

## The Effects of Vertical Consolidation in Health Care Markets

Vertical merger policy is in a transitional period. . . . During the 1970s and 1980s, vertical merger enforcement policy fell dormant in the wake of Chicago School arguments that vertical integration was most likely procompetitive or competitively neutral. Recently, though, government enforcement agencies began scrutinizing mergers with significant vertical elements.

~ Michael H. Riordan, 1998<sup>1</sup>

VERTICAL CONSOLIDATION in health care markets (consolidation between health care firms operating in different, but related, product markets, such as insurers and physicians, insurers and hospitals, or hospitals and physicians) comes in many forms and can have both procompetitive and anticompetitive impacts. Accordingly, like horizontal consolidation, vertical consolidation among insurers, hospitals, and physicians can have significant implications for the well-being of health care consumers.

Vertical consolidations among health care firms can lead to lower prices if they generate efficiencies (cost savings) and encourage more aggressive competition among firms in the market. In other situations, however, vertical consolidations can lead to higher prices by facilitating the exercise of monopoly power. It is possible to have both efficiency gains and increases in monopoly power resulting from the same case of vertical consolidation. Whether consumers are better or worse off depends on which effect is stronger.

Analyses of the welfare effects of vertical consolidation are further complicated by three factors. First, there is considerable theoretical debate concerning whether and when vertical consolidation in health care markets facilitates the exercise of market power. Second, there is

virtually no empirical research providing evidence of the impacts of vertical consolidation in health care markets. The major exception is an unpublished study of physician-hospital integration in three states between 1994 and 1998.<sup>2</sup> Third, when health care firms consolidate vertically, individual competitors—physician organizations, hospitals, or insurers—are often hurt (for example, individual competitors may lose customers or even be driven out of business). Complications arise because individual competitors can be hurt both in cases where vertical consolidation decreases competition and in cases where it enhances (or at least does not lessen) competition. Harmed competitors are likely to raise antitrust challenges to the vertical consolidation in either case; however, the antitrust laws were designed to protect competition, not individual competitors.

In *Doctor's Hospital of Jefferson Inc. v. Southeast Medical Alliance, Inc.*,<sup>3</sup> for example, one hospital challenged its termination from a PPO that simultaneously began to contract with the hospital's competitor. The court correctly granted summary judgment on the grounds that the plaintiff failed to establish injury to competition. Vertical foreclosure of this sort is common, and the evidence presented, such as the large number of competitors in the market for health care financing and the fact that the terminated hospital was still a preferred provider at six other PPOs, suggested no anticompetitive effect.

Given the many complications involved in distinguishing the pro-competitive vertical consolidations from the anticompetitive ones, it is not surprising that there are many unsettled antitrust policy issues concerning vertical consolidation among health care firms. Consistent with these unsettled antitrust policy issues, the DOJ and FTC have established “antitrust safety zones” for horizontal provider arrangements, such as hospital mergers and physician network joint ventures, but not for vertical provider arrangements. These safety zones describe a subset of the provider arrangements that the federal agencies are unlikely to challenge under the antitrust laws. Specifically, the agencies stated: “Because multiprovider networks involve a large variety of structures and relationships among many different types of health care providers, and new arrangements are continually developing, the Agencies are unable to establish a meaningful safety zone for these entities.”<sup>4</sup>

As in the previous chapter on horizontal consolidations, I will focus

in this chapter on synthesizing the theoretical and empirical literatures on the potential for vertical consolidation to enhance efficiency and market power. The analyses, based on both economic theory and empirical research, will show which benefits (efficiency gains) and costs (market power enhancements) of vertical consolidation are most plausible in health care markets. My hope is that this synthesis will facilitate the antitrust enforcement process of determining which vertical consolidations will be procompetitive (will have net positive impacts on consumers because the efficiency gains are greater than the associated costs) and which ones will be anticompetitive (will have net negative impacts on consumers because the increases in firms' market power resulting from the consolidation are greater than the associated benefits).

### **Types of Vertical Consolidation**

The types of vertical consolidation found in health care markets range from vertical integration (mergers and acquisitions) to nonexclusive vertical contracts, with exclusive dealing contracts, tying restrictions, joint ventures, and most-favored nation (MFN) clauses falling somewhere in the middle. Vertical integration, exclusive dealing contracts, and tying restrictions (under certain circumstances) present the greatest concern for anticompetitive behavior.

Vertical integration involves ownership—for example, a hospital or an insurer merging with or acquiring a physician organization.<sup>5</sup> Most old-style closed-panel HMOs are perfect examples of vertical integration. Although there are still numerous examples of this sort of integration in health care, its prevalence in the future is unclear. As discussed in Chapter 1, many vertically integrated providers are selling their insurance plans, and many vertically integrated insurers are selling their provider organizations. Likewise, many hospitals are selling their physician practices.

Exclusive dealing contracts are often thought of as integration through contract rather than through ownership. Their competitive impact may be quite similar to vertical integration because under exclusive dealing contracts at least one of the parties in the exchange agrees to trade only with the other. Under a hospital-physician exclusive contract, for example, the hospital may give certain physicians the right to be the only providers of the contracted services at that hospital.

This is called a one-sided exclusive contract because the exclusivity is binding on the hospital, but not the physicians, who are free to practice at other hospitals. If, in addition, the physicians agree to practice solely at the contracting hospital or to refer all patients to that facility, then the contract is called a two-sided exclusive contract.

Under certain circumstances one- and two-sided exclusive contracts can foreclose rivals from the market, decrease competition, and facilitate the exercise of market power. In particular, when hospital markets are characterized by few competing hospitals, this type of single-sided exclusive contract may decrease competition in the market for physician services.<sup>6</sup> Moreover, this sort of double-sided exclusive contract may decrease competition in two markets (the markets for physician and hospital services) by limiting the ability of competing hospitals to obtain sufficient numbers of patient admissions.

