

# CONSOLIDATION IN HEALTH CARE MARKETS

## A Review of the Literature

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### INTRODUCTION

This paper surveys the literature about the recent consolidation of various health care markets. More specifically, we focus our attention on the consolidation of hospital, provider, and health insurance markets, and the impact of this consolidation on health care prices, costs, and quality, as well as the overall rate of growth of health care spending. Given the evolving nature of health care markets, we focus on the most recent research available.

We will seek to identify leading studies and key research findings in this area as well as evaluate the policy implications of these findings. Though a somewhat abbreviated review, our “literature scan” seeks to provide an overview of the key research findings in this area in order to build knowledge and guide further investigation. The ultimate hope is that this literature scan will aid the current discussion on the measures that would achieve long-term health care cost control and address the fundamental, underlying factors driving up health care costs.

The consolidation that has been occurring in various key health care markets is surely a topic well-deserving of diligent review. As the long-term trend of consolidation continues and the provisions of the Affordable Care Act (“ACA”) which encourage greater clinical integration take effect, it is essential that we understand the potential implications of these changes in market structure if we are to effectively meet health care reform’s ultimate goal of containing health care costs while improving quality.

After a brief background on antitrust enforcement and integration, this paper is broken into three sections discussing hospital, physician, and health insurance consolidation. Section I focuses on hospital consolidation with an examination on price, quality and policy implications of the hospital market. Section II examines the limited literature concerning physician consolidation. Section III spotlights the articles

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concerning the growing consolidation of the health insurance market. Finally, the paper concludes with a policy analysis of the antitrust implications from the research while providing some specific solutions.

## BACKGROUND

The health care industry is regulated under both state and federal antitrust laws. For the purpose of this paper, the focus will be on federal agencies and their roles in enforcing antitrust laws. At the federal level, both the Federal Trade Commission (“FTC”) and the Department of Justice (“DOJ”) review complaints over anticompetitive activity and determine whether to bring investigations and ultimately enforcement actions. In particular, enforcement actions protect consumers from higher prices in the health care market that result from efforts to reduce or eliminate competition. While there is some overlap in which agency will bring a particular antitrust investigation, in health care antitrust, the DOJ has jurisdiction over health insurance companies while the FTC primarily focuses on hospitals and health providers.

The current state of health care antitrust law is in flux. During the previous administration, there were more than 400 health insurance mergers brought before the DOJ, only two of which required restructuring. The McCarran-Ferguson Act, which exempts health insurance companies from federal antitrust laws, further limits antitrust enforcement. However, under President Obama, there has been a revitalization of antitrust enforcement against health insurance companies and hospitals. In fact, after losing seven straight hospital merger cases in the 1990s and early 2000s, the FTC has been more successful stopping anticompetitive hospital mergers over the last five years. In all, both the FTC and DOJ are becoming increasingly more successful in their pursuits of preventing anticompetitive conduct in health care.

Currently, hospitals, physician organizations, and insurance companies are consolidating in two different methods; horizontally and vertically. Horizontal arrangements involve conduct between firms at the same level of production. Vertical arrangements arise between businesses at different levels along the same supply chain, such as a hospital’s acquisition of a physician practice.

### I. HOSPITAL CONSOLIDATION

It is clear that there has been significant hospital consolidation over the past decade. According to Vogt and Town (2006), using data from 1990 until 2003, the typical metropolitan statistical area resident saw a reduction in their hospital selection from six to four competing local hospital systems. Since the study was completed, the number of hospitals has further decreased with the increasing number of hospital mergers. With the noticeably changing landscape of hospitals, there is a great deal of the literature on consolidation in health care markets. One likely reason for the particular attention paid to hospital markets is that, compared to health insurance and many other provider markets, reliable pricing data relating to hospitals is much more widely available. As discussed later in this paper, given the private and proprietary nature of

health insurance and provider market data, it is often difficult to gauge the price and cost impact of consolidation. However, the numerous public interactions by individuals and state and federal governments with hospitals have created a plethora of much more easily accessible data. With notable consistency, the literature surrounding hospital concentration indicates that more concentrated hospital markets generally lead to higher hospital prices.

