

# DEPARTMENT OF JUSTICE

Buyer Power Concerns and the *Aetna-Prudential* Merger

Address by

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## I. INTRODUCTION

Thank you for inviting me to this distinguished conference; it is a pleasure to be here. The title given for my address is “How Important Are Economic Considerations in Government Health Care Enforcement?” The short answer is that economic analysis plays a major role in influencing the Antitrust Division’s enforcement policy in healthcare, and elsewhere. But you probably want to hear a bit more, or at least I hope you do... So let me illustrate by focusing on an issue that has received a fair bit of attention recently — monopsony, or in plain English, market power exercised by a buyer against sellers of a particular good or service.

Concerns with increased monopsony power featured heavily in the Antitrust Division’s challenges of two prominent recent mergers: Aetna’s acquisition of Prudential’s health insurance assets, and Cargill’s acquisition of Continental’s grain trading division.<sup>1</sup> In *Aetna*, the Complaint alleged that the consolidation of Aetna’s and Prudential’s HMO businesses would, in Houston and Dallas, allow Aetna to (a) depress prices paid to physicians for their services and (b) raise prices charged to employers and other group purchasers of HMO plans. In *Cargill*, the competitive overlap was in the purchasing and exporting of grain; the sole concern expressed in the Complaint was that post merger Cargill would, in numerous localities, depress purchase prices to grain sellers — farmers and certain smaller grain handlers.

I will first address a few commonly-asked questions as to why mergers that increase monopsony power should raise antitrust concerns. I will then turn to the buying-side issues in

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## II. SOME QUESTIONS ABOUT MONOPSONY AS A MERGER CONCERN

### A. Doesn't Overall Welfare Necessarily Increase if a Merger Lowers Prices Paid to Suppliers?

A common error is to claim that a merger that depresses prices to suppliers must benefit consumers and increase overall welfare. I will discuss the effects on consumers shortly. Let me begin with the effect on overall welfare.

*Overall welfare* (or economic efficiency) refers to the sum of gains and losses to all relevant parties, expressed in dollar-equivalents and weighted equally; e.g., a dollar gain to the merged firm from depressing the price it pays to a supplier gets equal weight as a dollar loss to a supplier. Overall welfare is a criterion often used by economists to evaluate a variety of changes that raise policy issues; by weighting the gains and losses to various parties equally, it treats distributional effects as neutral. This criterion is appropriate when one is indifferent to distributional changes, as arguably might be the case when a merger affects only the merging firms and other firms (as opposed to final consumers).<sup>2</sup> One can certainly consider other criteria that accord different weights to various groups, notably placing greater weight on the welfare of consumers — as arguably the antitrust laws require. But asking what happens to overall welfare is at least a useful starting point.<sup>3</sup>

Understanding why input price falls — efficiencies v. monopsony. The error in presuming that a

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<sup>2</sup> Aside from being indifferent to distributional changes, another reason for using equal weights is that the government could, if it wished, tax the gainers from a given policy change and use the proceeds to compensate the losers. Thus, if overall welfare rises, it is possible to compensate the losers and still leave the gainers better off.

<sup>3</sup> Observe that if the merging firms benefit but overall welfare declines, then in order to find the merger desirable one would have to accord a greater weight to the merging firms' profits than to the welfare of their customers and suppliers — an unlikely scenario.

lowering of input price must increase overall welfare reflects a failure to ask *why* input price falls. One must distinguish two cases: efficiencies and monopsony.

*Efficiencies.* The merger may generate *efficiencies* for the merged firm and lower the cost to suppliers of dealing with it. For example, post merger the firm may reduce contracting costs and transport costs by ordering in larger volume; or it may relieve suppliers of certain functions (such as carrying inventory) that it now can perform more efficiently than they can. These real cost savings are akin to a technological innovation in providing the input. They are reflected not only in a lower input price; importantly, they also induce an *expansion in the quantity* of the input used by the firm and an increase in overall welfare: welfare increases because the lower input price reflects genuine cost savings in the supply chain.