The actual competitive effect of exclusive dealing arrangements depends critically on the nature of the contract. The key factors are the degree of formal or implicit exclusivity (the extent to which the contract requires network members either to sell or to buy services only from other network members or the extent to which unwritten agreements prevent network members from contracting with other physicians or hospitals), the duration of the contract, the penalties for breach of the contract, and the proportion of the local hospital and physician services markets involved in the contract. Increasing any of these factors increases the likelihood that the exclusive contract will decrease competition and consumer welfare.

Exclusive contracts between hospitals and hospital-based physicians, such as radiologists, anesthesiologists, pathologists, and emergency room physicians, are quite common. An American Hospital Association survey found that 73 percent of hospitals had exclusive contracts with physicians in 1984.<sup>7</sup> More recently, hospitals have been contracting with cardiologists, internists, obstetricians, and thoracic surgeons on an exclusive basis.<sup>8</sup>

Exclusive arrangements between insurers and providers are not common,<sup>9</sup> and two states (Minnesota and New Hampshire) actually prohibit these sorts of contracts between HMOs and providers.<sup>10</sup> In 1997 the California Department of Corporations banned the use of exclusive provider contracts by PacifiCare.<sup>11</sup>

Tying restrictions require that buyers purchase two separate (but of-

ten complementary) products from particular sellers.<sup>12</sup> As a condition of the sale of one of these two products, called the tying good, the seller of the tying good requires the buyer to purchase the tied good from a seller of the tying good seller's choice. In the health care industry, tying restrictions might require MCCs to purchase physician and hospital services, two separate but complementary products, from particular hospital systems and physician organizations.<sup>13</sup> For example, a dominant hospital system's decision (and written contract) to enter risk-sharing contracts with only one local physician organization effectively imposes a tying restriction on MCCs. MCCs wanting to contract and share risk with the dominant hospital system would have to contract with the tied physician organization as well. In this case hospital services are the tying good and physician services are the tied good. Under certain conditions, for example when the hospital system (or seller of the tying product) has appreciable economic power to impose the tie and thereby force unwanted purchase of the tied product,<sup>14</sup> this sort of tying restriction has the potential to decrease competition in the market for the tied good (physician services) by eliminating other physician organizations' abilities to compete for risk contracts with the dominant hospital system.

Tying may be anticompetitive because it is an effective way for the dominant hospital system to affect the market structure of the tied good market.<sup>15</sup> Specifically, rival physician organizations may be foreclosed from sufficient sales because of the tying restriction, and thus their continued operation may become unprofitable. These sellers of the tied good are denied the scale necessary to survive in the market.

Likewise, a dominant physician organization's decision (and written contract) to enter risk-sharing contracts with only one local hospital system effectively imposes a tying restriction. MCCs entering into risk-sharing agreements with the dominant physician organization would have to contract with the tied hospital as well. In this case physician services are the tying good and hospital services are the tied good. Again under certain conditions, this restriction has the potential to decrease competition in the market for the tied good (hospital services) by eliminating other hospitals' abilities to compete for risk contracts with the dominant physician organization.

Vertical joint ventures involve collaboration and partial integration among providers and insurers or hospitals and physicians. For example,

a physician organization and an insurer may form a joint venture to offer a new HMO. Or a physician organization and a hospital may form a joint venture to open an ambulatory surgery center, outpatient cancer treatment center, pain management clinic, cardiac catheterization lab, imaging center, or outpatient physical therapy/sports medicine facility. These sorts of joint ventures between hospitals and physicians seem to be increasing in number.<sup>16</sup>

PHOs and management service organizations (MSOs) often take the form of joint ventures between hospitals and physicians. In many cases the PHO is jointly owned and operated by a hospital(s) and its affiliated physicians. PHOs enable hospitals and physicians to contract with managed care plans to provide both physician and hospital services. An MSO is similar to a PHO, but it has evolved into an organization that provides more services to physicians, such as billing and collection services and utilization management services. An example of a hospital-physician joint venture involving many hospitals and physicians is the joint venture between Caregroup, a Boston-based system of six hospitals and its approximately 2,000 physicians, and Lahey Clinic, a system of three hospitals and its approximately 800 physicians.<sup>17</sup> By 1998, approximately 54 percent of acute care hospitals in the United States had PHOs or MSOs.<sup>18</sup>

Most-favored nation (MFN) clauses are vertical contractual agreements concerning prices. MFN clauses specify that the seller (for example, a hospital or physician organization) will not charge the contracting insurer more than the lowest price the seller charges any other buyer. If the seller offers another buyer a lower price, then the seller must offer the same lower price to the contracting insurer with the MFN clause. The prevalence of MFN clauses in contracts between insurers and hospitals or physicians is not known; however, in 1995 Washington became the first state to ban the use of these clauses in contracts between health care providers and health plans.<sup>19</sup>

### **Efficiency Gains Specific to Vertical Consolidation**

Vertical consolidation between health care firms can be efficiency-enhancing in many of the same ways as horizontal consolidation between health care firms. For example, vertical consolidation may allow for the realization of both transactional economies (lower costs due to

reductions in transaction costs) and economies of scope (lower costs due to more efficient joint production of two or more products).

In addition, economic theory suggests that vertical consolidation between health care firms can be efficiency-enhancing in at least two other ways: (1) by correcting problems caused by misaligned incentives (externalities), and (2) by eliminating the double monopoly markup that can occur when both insurers and providers have market power. Issues of the alignment of incentives are particularly salient in health care markets, given the difficulty of contracting for and assuring quality.