#### A. PRICE IMPLICATIONS

A recent study by Robinson (2011) employs a multivariate statistical method to evaluate the association between hospital market concentration, prices (after removing all contractual discounts) and profits for commercially insured patients. In this effort, Robinson analyzes data for patients admitted to 61 hospitals for six prominent and high-volume cardiac and orthopedic surgery procedures. Using the Dartmouth Atlas, which has assigned a total of 306 hospital markets to the United States, the data encompass 27 markets spanning eight different states. The 27 markets varied in number of total hospitals with a range of two hospitals to 92 with an overall average of 15.6 hospitals per market. Even after adjusting the figures to account for distinct patient and hospital characteristics, Robinson finds that, for all six procedures, hospital prices for patients in concentrated markets were significantly higher. Hospitals in concentrated markets charged \$4,561 to \$13,690 more per patient across the six procedures than hospitals in non-concentrated markets. There are a couple of caveats on the study. First, the eight states represented are concentrated in the west and southeast and do not fully represent the national market. Second, “cost” alone might give a false impression of overall profitability of hospitals in concentrated markets. The study assumes common operating marginal costs across services, which does not take into account different size hospitals. Large hospitals in concentrated markets are more likely to have disproportionately higher expenses, and a higher volume of more complex services all leading to higher costs. Therefore, consolidation might not be the only factor leading to increased costs.

That concentration in hospital markets may result in higher prices for payers and patients is a finding consistently supported throughout the literature. As Capps (2010) suggests, the economic literature analyzing the post-1990s hospital mergers shows that a significant portion of the increased hospital rates was due to hospital mergers. To study hospital consolidation’s impact on price, the author uses a 1997 through 2006 data set comprising 94 markets. His findings show that nationwide payments to hospitals by private insurers are nearly three percent higher while privately insured payors pay roughly six percent more due to consolidation in hospital markets. When viewing total national health care expenditures, the study suggests that Americans pay roughly \$10-12 billion more in annual medical expenses due to hospital consolidation. While his data coincides with other findings, Capps does note that average price effect could differ on a regional basis.

Relying on data from five leading insurance companies in Illinois, Haas-Wilson and Garmon (2011) compared prices pre and post-merger for two different hospital mergers both occurring in the northern suburbs of Chicago in 2000. The authors found

that the Evanston Northwestern Health Care and Highland Park Hospital merger led to roughly 11 to 17 percent price increase. However, their quantitative analysis of the Vista Health merger, which involved the combination of two community hospitals in Waukegan, Illinois, revealed only a relative price increase with only one insurance company experiencing a significant price increase post-merger. (See also Melnick, Shen, and Wu, 2011; Tenn, 2011).

Many studies suggest that increased bargaining power wielded by consolidated hospital systems leads to higher hospital prices. Using a metropolitan statistical area dataset from 2001-2004, Melnick, Shen, and Wu (2011) examine how hospital and health plan market consolidation interact to impact hospital prices. Their results not only reinforce Robinson's finding that greater hospital concentration leads to higher prices, but they argue that more concentrated health insurance markets may actually help counteract this price-increasing tendency of hospital concentration. Accordingly, Melnick, Shen, and Wu argue that, as long as health insurance markets remain competitive, increased insurance consolidation can serve to benefit consumers by helping to contain hospital prices.

There are at least two reasons, however, that the conclusions of Melnick, Shen, and Wu should be considered guardedly. First, their assumption that most health insurance markets are currently competitive seems to be overstated. As we will explain at greater length below, there is significant evidence to challenge the assumption that health insurance markets are competitive (Dafny et al., 2011; Dafny, 2010) and, consequently, that better leveraged health plans would necessarily pass on savings so as to significantly improve consumer welfare (Dafny, 2010).