*Monopsony.* Suppose instead that the merger generates no efficiencies, and instead lowers input prices by increasing the firm's market power over its competitive suppliers. Suppliers' price reductions are now driven by the merged firm's willingness to *decrease* the input quantity it buys in order to force down price. Although input price is lower, this time overall welfare decreases.

To see that there is nothing peculiar about this, note that the textbook cases of pure monopoly and pure monopsony are entirely symmetric. Under monopoly, the seller faces price-taking customers whose aggregate demand curve for the firm's product is downward sloping in price — at higher prices less is demanded. The monopolist raises price above the competitive level by restricting the quantity it sells; because of this quantity reduction, the harm to consumers outweighs the monopolist's gain, so overall welfare decreases.

The textbook case of monopsony is the mirror image of monopoly. The buyer faces price-taking sellers whose aggregate supply curve is upward sloping in price -- sellers are willing

to accept lower prices for supplying less, because their marginal costs increase with the quantity they supply. The monopsonist depresses the input price it pays below the competitive level by reducing the input quantity it purchases. As with monopoly, the inefficient reduction in quantity makes the harm to suppliers exceed the gain to the buyer, and so overall welfare declines. Therefore, a merger that increases monopsony power and reduces both the input price and the input quantity transacted will decrease overall welfare.

B. If a Merger Lowers Prices to Suppliers, Don't *Consumers* Necessarily Benefit?

Now turn from suppliers and consider the effect on consumers who purchase the merging firms' product. (For simplicity, suppose that the purchasers are final consumers rather than intermediaries.) The belief that consumers must benefit if a merger lowers input price can be wrong for two reasons: (a) the merger may have no effect whatsoever on the output market; (b) if there is an effect, its direction depends on why the input price declines — efficiencies or monopsony.

Buying power but no effect on output market. First, the merged firm may possess significant power over the input market but have little or no impact on the output market (the limiting case is that of a "price taker"); if so, consumers are not significantly affected — positively or negatively — regardless of what the firm does post merger in the input market.

Logically, it is entirely consistent for the merged firm to have significant buying power versus its suppliers yet little influence over the price (or other terms) in the output market. There are at least two reasons for this. The *geographic* scope of the input and output markets can be quite different. For example, merger of two textile producers that are the major employers in a

small town can significantly increase the power to drive down local wages; yet the price of textiles to consumers will remain unchanged if this price is determined in world markets by the decisions of numerous other textile producers. The *product market* (as opposed to geographic) alternatives available to suppliers and to consumers also can be very different. Suppliers may lack good alternatives to producing the particular input bought by the firm, while consumers may enjoy good substitutes for the product sold by the firm.

Direction of change in firm's output depends on why input price falls. But suppose that the merged firm is significant not only as a purchaser in the input market but also as a seller in the output market, so that changes in its sales decisions can significantly affect consumers. As when analyzing the merger's effect on overall welfare, it is now critical to know why the merger brings about lower input prices — through efficiencies or monopsony power. If lower input prices are due to efficiencies, the decrease in the firm's costs induces it to expand its output and lower its price, an effect which is positive for consumers.

But if input price falls because of the exercise of increased monopsony power by the merged firm, the input quantity utilized will typically fall. This induces the firm to cut its output of the good it sells to consumers and raise its price.<sup>4</sup> It may appear counter-intuitive that input price can fall yet consumers can lose. But in fact, this outcome is natural when the lower input price reflects the exercise of buyer market power. Again, compare the textbook cases of monopsony and monopoly. If a merger leads to monopoly, one does not expect the merged

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firm's suppliers to benefit from the fact that customers are paying the firm a higher price; to the contrary, suppliers are likely to lose — because the firm's reduced sales of output will lower its demand for inputs. The same logic applies when a lower input price is the result of increased buyer market power.

C. Is Harm to Final Consumers Necessary for Antitrust Concern?

I have explained why a merger that increases the firm's market power over suppliers and depresses input price and quantity (a) will reduce overall welfare and (b) will not benefit consumers; but I noted that consumers may not lose either — if the firm cannot affect overall performance in the output market, because it is too small or otherwise faces severe competition.