### *Internalization of Externalities or Improved Alignment of Incentives*

In health care markets, positive production externalities can result in hospitals and physicians providing services of lesser quality than is socially optimal. A positive production externality is said to occur when the actions of a producer (a physician or hospital) confer a benefit on a party not directly involved in the market transaction. For example, when a physician who contracts nonexclusively to provide services to the enrollees of a managed health plan is faced with a treatment decision that affects the quality of care received by a patient (the physician and patient are directly involved in the market transaction), the physician will consider the benefits of providing higher quality to the patient and to him/herself (improved reputation and additional profits for the physician), but may not consider the benefits of providing higher quality to the managed health plan (improved reputation and additional profits for the owners of the health plan). As a result of this externality, physicians underestimate the total benefits (the benefits received by patients, physicians, and owners of managed health plans) of providing higher-quality care, and physicians may forgo some opportunities to increase quality that are in society's best interests.

Vertical integration of insurers and providers or exclusive contracts between insurers and providers may induce physicians to take into account the total benefits (including the benefits to the owners of the managed health plans, in addition to the benefits to patients and themselves) of providing higher-quality care to patients. Thus, vertical associations between insurers and providers may eliminate this externality and result in physicians and hospitals providing higher-quality care.

Likewise, vertical integration or exclusive contracts between hospitals and physicians may induce physicians to consider the impact of their treatment decisions on hospitals' reputations. Clearly, physicians' treatment decisions concerning hospitalized patients have an impact on both physicians' and hospitals' reputations. When hospitals and physicians are not vertically associated, however, the physician may only take his/her reputation for quality into account when making important decisions concerning quality of care. If hospitals and physicians are vertically integrated or physicians have signed exclusive contracts with hospitals, then physicians will be more likely to take hospitals' reputations into account when making these sorts of decisions. As a result, vertical associations between hospitals and physicians may result in higher quality of care.<sup>20</sup>

Another example is health insurers, who make multiple decisions that affect both their reputations and profits and health care providers' profits—decisions about benefit design (which health care services are covered and how much is covered—visit limits or expenditure limits), provider network inclusiveness (which hospitals and physicians are included in the network), and marketing. When an insurer is not vertically integrated or exclusively contracted with certain providers, that insurer will select its benefit design, network inclusiveness, and marketing strategy based on estimates of what will maximize its profit, not taking into account the impact on those providers' profits. However, a more generous benefit design, a less inclusive network, or additional marketing may result in additional profits for those providers (sometimes at the expense of those providers' competitors). Vertical integration or exclusive contracts between insurers and providers can internalize this externality.

### *Elimination of the Double Monopoly Markup*

In the absence of vertical integration, providers with market power contract with insurers at prices that include monopoly markups over the providers' costs, and then insurers with market power turn around and charge premiums that include monopoly markups over insurers' costs. Since insurers' costs include the higher costs of contracting with providers with market power, there is a double markup and insurance prices are higher.



With vertical integration between providers and insurers, costs are marked up only once, and insurance prices will be lower. Therefore, vertical integration (but not necessarily exclusive contracts) between insurers and providers can increase efficiency and reduce insurance prices when both insurers and providers have market power.

### **Anticompetitive Effects Specific to Vertical Consolidation**

Economists are still debating the competitive effects of vertical consolidation, and so far there is little agreement. Some economists, often grouped under the label “the Chicago School,” argue that vertical consolidation is competitively neutral or has procompetitive effects,<sup>21</sup> while others, known as “the post-Chicago School,” argue that vertical consolidation can be anticompetitive under certain conditions.

The theory and conclusions of the Chicago School, however, depend on assumptions that are inapplicable to health care markets. In particular, it has been shown that the Chicago School conclusion of a “single monopoly profit”—the notion that vertical mergers cannot increase a monopolist’s profits further<sup>22</sup>—is critically sensitive to the assumptions of a fixed-proportions technology (the requirement that inputs into the production process be used in a fixed ratio to one another so that substitution between inputs is not possible), perfect competition in the input market (for example, the market for hospital services), and monopoly in the output market with prohibitive barriers to entry.<sup>23</sup> The models of the post-Chicago School do not depend on these same restrictive assumptions, and thus are more applicable to health care markets.

Nevertheless, much can be learned from Chicago School thinking, especially in regard to the competitive effects of exclusive dealing contracts. Both parties to an exclusive deal must benefit from it, and accordingly, it is less likely that exclusive dealing contracts will have anti-competitive effects.<sup>24</sup> For example, why would a physician organization be willing to sign an exclusive dealing contract that limited its physicians’ abilities to admit patients to other hospitals, when the net effect of this exclusive dealing contract was to decrease competition in the market for hospital services, raise prices for hospital services, and therefore reduce demand for the services of the physicians<sup>25</sup> and reduce the physician organization’s profits? To induce the physician organiza-

tion to sign this sort of exclusive dealing contract, the hospital would have to compensate the physicians for lost profits, potentially rendering the anticompetitive exclusive deal unprofitable for the hospital.

### *Vertical Consolidation and Post-Chicago School Thinking*

Post-Chicago School theories suggest that in health care markets characterized by entry barriers, the anticompetitive impacts of vertical integration and exclusive contracts derive from (1) the potential for vertically-consolidated firms to raise rivals' costs and/or foreclose rivals' access to a necessary market, and (2) the potential for vertical consolidation to confer market power by facilitating horizontal coordination or collusion.<sup>26</sup>

In the following subsections, the four possible cases of vertical consolidation between hospitals, physician organizations, and insurers (illustrated in Figure 1) are described, and the conditions under which each of these cases has the potential to be anticompetitive are analyzed. A discussion of most-favored nation clauses follows.