Second, when evaluating the results of Melnick, Shen, and Wu, as well as the literature on the price implications of hospital consolidation more generally, it is significant to understand the limitations of such a price-centric framework. Price alone is often an insufficient faction to fully understanding the impact of a given market structure. Furthermore, quantitative studies are difficult to compare because they emphasize different price "definitions." Price can be defined as charges from the hospital, revenues, and even negotiated prices. If a study uses price data from different studies with different measures, then reliable comparison becomes nearly impossible. Other factors need to be considered. This is particularly true in the health care sector where understanding impact of consolidation on quality is critical, not only to consumer welfare but also to cost control. In health care consumers appropriately place a high value on quality and choice. Relying purely on price, and ignoring other factors, to measure the level of consumer welfare can place disproportionate focus on the payment intermediary and overlook many of the realities for the consumer.

For instance, as Robinson (2011) explains, positive contribution margins, or the marginal profit per unit sold, for privately-insured patients are often used to compensate for the payments from government sponsored health plans whose reimbursement lags behind the growth in the cost of care. Although not noted in the study, the margins from the private insurers are often small due to hospitals high fixed and high semi-variable

costs. Many hospitals rely on these margins to invest in new capacity and technology, upgrade facilities, provide services for the uninsured, and to meet operating expenses. So while bolstering the bargaining power of health plans may increase their ability to drive down reimbursement and diminish hospital prices in the short-term, this approach fails to address the fundamental financial realities faced by hospitals and so is unlikely to ultimately increase consumer welfare. Insurance companies may benefit from lower reimbursement, but consumers—and disproportionately those underserved consumers who rely most heavily on the charitable services of hospitals—will suffer the consequences of scaled back services and overall lower quality care.

Another counterpoint is provided by Margaret Guerin-Calvert and Guillermo Israilevich (2010) in their critique of the 2010 Report by the Massachusetts Attorney General on Health Care. That study, relying on Center for Medicare and Medicaid Service Cost Reports and Massachusetts Division of Health Care Finance and Policy Hospital Summary Utilization Data from 2005-2008, suggests that certain hospitals may receive higher reimbursement because these hospitals provide higher quality or better services. This is in contrast to the Massachusetts's report which concluded that health care payment is not “value-based” and that price increases, not increases in utilization or quality, necessitate the increases in health care costs. Rebutting the statistical methods employed in the Massachusetts's report, they disagree with the Attorney General's assertion that price differences always flow from market power and leverage. Instead, they argue that a small variation in quality perceived by patients may result in a large variation in willingness to pay for hospitals they prefer. The patient's willingness to pay higher prices provides incentives for hospitals to improve services, enhance quality, or expand output of highly demanded services.

## B. QUALITY IMPLICATIONS

Quality is also a concern in evaluating the impact of concentration. This is particularly true for health care where consumers value quality and choice to a very significant degree. Town and Vogt (2006) identified ten different studies that examined the effect of hospital market concentration on quality of care. The results were inconclusive. Five studies found that high levels of concentration reduce overall quality in at least some procedures, four found quality improvements from concentrated hospital markets, and three studies found no effect at all. However, as Town and Vogt point out, there is not a large enough sample size and the results of each study were susceptible to changes in procedure and location.

Unfortunately there are very few well accepted quality measures and there are very few studies of the impact of consolidation on quality. Romano and Balan (2010) argue that there are three measures in which hospital mergers can improve quality: clinical superiority, economies of scale, and financial resources. If a hospital has superior practices to that of the pre-merged firm which is sufficiently ineffective, the acquiring system can achieve positive quality improvements. Economies of scale allow small, independent hospitals who are merged with larger entities to purchase quality-improving equipment or provide additional services at lower cost. Scale economies can correlate

with positive improvement in quality with volume-outcome relationships for surgical procedures. The “learning curve of doctors” requires practicing procedures multiple times and certain mergers with the necessary economies of scale allow inexperienced doctors the needed repetitions to improve their technique thus improving quality. Also, a merger can benefit patients by enabling the merging parties to obtain more efficient utilization of expensive equipment and improve the delivery of high cost procedures. Finally, a merger can improve clinical quality for a firm that lacked the financial resources to make investments. The investments must be worthwhile on its own merit, and the authors warn that, if the benefits are not merger specific, the financial resources are unlikely to reap significant merger benefits.