This was *not* the case in *Aetna*. Since Aetna had significant market power in the sale of HMO products in Dallas and Houston, its exercise of monopsony power post merger against physicians could have had significant adverse spill-overs on purchasers of its HMO plans, who could not easily switch to other HMOs. Lower prices paid to physicians by Aetna would likely have caused some physicians to drop out of the market, to curtail their hours, or to spend less time with each Aetna HMO patient; in any such case, the quantity or quality of medical care would have suffered.

But the possibility of monopsony harm without a spill-over to consumers did present itself squarely in *Cargill*, where the Division's complaint did not allege harm to grain purchasers. Grain prices to consumers (or to national processors like Kellogg that sell final products to consumers) are determined in world markets; so the loss from increased monopsony power (absent the divestitures) may have been confined to suppliers — farmers and other grain sellers. Recall, however, that the loss to grain suppliers due to lower prices paid by Cargill post merger

(absent the divestiture) would have exceeded the gain to Cargill, because depressing input prices through monopsony power typically induces quantity distortions and thereby reduces overall welfare.<sup>5</sup>

Should antitrust be concerned with monopsony mergers which reduce welfare but do not harm consumers? An objection I've heard is that "antitrust protects consumers not competitors." In my view, however, this phrase should not be read literally as saying that only consumers matter. It is a metaphor for saying that antitrust is concerned not with individual competitors but with the competitive process. So if a merger increases market power and thereby harms the firm's trading partners — customers *or* suppliers — by more than it benefits the firm, antitrust concern *is* warranted. Insisting on consumer harm is overly narrow. From an economic perspective at least, there is little basis to oppose the exercise of market power against individuals in their capacity as buyers of products but not as sellers of their resources (e.g., physicians' time in *Aetna*, farmers' land, time and other assets in *Cargill*).

### III. BUYING SIDE CONCERNS IN *AETNA-PRUDENTIAL* MERGER

Turning to *Aetna*, the Division concluded that, in Dallas and Houston, Aetna's acquisition of Prudential's HMO business would significantly increase Aetna's market power to impose adverse price and non-price terms on physicians for purchasing their services. As should be the case, the competitive analysis in Aetna was colored by the specific market facts; our theory of harm was informed by what we learned in the course of an extensive investigation.

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<sup>5</sup> For example, had Cargill driven down the prices it pays, farmers might have responded by: (1) changing the location where crops are sold (towards more distant locations, but where purchases are not monopsonized); or (2) growing different crops, ones which do not face monopsony buyers, but which may not have been the farmer's first choice, given soil and climate conditions. Such quantity responses entail real inefficiencies.



A. Key Factors: Price Discrimination and Switching Costs

Post merger and absent divestitures, Aetna's market power over many physicians in a locality would have been greater than suggested by its aggregate market share of physician services purchased in that locality. This conclusion stems from the interaction of two key factors: the scope for *price discrimination* by Aetna across physicians; and the existence of *significant switching costs* to a physician of replacing lost business if the relationship with Aetna is terminated. Let me first describe these factors, then explain their competitive significance.

Scope for price discrimination by Aetna across physicians. There was considerable evidence that prices and other terms to physicians are not established by a payer on a locality-wide basis. Rather, a payer such as Aetna negotiates separately with different physician practices. Aetna therefore could target physicians which it deemed more vulnerable post merger, and seek to impose worse terms selectively on them.

Switching costs to physicians. Secondly, a physician dropped by Aetna for refusing its tougher contract demands post merger, would face significant switching costs while trying to replace lost Aetna business from other sources. These switching costs arise from the interplay of two factors:

*Physicians' time cannot be stored.* Unlike many commodities, such as oil which can be left in the ground, physicians' time cannot be stored. Therefore, if a physician cannot replace lost patients sufficiently fast, or divert time to comparably productive uses, the physician will incur a significant and irrevocable loss if terminated by Aetna.

*Significant delays and other impediments to switching or replacing Aetna patients.* The non-storability of physicians' time would be inconsequential if lost Aetna patients could be

switched to other plans or replaced with comparable revenue sources rapidly and with little costly effort. But our investigation suggested that switching or replacing patients is *not* swift and easy. Several characteristics of the market for physician services create these frictions.