#### HOSPITAL-PHYSICIAN CONSOLIDATION THAT INHIBITS OTHER PHYSICIANS' ACCESS TO HOSPITALS

In 1995 the DOJ challenged the behavior of a monopoly hospital and its medical staff in Danbury, Connecticut, as having anticompetitive impacts in the markets for physician and hospital services.<sup>27</sup> The DOJ and the state attorney general alleged that the only acute care hospital in Danbury limited the size and mix of its medical staff (thereby inhibiting other physicians' access to the only acute care hospital in Danbury) in order to restrain competition in the market for physician services and coerce physicians to use its outpatient facilities. According to the complaint, both the threat of losing hospital admitting privileges and the "generous" physician fees negotiated by HealthCare Partners, a jointly owned corporation with the Danbury Area IPA (which included over 98 percent of the physicians on the hospitals' medical staff), provided the incentive for physicians to increase their use of Danbury Hospital's outpatient surgery facilities, and thus inhibit competition in markets for hospital services. The defendants consented to abide by the Final Judgment without trial, and accordingly not to fix prices or restrain competition.

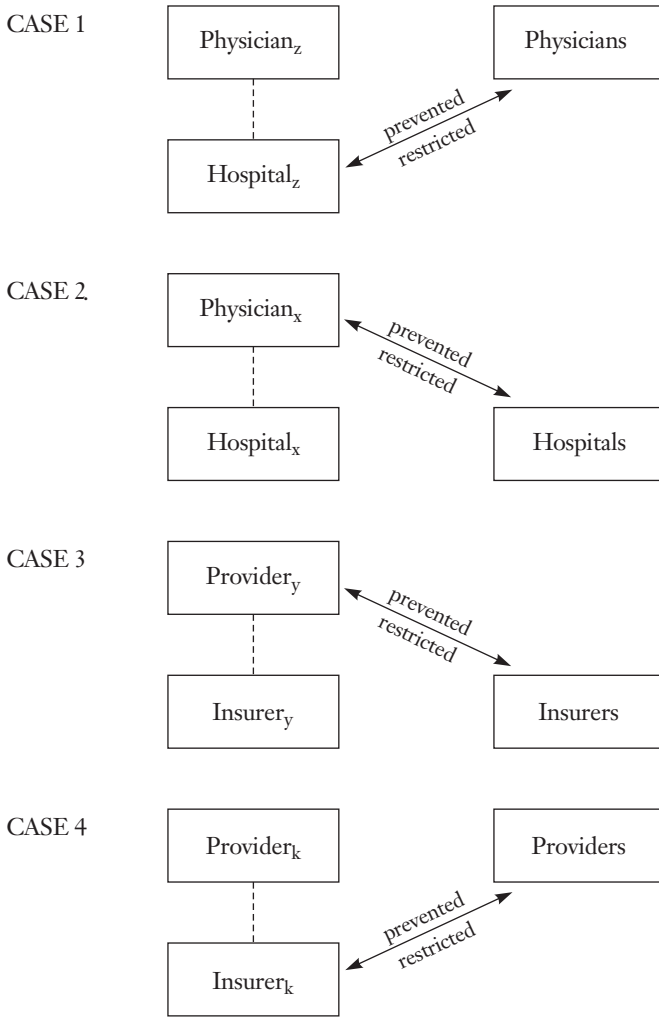


Figure 1 Four possible cases of vertical consolidation

In general, the case of physician organization<sub>z</sub> and hospital<sub>z</sub> merging, forming a joint venture (for example, a PHO), or signing an exclusive dealing contract (specifying that physician organization<sub>z</sub> will be the sole supplier of certain physician services at that hospital) can be anticompetitive under certain conditions. This sort of vertical consolidation has the potential to be anticompetitive—specifically, to reduce competition in the local market for physician services and thus to allow the vertically-consolidated physicians to exercise market power—when

there are entry barriers in the local market for hospital services and (1) the vertically-consolidated hospital is the only hospital in the local market or (2) the vertically-consolidated hospital is the highest-quality provider or the most cost-effective provider of hospital services in the local market and the vertically-consolidated hospital can maintain that position over time.

Assuming entry barriers in the market for hospital services, if the vertically-consolidated hospital is the sole supplier of hospital services and the vertically-consolidated hospital/physician organization does not allow other physicians to treat patients at this hospital, rival physicians and potential physician entrants are effectively foreclosed from the local market for physician services. For example, without access to the local hospital's operating rooms, surgeons would be unable to perform inpatient surgeries locally, and thus their abilities to operate profitable practices in the local market for physician services would be diminished. This increases the ability of the vertically-consolidated physicians to exercise market power.

If the vertically-consolidated hospital is the highest-quality or most cost-effective hospital in the local market and the vertically-consolidated hospital/physician organization does not allow other physicians to treat patients at this hospital (so the vertically-consolidated physicians have access to and control of a superior input), rival physicians' and potential physician entrants' costs of providing physician services can be raised or their abilities to provide high-quality physician services lowered. Nonvertically-related physicians (and potential entrants into the market for physician services) are at a competitive disadvantage in the sense that they are forced to admit and treat patients at lower-quality hospitals (holding travel time and price constant, consumers prefer higher-quality hospitals) or higher-cost hospitals (holding quality and travel time constant, consumers—managed care plans—prefer lower-priced hospitals). Facing less formidable competitors in the market for physician services, the vertically-consolidated firm gains the market power to sell physician services at prices above its costs.