However, in Romano and Balan’s review of the Evanston Northwestern Health Care and Highland Park Hospital merger, which was challenged by the FTC, the authors found little evidence that the merger led to improved quality of care. Relying on a 1998-2003 dataset from the Illinois Department of Public Health, the quantitative data suggest that Highland Park’s quality of clinical care did not improve post-merger when comparing the data to a set of control hospitals. The statistical analysis focused on patient outcomes, specifically risk-adjusted death and complications and other service areas including, results in cardiac surgery and interventional cardiology, and quality improvements related to teaching hospitals, nursing, and obstetrics. The authors do note that outcomes are a difficult quality measure since there are many “outcomes” that cannot be measured by regression analysis and that there was a lack of heterogeneity among the control hospitals. Their findings suggest that the Evanston-Highland merger had relatively limited impact on improving clinical outcomes with a large overall improvement in quality post-merger being “very unlikely.” However, while the authors state that overall clinical quality did not significantly improve, they could not rule out that specific clinical conditions improved post-merger.

### C. COST IMPLICATIONS

In response to the overcapacity and shifting financial situations of many hospitals over the past decade, it is certain that hospital mergers can help rationalize facilities, reduce costs and achieve important efficiencies to the benefit of both plans and consumers. Melnick, Shen, and Wu (2011) acknowledge the benefits of integrated hospital systems when they recommend that consolidated systems remain intact: “Because such large systems may provide increased efficiency and quality, we do not recommend breaking them up.”

The potential efficiencies from consolidation deserve very careful consideration. By better aligning health care physicians and hospitals, consolidation can also help address our currently siloed health care system. The goals of health care reform include improvement of both efficiency and quality. Integration of hospitals with physicians forming a more unified delivery system, could improve both of these targeted areas. (See Berenson et al., 2010).

The studies on the cost implications of hospital consolidation generally conclude that cost savings do result from most mergers and acquisitions, but unfortunately the studies are quite dated. Dranove and Lindrooth (2003), for example, examine the impact of system acquisitions and mergers and find the resulting cost savings to be substantial. While the study is dated, they find that on average hospitals experience cost decreases of 14 percent post-merger. However, when examining hospital consolidations that do not involve comprehensive integration, but merely combine ownership, Dranove and Lindrooth find the cost savings are modest at best. Perhaps unsurprisingly, without comprehensively combining operations, consolidating hospitals are unlikely to achieve notable efficiencies and synergistic cost savings. As expressed by Vogt and Town (2006) in a previous survey of the literature on the cost implications of hospital consolidation, “the balance of the evidence indicates that hospital consolidation produces some cost savings and that these cost savings can be significant when hospitals consolidate their services more fully.”

## II. PHYSICIAN CONSOLIDATION

Consolidation among physicians has increased in the recent past. The proportion of small physician practices, representing five physicians or less, has significantly dropped. Meanwhile, growing in prevalence are the physician practices with 6 physicians or more. (See Liebhaber and Grossman, 2007). While in light of data constraints research on the price and cost implications of physician integration is rather limited, some studies have sought to examine the subject.

Berenson et.al. (2010), for example, look at the impact that physician organization consolidation in California, namely in the form of medical groups and independent practice associations (“IPAs”) has had on negotiation dynamics within the California health care system. IPAs are associations of physicians that combine to provide a range of services to a managed care organization for a monthly, per member amount. Based on approximately 300 interviews in six California markets with representatives of hospitals, physician organizations, health plans, large employers, benefit consultants, and other stakeholders, this study finds that various forms of physician consolidation has shifted negotiating power toward providers and generally results in higher payment rates. The study found that price increases from hospital-physician alliances was common in all six California markets. While there has been an overall 14 percent decline in hospital capacity in California, the authors found that powerful physician group’s payment rates exceeded 200 percent of what Medicare pays.