Consider first a physician's difficulties in trying to *retain existing patients* by inducing them to switch from Aetna to another payer. Firstly, the physician may not participate in another plan offered by a patient's employer (a significant fraction of employers offer only a single plan) and paying out-of-pocket or going out of network can be considerably more expensive for the patient. Moreover, even if the employer does offer non-Aetna plans in which the physician participates, an enrollee's choice of plan depends on many factors. An HMO plan represents a bundle of attributes (primary care physicians, specialists, hospitals, copayments, pre-certification requirements, etc); so while loyalty to a physician is important, it may not always be enough to outweigh the other attributes of a plan that the enrollee finds attractive and induce the enrollee to switch to a non-Aetna plan in order to retain that physician. If dropped by Aetna, a physician can thus expect to lose a significant share of his or her Aetna patients (who would not switch to other payers), as well as future patients that would have come from Aetna.

Replacing such lost Aetna business by *attracting new patients* from other sources is likely to be even harder than trying to retain existing patients by inducing them to abandon Aetna. By definition, potential new patients lack an established relationship with this physician, and attracting their consideration is not a simple matter for several reasons: (1) A physician's direct contact with potential HMO patients is very limited, since it is filtered through the plan. (2) A physician also has a very limited ability to *indirectly* steer patients by influencing employers' choice of which plans they offer (except, perhaps, for some large or very prestigious physician practices). (3) Obtaining access to a broader patient pool by signing up with new payers also is

not a powerful option, since most physicians already are signed up with most payers. (4) The preceding obstacles arise for attracting any new patients, including ones who are seeking a new local physician (e.g., because they are new to the area, or because they change employers and their physician does not participate in the new employer's plans). Attracting patients who already have a local physician and do not need to switch poses an additional hurdle: overcoming the patient's loyalty to the current physician.

#### B. Competitive Implications of Price Discrimination and Physician Switching Costs

The scope for price discrimination by Aetna across physicians and the presence of significant switching costs for physicians to abandoning a payer such as Aetna imply that Aetna's market power over physicians post merger cannot be analyzed as in a textbook commodity market. There, a single price prevails and a buyer's influence on sellers occurs only through the buyer's impact on market-wide purchasing volume; a large buyer cannot target particular sellers for concessions. By contrast, Aetna can contract separately with various physicians (or physician group practices) and its market power over them must be analyzed accordingly.

In contracting with a given physician (or practice) post merger, Aetna's ability to impose a lower price or other adverse terms is likely to be greater the larger is the physician's prospective loss if it rejected Aetna's demands and lost all of Aetna's business. (Aetna's all-products-clause ensures that a physician who rejects any Aetna plan would lose all Aetna business.) Two market shares of Aetna affect the magnitude of the prospective loss to a given physician, and therefore Aetna's power to depress price to that physician:

Locality-wide share. The larger is Aetna's aggregate share of all patients in a locality (e.g.,

Houston) the *smaller* is the pool of (non-Aetna) patients from which a physician can try to replace Aetna patients — hence, the slower is the rate at which any given number of lost patients can be replaced. (The replacement rate is roughly proportional to the size of the eligible pool, hence inversely proportional to Aetna’s locality-wide share.) By consolidating Aetna’s and Prudential’s patient pools, the merger (absent divestitures) would have meant that a physician dropped by Aetna would replace patients more slowly, and thus incur a higher loss *per patient* that must be replaced, than if the physician were terminated by Aetna (or Prudential) pre-merger. The physician’s increased prospective loss per patient from rejecting Aetna’s demands and being dropped puts Aetna in a position to impose lower prices post merger.

Share of individual physician’s business. Unlike an anonymous commodity market, Aetna’s leverage over a physician depends not only on Aetna’s locality-wide market share but also on its share of that particular physician’s business. If Aetna accounts for a larger share of a physician’s patients, that physician would have to replace more patients if the Aetna relationship is ended — and would therefore face a greater loss (“switching cost”) from ending the relationship.

