of care for all services offered (Schneider).

Helen Schneider conducted a study that examined how risk-adjusted mortality correlates to hospital consolidation. Her study looks at risk-adjusted mortality outcomes in regards to patients who underwent Coronary Artery Bypass Graft (CABG) surgery in California from 1997 to 2002. Helen chose the CABG procedure because it is one of the most frequently performed, yet high cost, surgeries. Furthermore, it typically has a low death rate, thus, outcomes are not considered to be unpredictable or inherently high risk. Risk adjusted mortality rates are mortality rates adjusted for patient risk factors that are not correlated with the service the patient received. Failing to adjust for patient risk factors may have given rise to the omitted variable bias of the OLS model and lead to biased output and incorrect correlation measures between hospital competition and quality (Schneider). To account for these risk factors, patient characteristics were accounted for, such as age, gender, body mass index, acuity and secondary conditions such as diabetes (Schneider).

The study included data on market characteristics, such as the HHI index, as well as the penetration of MCO's within all 14 of California's health service areas (Schneider). It also measured institutional characteristics, including hospital ownership types, system affiliation, teaching status, and the number of beds. Additionally, Schneider

included whether a hospital was a not-for-profit, community owned hospital, or investor owned hospital. Lastly, Schneider included demographic characteristics, such as per capita income and percent of Medicare and Medicaid patients.

The results of the study suggest that hospital competition has a negative effect on excess mortality, with excess mortality being the difference of observed mortality rate and predicted rate. Thus, as market concentration becomes higher, this study found that quality of care decreases for the standard CABG procedure. The study also found that the decrease in quality of care occurred across the industry at not-for-profit hospitals, as well as investor owned hospitals. In conclusion the study found that competition leads to an increase in excess mortality rates, or in other words, competition may save lives.

Schneider believed the better outcome of CABG procedures in competitive markets was due to the fact that when hospitals are in competition they will be encouraged to continuously improve patient care. That is to say, it is possible that successful implementation of antitrust on hospital mergers cannot only keep prices down, but can keep quality of care up. As such, the FTC's concern for the consumer transcends past the MCO all the way down to the patient.

This study has its limitations. Firstly, it focuses only on the CABG procedure and we cannot definitively apply the results to other areas of patient care such as patient satisfaction (Schneider). Nonetheless, it underscores the importance of putting quality metrics as a more central role in antitrust cases. While antitrust is not concerned with outcome of the competitor per say, it must be concerned with continued competition in the market (Schneider). Thus, the FTC is crucial not only because it facilitates competition, but also because competition plays an imperative role in the success of

health care policies and patient outcome. The FTC's continued involvement in hospital mergers is highly important to the future of health care quality in the country.

The formation of ACOs and the FTC's shortcomings in measuring resulting efficiencies, speaks to an important tension within the industry. Hospitals continuously use the efficiency argument to create hospital systems. ACOs use the efficiency argument to create consolidation throughout the entire health care industry. As it stands now, significant data indicates that consolidation decreases competition and competition decreases quality (Schneider). Yet, as the efficiency argument and failing firm argument gain more and more popularity within the industry, they cannot be easily dismissed. While the Court and the FTC have historically tried to not place much emphasis on the arguments, it might be time for the FTC to come up with a better, more empirical methodology of predicting the genuine effect that a merger may have on the quality of services.

Conclusion: What Does this Imply for the Future of Antitrust Enforcement?

In many ways, we won't be able to understand the full effect of the consolidation until years from now, after the mergers have had the opportunity to fully integrate and create long lasting effects, either positive or negative. To say that all hospital mergers are anticompetitive or bad for consumers is inaccurate. Nonetheless, the health care industry is one in which competition plays a particularly important role. For the hospital industry, competition is thought to literally save saves (Lo Sasso). This makes the task of the FTC to be of great importance.

Recently, we have seen the FTC behave in somewhat nontraditional ways when determining the appropriate remedy. For instance, the FTC's proposed behavioral remedy in the ENH case appears to be an implicit acknowledgement that the anticompetitive merger succeed in creating important integrated efficiencies, even if the FTC is reluctant to outwardly say so. Additionally, circumstances surrounding the divestiture of St. Luke's and ProMedica portray the FTC's concern for the future of St. Luke's. The FTC did not want ProMedica to gain additional market power by having St. Luke's under its name, thus the divestiture was ordered. Nonetheless, the FTC seems to have a significant concern for St. Luke's and has taken great strides in an effort to facilitate its financial future. The FTC's interest in St. Luke's has little to do with St. Luke's specifically, as much as a desire to facilitate continued competition. Nonetheless, while the failing firm argument was not accepted as valid, the FTC appears fearful of a scenario in which St. Luke's is not able to compete with ProMedica and is forced to cut services or close altogether. In this particular case, we see that the FTC is putting a somewhat unexpected emphasis on the outcome of a competitor.

The highly differentiated nature of the hospital industry makes it difficult to measure the geographic and product market, yet the relevant market is crucial to the outcome of antitrust cases. Furthermore, the complexities of measuring quality of care make it difficult for the FTC to fully evaluate potential merit from the efficiency argument. The research indicating how important competition is brings quality of care to a focal point of the debate.

It is imperative that the FTC continues to cultivate its approach. The formation of ACOs encouraged by the ACA speaks to how drastically we can expect the health care industry to continue consolidating and concentrating market power. However, in a sense, the encouragement of ACOs has highlighted the FTC's need for better ways to measure and interpret improvements in quality of care and efficiency. As much as the FTC resists the efficiency and failing firm arguments, the two motives seem to be the driving force behind consolidation. While the FTC has implicitly considered these arguments in regards to St. Luke's and Highland Park, perhaps the time is approaching for a more explicit examination of these arguments, with improved quality of care metrics at the center of the debate.

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