Given the commonalities between IPAs and the accountable care organizations (“ACOs”) that will be promoted under health care reform, Berenson et al. raises concerns that the provisions relating to ACOs may lead to higher health care costs. They argue that if ACOs lead to more integrated provider groups with increased market power in negotiations, these reforms may have the unintended effect of raising rates for private payers.

There are significant reasons to be modest about the conclusions of the Berenson et al. study. The data is not an empirical study of actual pricing data and is based simply on interviews. Since the data gathered is only qualitative in nature and from a single state, the methodology is simply regional and can only provide non-quantitative analysis of provider consolidation.

Second, the suggested reimbursement increases do not take into account the number of government insured patients compared to privately insured patients. In order to stay in business, provider groups must remain profitable. Regardless of concentration, for many providers, reimbursement rates for Medicare and Medicaid do not provide enough revenue forcing providers to charge higher rates for private insurance. These increased reimbursement rates may enable them to continue to serve government insured patients.

Furthermore, there are efficiencies from this increased consolidation. Berenson et al. does not note that large provider groups tend to have more sophisticated cost accounting systems than stand alone hospitals or solo practitioners. These systems not only provide opportunities for higher reimbursement rates but raise costs on providers thus requiring higher rates.

The overall research surrounding the impact of vertical integration among hospitals and physicians is unfortunately thin. Ciliberto and Dranove (2005) and Cuellar and Gertler (2005) represent the major research on the competitive impacts of vertical integration by health care providers, yet, reach conflicting findings on the impact of this integration on hospital prices. Cuellar and Gertler argue that vertical integration between hospitals and physicians lead to higher prices than stand-alone hospitals, while Ciliberto and Dranove disagree with this assertion concluding that hospital-physician integration leads to overall lower prices.

### III. HEALTH INSURANCE CONSOLIDATION

Research on the impact of concentration in health insurance markets is limited but developing. The relatively scant attention this area has received from academics is likely the result of the dearth of sufficient market data in order to construct accurate measures of prices and market shares. Dafny et al. (2011) attest to this shortage of high-quality data sources on private health insurance. They compare four major datasets commonly used to study competition in the health insurance industry and find them to be largely inconsistent. When comparing the American Medical Association (“AMA”) to the National Association of Insurance Commissioners’ data, they found a substantial statistical difference in their market concentration figures leading to significantly different market concentration results in 17 out of 42 states. Comparing other sets of data produced the same inconsistent results. The authors conclude that use of the limited publicly-available sources of data on health insurance market shares is largely unreliable. Examination of market concentration data reveal that the four data sets greatly differ on their individual calculations of single, state market concentration.

Capps (2009) also agrees with this assertion regarding the importance of reliable data. When analyzing the AMA's data concerning market share and concentration, Capps found that the data does not accurately capture overall enrollment, demonstrates an implausible pattern of volatility over time, and state-level concentration is significantly higher than other data. As such, the data contain significant limitations. Dependable, publicly-available data on private health insurance markets is necessary to effectively study the competitive issues in these markets.

Some researchers, most notably Dafny (2010), have made efforts to overcome these limitations in data in order to evaluate competition in health insurance markets. Utilizing a dataset provided by a major benefits consulting firm on a confidential, limited-use basis, Dafny evaluates competition in the group insurance industry by testing whether or not health insurers charge higher premiums to more profitable firms. As the ability to engage in price discrimination should only exist in competitively imperfect settings, the extent to which carriers are able to extract employer-specific prices offers a glimpse into the competitiveness of health insurance markets. Dafny's findings reveal that firms purchasing health insurance do indeed face higher premium growth following positive profit shocks suggesting that health insurers exercise substantial market power when negotiating with private firms. In markets with six or fewer insurers, for every ten-percent-point increase in profits, profitable firms can expect to pay roughly 1.2 percent more in health insurance premiums.