*Disproportional increase in physician’s prospective loss.* Importantly, a physician’s total cost of replacing patients unexpectedly can increase by more-than-proportionally with the number of patients that must be replaced. For instance, consider a physician who obtains 15% of his or her patients from Aetna and 15% from Prudential. If forced to replace all 30% of these patients post merger, the physician is likely to incur more than twice the cost that would be involved in replacing only the 15% of Aetna or of Prudential patients separately pre-merger. (This effect can arise even if the speed of replacing patients did not diminish, as in fact it will because the potential replacement pool available to a physician dropped by Aetna shrinks post

merger.) Once again, the physician's increased prospective loss *per patient* if dropped by Aetna increases Aetna's ability to force the physician to accept a lower price post merger.

This concern with a disproportional increase in a physician's loss if a larger number of patients must be replaced at once is not merely theoretical. Numerous physicians told us that a physician becomes *significantly more* vulnerable to the exercise of market power by a payer once that payer's share of the physician's revenue exceeds some threshold level. Such "threshold effects" can arise for several reasons. For example, a physician may be able to ride out a loss of, say, 15% of his or her business with relatively little disruption by running down a backlog of patients, by taking a vacation, or by time-shifting activities in other ways; but the physician may experience rapidly increasing costs if a larger share of the business must be replaced at once. Indeed, to limit their exposure to any payer, many physicians carefully balance their portfolio of patients from different sources.

Increasing adjustment costs to a physician can arise also for other reasons, beyond the above threshold effects. For example, suppose that potential replacement patients arrive at a constant rate (e.g., new arrivals to the area); the physician then faces an increasing replacement cost *per patient*, the greater the number that must be replaced. A simple numerical example illustrates the point. Suppose that patients arrive at a rate of one per day. If 1 patient must be replaced, the physician loses 1-patient day's worth of income (assume a one-day lag in the patient's arrival); if 2 patients must be replaced, the loss is 3 patient-days (2 patient days on the first day, and 1 patient day on the second day); if 3 patients must be replaced, the loss is 6 patient days (3 plus 2 plus 1). So the *average loss* per patient that must be replaced (total revenue days lost divided by the number of patients replaced) in the respective cases is 1,  $3/2$  and  $6/3$ , i.e., it

increases with the number of patients that must be replaced.<sup>6</sup>

The significance of increasing adjustment costs to a physician is that physicians for whom Aetna accounts for a large and significantly higher share of their revenue post merger will be disproportionately vulnerable to the exercise of market power by Aetna in setting terms.

#### C. The Division's Conclusions in *Aetna*

Based on the specific facts — including numerous interviews with industry participants — the Division concluded that, absent the divestitures in Houston and Dallas, the acquisition of Prudential would allow Aetna in those localities to depress price significantly to a substantial number of physicians. This conclusion was based not on mechanical application of any single market share statistic. Rather, it stemmed from carefully considering the interaction between all the above factors — physicians' switching costs, price discrimination, Aetna's post merger market share locality-wide, and the range of Aetna's shares across particular physicians.

#### IV. CONCLUSION

I hope to have persuaded you of the merits of the Antitrust Division's buyer-power concerns in *Aetna*. But if I failed, I hope to have at least convinced you that the Division takes concerns with buyer market power in mergers seriously, and that economic thinking plays a major role in guiding our analysis and enforcement decisions — in health care and elsewhere.

Thank you for your attention.

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<sup>6</sup> The general formula for this example is as follows: if  $n$  patients must be replaced, the total loss of patient revenue-days is  $(1+n)n/2$ , and the *average* loss is  $(1+n)/2$ , which increases with  $n$ . Modifying the example to assume no initial 1-day lag in a patient's arrival does not alter the key result that the average loss rises with  $n$  (linearly in this example).

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firm's suppliers to benefit from the fact that customers are paying the firm a higher price; to the contrary, suppliers are likely to lose — because the firm's reduced sales of output will lower its demand for inputs. The same logic applies when a lower input price is the result of increased buyer market power.