Competition in the market for physician services will not necessarily be lessened if rival physicians and potential physician entrants can gain access to new sources of high-quality, low-cost hospital services. This is exactly why monopoly provision of hospital services or monopoly provision of the highest-quality or lowest-cost hospital services in combi-

nation with entry barriers into the market for hospital services are necessary conditions for anticompetitive effects to result from physician organization's acquisition of, joint venture with, or exclusive dealing contract with hospital.

The Chicago School critique raises the issue of why a hospital would sign an exclusive dealing contract specifying that it could not contract with other physicians, if the net effect of the exclusive deal was to raise the prices of physician services and possibly decrease the hospital's profits. Clearly, a hospital's willingness to sign this sort of exclusive contract depends on the hospital being made better off, as well. For the physicians to exercise market power and the hospital to be better off, simultaneously, requires an arrangement by which the physicians share their anticompetitive gain with the hospital.<sup>28</sup>

The necessity of such side payments to induce a hospital's participation in an anticompetitive exclusive deal, however, reduces the probability that the exclusive deals found in practice are anticompetitive. "We expect to see exclusive contracts only when the hospital is both willing and able to 'give away the store.'"<sup>29</sup> However, it has also been suggested that physicians may coerce hospitals into accepting these sorts of exclusive contracts.<sup>30</sup>

The Chicago School critique does not apply in the cases of vertical integration and joint ventures because the hospital (as part of the vertically integrated firm or joint venture) can share the benefits of enhanced market power in the market for physician services. This provides an incentive for hospitals to allow their medical staffs to control admitting privileges.

#### HOSPITAL-PHYSICIAN CONSOLIDATION THAT INHIBITS OTHER HOSPITALS' ACCESS TO PHYSICIANS

In 1996 the DOJ challenged as being anticompetitive a PHO in Baton Rouge, Louisiana, a vertical joint venture between Woman's Hospital (the largest provider of inpatient obstetrical services in the area) and its medical staff (representing approximately 90 percent of the OB/GYNs in the area). The terms of the PHO contract required physicians to refer all patients covered by PHO contracts only to other PHO physicians and to Woman's Hospital.<sup>31</sup> Woman's Hospital and its medical staff formed this PHO after General Health Inc. (the operator of a tertiary care hospital in the area) announced plans to open a new hospital

with five to six dedicated OB/GYN beds in the Baton Rouge area. The DOJ challenged the PHO because its intent was to inhibit the hospital entrant's access to local physicians and prevent entry by this potential new rival, and thus reduce competition in the market for hospital services.<sup>32</sup>

Chicago School thinking raises the question of why the OB/GYNs on the medical staff of Woman's Hospital were willing to participate if the net effect of the exclusive joint venture was to reduce competition in the market for hospital services. The answer to this question was found in the physician fee schedule developed by the PHO, which included fees that were substantially higher than the fees managed care plans were then paying OB/GYNs under individual contracts. These higher than competitive fees provided the OB/GYNs on the medical staff of Woman's Hospital with the incentive to participate in the PHO and to agree to the terms of the PHO contract, such as referring all patients covered by PHO contracts only to other PHO physicians and to Woman's Hospital.

The case did not go to court. Instead, the defendants consented to a Final Judgment in which they were enjoined from various activities, including negotiating on behalf of competing physicians, owning or contracting with an organization in which the participating physicians constitute more than 30 percent of the physicians in any relevant market, and discouraging physicians from dealing with rival hospitals.

In another recent case, *HTI Health Services v. Quorum Health Group*,<sup>33</sup> one hospital in Vicksburg, Mississippi (a town with two hospitals and two large physician groups) challenged the proposed merger between one of the two large physician groups in Vicksburg and a physician-owned integrated delivery system that included the other large physician group and the other hospital in Vicksburg. The challenge was based, in part, on the argument that allowing one hospital to own both physician groups would foreclose the other hospital from a sufficient base of customers. The vertically integrated physicians would become postmerger equity shareholders in the integrated delivery system, and thus would have the incentive to shift their patient admissions to the vertically integrated hospital. The court allowed the merger. Interestingly, these two hospitals are no longer competitors in the market for hospital services. As of November 1998, both hospitals became part

of a joint venture to build a larger hospital to replace the two smaller hospitals in Vicksburg.<sup>34</sup>

In general, the case of hospital<sub>x</sub> and physician organization<sub>x</sub> merging, forming a joint venture, or signing an exclusive dealing contract specifying that physician organization<sub>x</sub> cannot treat patients at other hospitals (thereby foreclosing rival hospitals and potential hospital entrants from the patients of these physicians)<sup>35</sup> has the potential to be anticompetitive under certain conditions. Specifically, this sort of vertical consolidation has the potential to decrease competition in the local market for hospital services, and thus to allow the vertically-consolidated hospital to exercise market power, when (1) the vertically-consolidated physicians have a large market share or provide (and will continue to provide) the highest-quality or most cost-effective physician services in the local market (and the vertically-related physicians are worth more to hospital<sub>x</sub> than to other hospitals or potential entrants because, for example, learning-by-doing results in the vertically-related physicians being more productive at hospital<sub>x</sub>), and (2) there are entry barriers into the market for physician services. Without entry barriers in the market for physician services, competition in the market for hospital services will not be reduced because rival hospitals and potential entrants into the market for hospital services will be able to recruit a sufficient number of physicians from other areas to practice at their institutions.<sup>36</sup> In what follows, entry barriers in the market for physician services are assumed.