This finding challenges the frequently held assumption that health insurance markets are currently competitive (Melnick, Shen, and Wu, 2011). It offers another reason to draw into question the notion that increased health plan concentration stands to significantly benefit consumers through lower premiums. Accepting Dafny's finding that many health insurers exercise notable market power in price negotiations with private payers, there is significant reason to doubt that price reductions secured by insurers as a result of increased bargaining power vis-à-vis providers would be effectively passed back to payers, since the data suggests that the insurance companies retain these profits. That is one of the reasons under the Affordable Care Act, insurance companies now have a statutory minimum medical loss ratio ("MLR"). The MLR requires that health insurers must spend a minimum of 80 percent in the individual and small group market and 85 percent in the large group market of their adjusted premium revenues on insurance claims and quality improvements. To the extent the insurance companies do not meet the MLR standard, they will have to pay the difference as a rebate to their enrollees. Thus the law acts to encourage insurance companies to improve services instead of increasing profits and a percentage of those profits will return to consumers.

Dafny et al. (2012) have further discussed the implications of a concentrated health market on cost to the consumer. They explore the relationship between growth in insurance premiums and changes in the health insurance market concentration driven by the 1999 merger of Aetna and Prudential Health Care. Using 139 local markets impacted by the merger, they compare the different increases in market concentration and insurance premium prices. Based on the data, they conclude that health insurance consolidation has caused the average premium price to increase by approximately seven

percent or roughly \$34 billion. Still, the authors do not suggest that the concentration of health insurance markets alone is the sole contributor for higher premiums. They also cautioned that the study is based on data analyzed solely from the merger of Aetna and Prudential Health Care. However, they argue that the highly concentrated nature of the health insurance market requires deeper analysis.

Bates et al. (2012) examines the relationship between a health insurance market's concentration and quantity of services demanded on an individual basis. The authors propose that highly concentrated markets will lead to higher prices, and thus a lower demand for individual insurance. Relying on data from 2001 through 2007 collected from all 50 states and the District of Columbia, they argue that insurance companies possess significant market power. As of 2007, 22 state insurance regulators could place restrictions on premiums rates for individually purchased insurance. The authors found the correlation between health insurance market concentration and individually purchased insurance strongest in the other 28 states that did not regulate the rates of the individual insurance market. In those 28 states, a ten percent increase in market concentration lowers individually purchased insurance by 13.4 percent or roughly 58,500 fewer people. However, they warn that this market concentration data is a lagged value, focused on results at the end of the time period, and driven by future expectations of insurance demand. Still, they note that the results conform to conventional economic theory that concentrated markets lead to higher prices and lower demand.

Dafny et al. (2012) argue that there is a positive relationship between health insurance concentration and profit. Insurance companies that possess significant market power can charge higher fees and thus have retained more profit over the last decade. Their analysis coincides with Robinson (2004) who also found that large, consolidated insurance companies obtained record profits. From the years 2000 through 2003, private insurers WellPoint, Anthem, United, Aetna, and CIGNA each experienced double-digit growth in earnings.

Dunn (2009) has examined the impact of concentration in the Medicare Advantage ("MA") insurance market on enrollment. Using publically available data from 2001-2007, Dunn investigated MA enrollment in state counties with at least 40,000 people. MA plans are available to seniors age 65 or older who forgo typical Medicare fee-for-service and enroll in a privately run MA program that is regulated by the Center for Medicare and Medicaid Services ("CMS"). According to his findings, there is a direct relationship between the number of competitors and the level of enrollment. When a second insurance company enters the market to offer an MA plan, enrollment increased by roughly 25-30 percent. When a third competitor enters the market, enrollment further increases by 15-20 percent. While Dunn notes that the study does not show or quantify consumer benefits due to additional entry, the study demonstrates increased competition in the MA market leads to higher enrollment.