C. Is Harm to Final Consumers Necessary for Antitrust Concern?

I have explained why a merger that increases the firm's market power over suppliers and depresses input price and quantity (a) will reduce overall welfare and (b) will not benefit consumers; but I noted that consumers may not lose either — if the firm cannot affect overall performance in the output market, because it is too small or otherwise faces severe competition.

This was *not* the case in *Aetna*. Since Aetna had significant market power in the sale of HMO products in Dallas and Houston, its exercise of monopsony power post merger against physicians could have had significant adverse spill-overs on purchasers of its HMO plans, who could not easily switch to other HMOs. Lower prices paid to physicians by Aetna would likely have caused some physicians to drop out of the market, to curtail their hours, or to spend less time with each Aetna HMO patient; in any such case, the quantity or quality of medical care would have suffered.

But the possibility of monopsony harm without a spill-over to consumers did present itself squarely in *Cargill*, where the Division's complaint did not allege harm to grain purchasers. Grain prices to consumers (or to national processors like Kellogg that sell final products to consumers) are determined in world markets; so the loss from increased monopsony power (absent the divestitures) may have been confined to suppliers — farmers and other grain sellers. Recall, however, that the loss to grain suppliers due to lower prices paid by Cargill post merger

(absent the divestiture) would have exceeded the gain to Cargill, because depressing input prices through monopsony power typically induces quantity distortions and thereby reduces overall welfare.<sup>5</sup>

Should antitrust be concerned with monopsony mergers which reduce welfare but do not harm consumers? An objection I've heard is that "antitrust protects consumers not competitors." In my view, however, this phrase should not be read literally as saying that only consumers matter. It is a metaphor for saying that antitrust is concerned not with individual competitors but with the competitive process. So if a merger increases market power and thereby harms the firm's trading partners — customers *or* suppliers — by more than it benefits the firm, antitrust concern *is* warranted. Insisting on consumer harm is overly narrow. From an economic perspective at least, there is little basis to oppose the exercise of market power against individuals in their capacity as buyers of products but not as sellers of their resources (e.g., physicians' time in *Aetna*, farmers' land, time and other assets in *Cargill*).

### III. BUYING SIDE CONCERNS IN *AETNA-PRUDENTIAL* MERGER

Turning to *Aetna*, the Division concluded that, in Dallas and Houston, Aetna's acquisition of Prudential's HMO business would significantly increase Aetna's market power to impose adverse price and non-price terms on physicians for purchasing their services. As should be the case, the competitive analysis in Aetna was colored by the specific market facts; our theory of harm was informed by what we learned in the course of an extensive investigation.

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<sup>5</sup> For example, had Cargill driven down the prices it pays, farmers might have responded by: (1) changing the location where crops are sold (towards more distant locations, but where purchases are not monopsonized); or (2) growing different crops, ones which do not face monopsony buyers, but which may not have been the farmer's first choice, given soil and climate conditions. Such quantity responses entail real inefficiencies.

A. Key Factors: Price Discrimination and Switching Costs

Post merger and absent divestitures, Aetna's market power over many physicians in a locality would have been greater than suggested by its aggregate market share of physician services purchased in that locality. This conclusion stems from the interaction of two key factors: the scope for *price discrimination* by Aetna across physicians; and the existence of *significant switching costs* to a physician of replacing lost business if the relationship with Aetna is terminated. Let me first describe these factors, then explain their competitive significance.

Scope for price discrimination by Aetna across physicians. There was considerable evidence that prices and other terms to physicians are not established by a payer on a locality-wide basis. Rather, a payer such as Aetna negotiates separately with different physician practices. Aetna therefore could target physicians which it deemed more vulnerable post merger, and seek to impose worse terms selectively on them.

Switching costs to physicians. Secondly, a physician dropped by Aetna for refusing its tougher contract demands post merger, would face significant switching costs while trying to replace lost Aetna business from other sources. These switching costs arise from the interplay of two factors:

*Physicians' time cannot be stored.* Unlike many commodities, such as oil which can be left in the ground, physicians' time cannot be stored. Therefore, if a physician cannot replace lost patients sufficiently fast, or divert time to comparably productive uses, the physician will incur a significant and irrevocable loss if terminated by Aetna.