In the case of physicians who admit patients to hospitals, as opposed to the case of hospital-based physicians (such as anesthesiologists and radiologists who provide services to patients admitted by other physicians), if the vertically-consolidated physicians have a large market share and treat their patients exclusively at hospital<sub>x</sub>, then this vertical consolidation may foreclose rival hospitals and potential hospital entrants from a sufficient base of customers. With fewer physicians to admit patients, nonvertically-consolidated hospitals (and potential entrants into the market for hospital services) may be at a competitive disadvantage in the sense that they may be forced to reduce their outputs of hospital services, thereby incurring higher average costs (assuming scale economies) and having to charge higher prices (for example, higher per diem rates). It is also possible that forcing rival hospitals

to reduce their outputs will decrease rival hospitals' abilities to compete on the basis of quality (assuming practice makes perfect). Facing less formidable competitors in the market for hospital services, the vertically-consolidated firm gains the market power to sell hospital services at prices above its (relatively lower) costs.

Even if the physicians associated with physician organization<sub>x</sub> continue to admit patients at rival hospitals, such admissions may involve sicker and more costly-to-treat patients. This too would put rival hospitals at a competitive disadvantage, forcing them to sell at higher prices (in order to cover their higher costs), and allowing the vertically-consolidated firm to sell hospital services at prices above its (relatively lower) costs.

When physician organization<sub>x</sub> includes the highest-quality or most cost-effective physicians, nonvertically-consolidated hospitals are at a competitive disadvantage in the sense that the vertical consolidation forces rival hospitals and potential entrants to deal with lower-quality or less cost-effective physicians. A hospital's reputation for quality is closely tied to the reputations of the physicians on its medical staff. Again, facing less formidable competitors (hospitals with higher costs or reputations for lower quality), hospital<sub>x</sub> gains market power.

As already emphasized, entry barriers into markets for physician services are a necessary condition for hospitals' use of these vertical consolidation strategies to increase their market power in markets for hospital services. One implication of this is that entry barriers in markets for physician services may be in both the physicians' and the hospital's best interests. Accordingly, a vertically-consolidated hospital may be willing to give the vertically-consolidated physicians authority over admitting privileges because, as discussed in Chapter 5, the physicians on a hospital's medical staff may be able to use their authority over hospital staffing policies to effectively deter entry into markets for physician services. Since only physicians with admitting privileges can admit patients and use the hospital's resources to treat patients, lack of admitting privileges at the only local hospital or the superior local hospital could put potential physician entrants at a severe disadvantage, and thus deter entry into the market for physician services. By giving these physicians control of admitting privileges, the hospital may be creating an entry barrier into the market for physician services and thus creating



the condition necessary for vertical consolidation to enhance its own market power.

#### INSURER-PROVIDER CONSOLIDATION THAT INHIBITS OTHER INSURERS' ACCESS TO PROVIDERS

In *Blue Cross and Blue Shield of Wisconsin v. Marshfield Clinic*,<sup>37</sup> BC/BS charged that the vertical integration of the Marshfield Clinic (a clinic employing approximately 400 physicians and contracting with another 900 physicians on a nonexclusive basis) and its HMO foreclosed BC/BS from access to the physicians of the Marshfield Clinic and thus reduced competition in the market for HMOs.<sup>38</sup> The Court of Appeals, however, ruled that the vertical integration of the Marshfield Clinic and its HMO did not result in anticompetitive vertical foreclosure in the market for HMOs (in large part because the court ruled there is not a separate market for HMOs).

In general, the case of insurer<sub>y</sub> merging, forming a joint venture, or signing an exclusive contract with provider<sub>y</sub> specifying that provider<sub>y</sub> will treat only those patients insured by insurer<sub>y</sub> (thereby foreclosing other insurers' access to provider<sub>y</sub>)<sup>39</sup> has the potential to be anticompetitive, specifically to decrease competition in the market for health care financing and thus to allow insurer<sub>y</sub> to exercise market power under certain conditions.<sup>40</sup> First, the vertically-related provider must have a large market share or must be (and continue to be) the highest-quality or the most cost-effective provider in the local market (and provider<sub>y</sub> must be worth more to insurer<sub>y</sub> than to rival insurers and potential entrants). Second, there must be entry barriers in the market for provider<sub>y</sub>'s services.

Under these conditions, vertical consolidation by reducing the abilities of nonvertically-related insurers to compete can be anticompetitive. Rival insurers and potential entrants into the market for insurance are at a competitive disadvantage in the sense that eliminating rival insurers' opportunities to contract with the most cost-effective provider(s) raises their costs, and eliminating rival insurers' opportunities to contract with the largest or highest-quality provider(s) reduces their abilities to market their health plans. Holding price constant, consumers will prefer health plans with insured access to the highest-quality providers, and holding quality constant, consumers will prefer the low-

est-priced health plans. With rivals and potential entrants at a competitive disadvantage, insurer<sub>y</sub> gains the market power to raise its prices above its costs.

Even if provider<sub>y</sub> continues to contract with rival insurers and potential entrants into the market for insurance, provider-insurer mergers and joint ventures still have the potential to be anticompetitive. Provider<sub>y</sub> may continue to contract with other insurers, but at prices above the internal prices at which it implicitly sells to itself. This sort of strategy to raise rivals' costs can be anticompetitive if (1) there are entry barriers into the market for provider<sub>y</sub>'s services and (2) nonvertically-consolidated incumbent providers are unable (possibly due to permanent capacity constraints) or unwilling (possibly due to the tendency for vertical consolidation to facilitate horizontal collusion on price) to contract with nonvertically-consolidated insurers at prices as low as the internal prices at which the vertically-consolidated firm implicitly sells to itself. In this case, nonvertically-consolidated insurers are at a competitive disadvantage in the sense that they have to raise their insurance prices to cover their higher input costs, and insurer<sub>y</sub> gains the market power to raise its insurance prices above its costs.