## CONCLUSION and POLICY IMPLICATIONS

The literature on the price increasing effects of consolidation among hospitals and physicians has fueled concerns about some of the aspects of health care reform. There has been increased scrutiny by both the FTC and DOJ concerning the consolidation of health markets. Some researchers have suggested that the provisions of the ACA focused on promoting ACOs, groups of providers that would have financial incentives to deliver more efficient, higher-quality care, may have the unintended effect of increasing the health care prices. (See Berenson et al, 2010; Robinson, 2011; Melnick, Shen, Wu, 2011). They suggest that by encouraging more integrated health delivery systems, these provisions will lead to the further concentration of hospital and provider markets and, in turn, increased clout by these parties to raise prices to private insurance carriers.

The literature surrounding hospital and health insurance consolidation is consistent and raises concerns over increased concentration. It is clear that effective enforcement from the antitrust agencies is necessary to protect consumers from potentially anticompetitive forms of consolidation that stand to increase leverage to secure higher premiums (in the case of insurance) or higher reimbursement (in the case of hospitals and providers). It is also clear, however, that the highly-fragmented condition of our present health care system is a major culprit of higher cost, lower quality health care and that the silos persisting in our health system need to be addressed if we are to effectively bend the cost curve. It is necessary, therefore, that enforcers strike a prudent balance in antitrust enforcement so as to prevent anticompetitive and excessive consolidation, but not to stymie the alignment needed to meet the laudable quality and efficiency goals of health care reform.

Emblematic of this approach is the FTC's increased attention to hospital mergers. Hospital consolidation continues for a variety of factors including reduced reimbursement, excess capacity and the drive for efficiency. Although there are dozens of mergers each year, the FTC challenges less than a handful. In doing so, they have developed an approach that carefully identifies the harms from consolidation, while accounting for the potential efficiencies of consolidation. One open issue is how the FTC addresses the coordination sought by the ACA. For example, in its challenge to the ProMedica Health System/ St. Luke's Hospital merger, the FTC stated that clinical integration between hospitals for the purpose of conforming to the new health care law would not be an acceptable defense for antitrust violations. A strict adherence to the traditional antitrust merger analysis that fails to fully evaluate the need for coordination that is a cornerstone of the ACA could result in a paradoxical situation providing less than fully-integrated providers more leeway than the fully-merged providers that are more capable of achieving meaningful efficiencies. (See Dranove and Lindrooth, 2003).

As the literature indicates, the horizontal consolidation of hospitals deserves careful scrutiny from the antitrust regulators. But a clear distinction needs to be drawn between problematic consolidations on the one hand, and the efficient integration of our health system on the other. Public policies and the federal antitrust agencies should be focused on promoting the forms of comprehensive integration that bring about meaningful efficiencies and improvements in service. The ACA and its provisions are creating incentives to move providers, hospitals and physicians, away from fee-for-

service reimbursement towards payment for quality of care. This represents a potentially monumental change in reimbursement that may create incentives for providers to eliminate excess waste as they attempt to provide more efficient, quality services. As Berlin and Roach (2012) argue, altered financial incentives for all providers are a prerequisite for such effective health care integrations. A key objective of reform is the replacement of the fee-for-service reimbursement methodology with incentives that encourage lower utilization, while maintaining or improving the quality of care. When coupled with reformed financial incentives and aimed at promoting higher quality, lower cost health care, regulators should not be arduously resistant to efforts by health care providers to integrate.

The focus of the enforcement agencies is on the impact of consolidation of hospitals, and in particular on the impact on commercial insurers. But, hospitals and physicians treat patients with all forms of insurance including both private and government, even though government reimbursement rates are typically lower than private rates. Any benefits derived from consolidation including quality improvements, increased access to care, and cost savings and efficiencies, are relayed to government-insured patients as private payors end up subsidizing government's lower reimbursements. Focusing solely on the impact of commercial insurance companies, as many of the government's enforcement actions and these studies do, may be misguided. It would be prudent for future research and analysis to evaluate the overall impact of consolidation on both private and government markets.