*Significant delays and other impediments to switching or replacing Aetna patients.* The non-storability of physicians' time would be inconsequential if lost Aetna patients could be

switched to other plans or replaced with comparable revenue sources rapidly and with little costly effort. But our investigation suggested that switching or replacing patients is *not* swift and easy. Several characteristics of the market for physician services create these frictions.

Consider first a physician's difficulties in trying to *retain existing patients* by inducing them to switch from Aetna to another payer. Firstly, the physician may not participate in another plan offered by a patient's employer (a significant fraction of employers offer only a single plan) and paying out-of-pocket or going out of network can be considerably more expensive for the patient. Moreover, even if the employer does offer non-Aetna plans in which the physician participates, an enrollee's choice of plan depends on many factors. An HMO plan represents a bundle of attributes (primary care physicians, specialists, hospitals, copayments, pre-certification requirements, etc); so while loyalty to a physician is important, it may not always be enough to outweigh the other attributes of a plan that the enrollee finds attractive and induce the enrollee to switch to a non-Aetna plan in order to retain that physician. If dropped by Aetna, a physician can thus expect to lose a significant share of his or her Aetna patients (who would not switch to other payers), as well as future patients that would have come from Aetna.

Replacing such lost Aetna business by *attracting new patients* from other sources is likely to be even harder than trying to retain existing patients by inducing them to abandon Aetna. By definition, potential new patients lack an established relationship with this physician, and attracting their consideration is not a simple matter for several reasons: (1) A physician's direct contact with potential HMO patients is very limited, since it is filtered through the plan. (2) A physician also has a very limited ability to *indirectly* steer patients by influencing employers' choice of which plans they offer (except, perhaps, for some large or very prestigious physician practices). (3) Obtaining access to a broader patient pool by signing up with new payers also is



not a powerful option, since most physicians already are signed up with most payers. (4) The preceding obstacles arise for attracting any new patients, including ones who are seeking a new local physician (e.g., because they are new to the area, or because they change employers and their physician does not participate in the new employer's plans). Attracting patients who already have a local physician and do not need to switch poses an additional hurdle: overcoming the patient's loyalty to the current physician.

#### B. Competitive Implications of Price Discrimination and Physician Switching Costs

The scope for price discrimination by Aetna across physicians and the presence of significant switching costs for physicians to abandoning a payer such as Aetna imply that Aetna's market power over physicians post merger cannot be analyzed as in a textbook commodity market. There, a single price prevails and a buyer's influence on sellers occurs only through the buyer's impact on market-wide purchasing volume; a large buyer cannot target particular sellers for concessions. By contrast, Aetna can contract separately with various physicians (or physician group practices) and its market power over them must be analyzed accordingly.

In contracting with a given physician (or practice) post merger, Aetna's ability to impose a lower price or other adverse terms is likely to be greater the larger is the physician's prospective loss if it rejected Aetna's demands and lost all of Aetna's business. (Aetna's all-products-clause ensures that a physician who rejects any Aetna plan would lose all Aetna business.) Two market shares of Aetna affect the magnitude of the prospective loss to a given physician, and therefore Aetna's power to depress price to that physician:

Locality-wide share. The larger is Aetna's aggregate share of all patients in a locality (e.g.,

Houston) the *smaller* is the pool of (non-Aetna) patients from which a physician can try to replace Aetna patients — hence, the slower is the rate at which any given number of lost patients can be replaced. (The replacement rate is roughly proportional to the size of the eligible pool, hence inversely proportional to Aetna’s locality-wide share.) By consolidating Aetna’s and Prudential’s patient pools, the merger (absent divestitures) would have meant that a physician dropped by Aetna would replace patients more slowly, and thus incur a higher loss *per patient* that must be replaced, than if the physician were terminated by Aetna (or Prudential) pre-merger. The physician’s increased prospective loss per patient from rejecting Aetna’s demands and being dropped puts Aetna in a position to impose lower prices post merger.