Despite the court's decision in the Marshfield case, the conditions for anticompetitive vertical foreclosure in the market for insurance may have been present. Although Marshfield Clinic did not have a particularly large market share, there was evidence that its physicians offered the highest-quality services in the local market. Both parties of the dispute acknowledged Marshfield's unsurpassed reputation for quality.<sup>41</sup> Moreover, barriers to entry may have been present in the local market for physician services. There was evidence presented at trial that only Marshfield physicians had hospital admitting privileges at the dominant local hospital. To the extent that control over which physicians obtain admitting privileges at the dominant or highest-quality local hospital creates entry barriers into the market for physician services, the two requirements for anticompetitive vertical foreclosure in the market for insurance may have been present in the Marshfield case. Interestingly, in January 1999 (about four years after the Court of Appeals ruling in the Marshfield Clinic case) the Marshfield Clinic signed a contract with BC/BS of Wisconsin to provide physician services to enrollees of BC/BS.<sup>42</sup> No information, however, is available on the contracted prices established between Marshfield Clinic and BC/BS of

Wisconsin (nor is there information on the internal prices at which Marshfield Clinic implicitly sells to its HMO), and thus this new contract implies little about the monopoly power of Marshfield Clinic's HMO.

In *U.S. Healthcare, Inc. v. Healthsource, Inc.*,<sup>43</sup> although it was not exactly an insurer-provider exclusive dealing case, one HMO asserted that another HMO had foreclosed it from the market by offering to pay physicians higher capitation payments if they agreed not to contract with other HMOs. On the basis of multiple factors, including the fact that only 25 percent of the primary care physicians in the local market were under exclusive contracts, the short duration of the contracts (initially 100 days, but later shortened to 30 days), and the magnitude of the financial incentive, the court ruled that the pay differentials offered to physicians could not foreclose a rival HMO from the market.<sup>44</sup>

Another case with related but not exactly insurer-provider exclusive dealing issues<sup>45</sup> is *Reazin v. Blue Cross and Blue Shield of Kansas, Inc.*<sup>46</sup> A BC/BS memorandum that was sent to all hospitals in Kansas, suggesting that BC/BS would punish hospitals for participating in other health plans, was introduced as evidence. In effect, BC/BS sought implicit exclusive deals with these hospitals. A federal court jury found BC/BS guilty of conspiring with hospitals to stifle development of competing managed care plans and exercising market power to raise prices. In addition, the jury determined that BC/BS's threat of punishment against hospitals participating in competing managed care plans (the implicit exclusive deal) was intended to decrease competition in the market for health care financing.<sup>47</sup>

#### INSURER-PROVIDER CONSOLIDATION THAT INHIBITS OTHER PROVIDERS' ACCESS TO INSURERS

This sort of exclusive contracting is also called selective contracting. The courts have looked favorably on insurers' selective contracting choices where procompetitive justifications are present.<sup>48</sup> For example, in *Capital Imaging Associates v. Mohawk Valley Medical Associates*<sup>49</sup> an HMO had contracted for MRI services with only one of the two radiology groups in the area, and the excluded radiology group brought an antitrust suit. The court found, however, that the HMO lacked market power since it had only 2.3 percent of all HMO enrollees and there

were 53 HMOs operating in the area. The extent to which the plaintiff was foreclosed from the market was minimal, and therefore there was no significant anticompetitive impact.

In general, the case of insurer<sub>k</sub> merging, forming a joint venture, or signing an exclusive contract with provider<sub>k</sub> specifying that provider<sub>k</sub> will be the only provider to treat the enrollees of insurer<sub>k</sub> (thereby foreclosing other providers' access to the enrollees of insurer<sub>k</sub>)<sup>50</sup> has the potential to be anticompetitive under certain conditions. Specifically, this sort of vertical consolidation can decrease competition in the markets for hospital and physician services, and thus allow provider<sub>k</sub> to exercise market power, when (1) there are entry barriers in the market for insurance and (2) the vertically-consolidated insurer has a large market share.

Under these conditions the vertical consolidation can be anticompetitive by reducing the ability of nonvertically-related providers to compete. Rival providers (and potential entrants into the market for hospital or physician services) are at a competitive disadvantage in the sense that eliminating rival providers' opportunities to contract with insurer<sub>k</sub> may exclude rival providers from a sufficient customer base. If the vertically-consolidated insurer does not contract with rival providers, those providers may be forced to reduce their outputs and incur higher average costs. This makes rival providers less formidable competitors (their costs and prices will be higher) and may allow the vertically-consolidated firm to increase its provider prices above the competitive level.

### *Most-Favored Nation Clauses*

Until 1997 the courts consistently allowed the use of MFN clauses.<sup>51</sup> In *U.S. v. Delta Dental of Rhode Island*, however, the Court for the first time rejected an insurer's argument that most MFN clauses are *per se* legal and agreed with the DOJ that under certain market conditions MFN clauses may have anticompetitive effects. Specifically, the DOJ argued that Delta's use of MFN clauses had the effect of excluding potential entrants, such as PPOs that work by negotiating discounted fees with selected dentists, from the market for dental insurance in Rhode Island. However, the courts have yet to fully analyze MFN clauses as unreasonable vertical restraints.<sup>52</sup>

Prior to 1997 the courts upheld MFN clauses with “virtually no analysis” of when an MFN might be anticompetitive,<sup>53</sup> and extremely broad statements in support of insurers’ use of MFN clauses accompanied some of these decisions. For example, in *Ocean State Physicians Health Plan v. Blue Cross & Blue Shield of R.I.*<sup>54</sup> the district court judge wrote: “As a naked proposition, it would seem silly to argue that a policy to pay the same amount for the same service is anticompetitive, even on the part of one who has market power. This, it would seem, is what competition should be all about.”<sup>55</sup> Similarly, in *Blue Cross & Blue Shield United v. Marshfield Clinic*<sup>56</sup> Judge Posner characterized MFN clauses as “the sort of conduct that the antitrust laws seek to encourage.”<sup>57</sup>