The antitrust agencies should direct greater focus towards consolidation in health insurance markets. As demonstrated by Dafny (2010) and Dafny (2012), concentration in health insurance markets is prevalent and often harmful for consumers. As consolidation among insurers does not hold the same potential as provider, both physician and hospital, integration to streamline health care delivery and better coordinate care, we urge regulators to direct increased attention to identifying and challenging anticompetitive consolidation in these markets.

While many of the studies used in this survey piece are recent, some research is nearly a decade old and based on regional data. For example, almost all of the studies on the impact of hospital consolidation on costs are almost a decade old. Furthermore, the research relied on in these older studies could be based on provider payment mechanisms no longer utilized and lack current, relevant data. As such, there are a variety of needs for future research on the topics covered. Although there is ample information and studies concerning hospital mergers impact on price, there can always be updates with more recent, national data. There is room for future research on the areas of both cost and quality implications from hospital mergers. Also, the focus of much health care concentration research is dedicated to horizontal mergers. There is need for future research on vertical consolidation within health markets. Although studies have begun to focus on insurance and hospitals, there is very little information concerning non-hospital providers of care. Future research on consolidation within this particular area of health care is also strongly encouraged.

One challenge in assessing increases in insurance premiums is having information on the trends in provider costs. Gaynor and Newman (2012) of the Health Care Cost Institute (HCCI) are addressing this problem by developing a survey of cost trends from four of the largest insurance companies: Aetna, Humana, Kaiser Permanente, and United Healthcare. The purpose of the study is to provide comprehensive data on trends in the costs of health care. Taken collectively, the data represent nearly 40 percent of the market for private insurance for those individuals under the age of 65. The data also includes 20 percent of all private claims for people under the age 65. This data and future reports by the HCCI could provide researchers with a much needed source for studies on the impact of provider cost changes on the health insurance market.

There are also certain actions that Congress and the federal government should take to ensure greater competition in health care markets. (See Balto 2010). Congress should repeal the McCarran-Ferguson Act which provides an antitrust exemption for health insurance. The Act restricts the full range of antitrust enforcement actions and effectively bars the FTC from bringing consumer protection actions against health insurers. Repealing the Act would allow the FTC and DOJ an opportunity to fully challenge possible anticompetitive and deceptive behavior within the health insurance industry. Second, the FTC needs to broaden its enforcement under Section 5 of the FTC Act. Section 5 of the FTC Act grants the FTC power to both investigate and prevent unfair and deceptive trade practices. (See Balto 2009). By broadening the scope of usage for Section 5, the FTC can attack anticompetitive activities within the health care industry. Specifically, Section 5 actions could combat anticompetitive conduct in most favored nation provisions, fraudulent reimbursement schemes, and improper claims payment and claims denials. (See Balto 2008). Third, Congress needs to grant the FTC the power to litigate against non-profit entities including hospitals and insurance companies. Since many health care groups incorporate as non-profits, these entities avoid scrutiny by the FTC. By granting the FTC review powers over non-profits, the federal government can better control anticompetitive behavior within health care markets. Finally, with the passage of ACA and the shift from fee-for-service to quality of care, there needs to be revisions to the joint Statement of Antitrust Enforcement Policy in Healthcare (1996 Guidelines) to articulate broader standards for more efficient collaboration. The new guidelines should reflect the changes provided in the ACA while granting greater opportunities for collaboration among providers.

Health care reform provides the opportunity to fundamentally alter the way health care is delivered and to meaningfully streamline the siloed system largely responsible for driving up health care spending in this country. We should not let traditional antitrust paradigms that can ignore the shift from quantity to quality of care stand in the way of achieving the comprehensive levels of integration that hold the potential to achieve long-term health care cost control. Using future research, a more structured analysis on the issues of health care consolidation, and enacting the specific provisions stated above, Congress and our antitrust agencies can establish a progressive antitrust policy that facilitates consolidation and collaboration that improves quality and reduces costs.

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