Share of individual physician’s business. Unlike an anonymous commodity market, Aetna’s leverage over a physician depends not only on Aetna’s locality-wide market share but also on its share of that particular physician’s business. If Aetna accounts for a larger share of a physician’s patients, that physician would have to replace more patients if the Aetna relationship is ended — and would therefore face a greater loss (“switching cost”) from ending the relationship.

*Disproportional increase in physician’s prospective loss.* Importantly, a physician’s total cost of replacing patients unexpectedly can increase by more-than-proportionally with the number of patients that must be replaced. For instance, consider a physician who obtains 15% of his or her patients from Aetna and 15% from Prudential. If forced to replace all 30% of these patients post merger, the physician is likely to incur more than twice the cost that would be involved in replacing only the 15% of Aetna or of Prudential patients separately pre-merger. (This effect can arise even if the speed of replacing patients did not diminish, as in fact it will because the potential replacement pool available to a physician dropped by Aetna shrinks post

merger.) Once again, the physician's increased prospective loss *per patient* if dropped by Aetna increases Aetna's ability to force the physician to accept a lower price post merger.

This concern with a disproportional increase in a physician's loss if a larger number of patients must be replaced at once is not merely theoretical. Numerous physicians told us that a physician becomes *significantly more* vulnerable to the exercise of market power by a payer once that payer's share of the physician's revenue exceeds some threshold level. Such "threshold effects" can arise for several reasons. For example, a physician may be able to ride out a loss of, say, 15% of his or her business with relatively little disruption by running down a backlog of patients, by taking a vacation, or by time-shifting activities in other ways; but the physician may experience rapidly increasing costs if a larger share of the business must be replaced at once. Indeed, to limit their exposure to any payer, many physicians carefully balance their portfolio of patients from different sources.

Increasing adjustment costs to a physician can arise also for other reasons, beyond the above threshold effects. For example, suppose that potential replacement patients arrive at a constant rate (e.g., new arrivals to the area); the physician then faces an increasing replacement cost *per patient*, the greater the number that must be replaced. A simple numerical example illustrates the point. Suppose that patients arrive at a rate of one per day. If 1 patient must be replaced, the physician loses 1-patient day's worth of income (assume a one-day lag in the patient's arrival); if 2 patients must be replaced, the loss is 3 patient-days (2 patient days on the first day, and 1 patient day on the second day); if 3 patients must be replaced, the loss is 6 patient days (3 plus 2 plus 1). So the *average loss* per patient that must be replaced (total revenue days lost divided by the number of patients replaced) in the respective cases is 1,  $3/2$  and  $6/3$ , i.e., it

increases with the number of patients that must be replaced.<sup>6</sup>

The significance of increasing adjustment costs to a physician is that physicians for whom Aetna accounts for a large and significantly higher share of their revenue post merger will be disproportionately vulnerable to the exercise of market power by Aetna in setting terms.

#### C. The Division's Conclusions in *Aetna*

Based on the specific facts — including numerous interviews with industry participants — the Division concluded that, absent the divestitures in Houston and Dallas, the acquisition of Prudential would allow Aetna in those localities to depress price significantly to a substantial number of physicians. This conclusion was based not on mechanical application of any single market share statistic. Rather, it stemmed from carefully considering the interaction between all the above factors — physicians' switching costs, price discrimination, Aetna's post merger market share locality-wide, and the range of Aetna's shares across particular physicians.

#### IV. CONCLUSION

I hope to have persuaded you of the merits of the Antitrust Division's buyer-power concerns in *Aetna*. But if I failed, I hope to have at least convinced you that the Division takes concerns with buyer market power in mergers seriously, and that economic thinking plays a major role in guiding our analysis and enforcement decisions — in health care and elsewhere.

Thank you for your attention.

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<sup>6</sup> The general formula for this example is as follows: if  $n$  patients must be replaced, the total loss of patient revenue-days is  $(1+n)n/2$ , and the *average* loss is  $(1+n)/2$ , which increases with  $n$ . Modifying the example to assume no initial 1-day lag in a patient's arrival does not alter the key result that the average loss rises with  $n$  (linearly in this example).