In the *Ocean State* case, an HMO called Ocean State challenged BC/BS’s use of a most-favored nation clause in its contracts with physicians as anticompetitive under Section 2 of the Sherman Act. Ocean State argued that BC/BS’s MFN clause was intended to decrease competition in the market for health care financing, specifically to weaken Ocean State by inducing physicians to resign from Ocean State. In fact, 350 of Ocean State’s 1,200 physicians did resign after BC/BS’s implementation of the MFN clause.<sup>58</sup> BC/BS argued that its MFN clause was intended to lower its costs, specifically to ensure that BC/BS did not pay physicians more for particular physician services than those physicians received from Ocean State or other insurers. Both the District Court and the Court of Appeals sided with BC/BS and ruled that MFN clauses tend to increase rather than decrease competition.

In *Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, BC/BS charged the Marshfield Clinic and its HMO (Security) with enforcing MFN clauses in Security’s contracts with physicians in an attempt to monopolize the market for HMOs. BC/BS argued that Security’s enforcement of MFN clauses excluded potential entrants into the HMO market. In fact, BC/BS’s HMO had attempted to contract with the physicians of the Marshfield Clinic, but was refused. The court sided with the Marshfield Clinic, in large part because there was no evidence of a separate market for HMOs, and the market share of Security HMO was quite small in the broader market of health care financing.

Although the court’s decision in the *Marshfield Clinic* case appears to be defensible based on the facts,<sup>59</sup> the issue of under what market conditions MFN clauses may be anticompetitive was left unsettled. Econo-

mists argue that under certain conditions, the use of MFN clauses by insurers with large market shares, such as BC/BS of Rhode Island, can be a mechanism to raise rival insurers' costs, and thus to achieve or maintain market power.<sup>60</sup> In general, the anticompetitive concerns associated with MFN clauses include decreasing price competition in the market for the seller's services, foreclosing entry of other insurers into the market for health care financing, and facilitating the exercise of market power by the contracting insurer with the MFN clause.

With respect to the *Ocean State* case, Jonathan Baker, an economist, wrote: "BC/BS may have achieved market power if the [MFN] contract provision caused so many doctors to terminate their affiliations with the rival HMO that Ocean State fell below a minimum efficient scale of production."<sup>61</sup> There is no evidence, however, that BC/BS's MFN contract provision reduced Ocean State's ability to compete in the market for insurance. In fact, between 1986 (the year when BC/BS began using the MFN clause in its contracts with physicians) and 1990 the enrollment of Ocean State increased by 59 percent.<sup>62</sup> Again this implies little about the anticompetitive potential of MFN clauses as there is also no evidence that BC/BS was enforcing its MFN contract provisions. It appears that although BC/BS of Rhode Island won the legal right to use MFN clauses in its physicians' contracts, the physicians were unaware of the policy until 1998 when the insurer began to "spell out" the MFN policy because a new state law required health care firms to be more explicit about their policies in contracts.<sup>63</sup> Apparently, hospitals in Rhode Island have had MFN clauses in their contracts for many years, but the clauses have been largely unenforced.

In addition to the argument that MFN clauses may raise rival insurers' costs, economists argue that the use of MFN clauses by insurers may be anticompetitive when these clauses facilitate horizontal pricing coordination among competing sellers of health care services. After providers have agreed to such clauses, they have little incentive to reduce their prices. In fact, as part of provider-owned health plans, providers may use MFN clauses to reduce price competition in the market for their services.

Although the courts allowed MFN clauses until 1997, between 1994 and 1996 the DOJ and the FTC challenged the MFN clauses in two other (in addition to Delta Dental of Rhode Island)<sup>64</sup> state-wide dental insurance plans (Delta Dental Plan of Arizona<sup>65</sup> and Oregon Dental

Service),<sup>66</sup> as well as a national vision care insurer (Vision Service Plan [VSP]) and a state-wide pharmacy network (RxCare of Tennessee), as unreasonable vertical restraints. The cases against Delta Dental Plan of Arizona and Oregon Dental Services were settled out of court, with the dental plans agreeing to discontinue the use of MFN clauses in their contracts with providers. The DOJ's settlement agreement with VSP enjoined VSP from continuing to use MFN clauses in its contracts with optometrists. Likewise, the FTC and RxCare of Tennessee entered into a consent order that stopped RxCare's use of MFN clauses.

In 1998 the DOJ challenged the most-favored rate clauses in Medical Mutual of Ohio's (formerly known as Blue Cross and Blue Shield of Ohio) contracts with hospitals. In this case the government alleged that these most-favored rate clauses violated antitrust law because they actually required hospitals to charge other insurers 15 to 30 percent more than they charged Medical Mutual. Medical Mutual filed a consent decree one day after the DOJ lawsuit was filed.<sup>67</sup>

## **Conclusion**

Economic theory suggests that vertical health care mergers, acquisitions, joint ventures, and contracts have the potential to both increase efficiency (lower costs and increase quality) and enhance market power (increase prices). As discussed throughout this chapter, the net pro-competitive or anticompetitive impact of a particular vertical consolidation depends on multiple factors, and these factors vary across markets and firms. Thus it must be determined for each individual case whether a particular vertical consolidation among health care firms will make consumers better or worse off. We can hope that the courts will take off their Chicago School blinders and analyze vertical consolidations in health care (and other) markets on a case-by-case basis.