

# Will Competition Plans Change Insurer-Provider Relationships?

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“To get to a world of competing organized systems that provide comprehensive care, . . . the government cannot decree it, and we are more likely to get there by using market forces” (Alain Enthoven 1978).

“In order to market their services efficiently, health care providers would find it necessary to organize themselves into total service delivery agencies” (David Stockman 1980).

**I**N JANUARY 1983, THE REAGAN ADMINISTRATION SENT to Congress a package of health care financing reforms. These proposals included a limit on the amount of tax-free employer contributions to health insurance and a Medicare voucher system. Underlying the Reagan plan was a market-oriented philosophy for financing health care services and controlling health care costs that has been called the competitive approach. The historical antecedents to this strategy can be found in the writings of Alain Enthoven and Walter McClure, and in prior congressional initiatives such as the Gephardt-Stockman bill (H.R. 7527). A common theme of these

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“competitive plans” was the belief that increased cost-consciousness on the part of consumers would induce a more selective choice of insurance plans and providers. Health insurers, in turn, were expected to respond through competitive efforts to provide low-cost medical care coverage. Included among these private initiatives were cost-containment activities directed at providers, such as utilization and claims review, negotiated discounts, and, in general, altered methods of provider reimbursement. Competition advocates believed that these private initiatives would lead to a reorganization of the health care delivery system and reduce rates of growth in health care costs and expenditures.

The purpose of this paper is to examine whether competition proposals are likely to provide sufficient stimuli to change existing payment relationships between insurers and providers and thereby effectuate a fundamental change in health care delivery. The choice of this issue reflects our belief that inefficiency in the health care sector is more than the problem of excess consumer demand or “moral hazard” from overinsurance. Since patients relinquish much of their consumer sovereignty to their physician-agents, provider incentives are crucial to the determination of health care expenditures. However, under traditional fee-for-service payment and cost-based reimbursement, physicians, hospitals, and other health care providers do not bear the financial consequences for many of their resource allocation decisions, such as the use of hospital and pharmaceutical services. It is our view that unless insurers change their reimbursement methods so that providers bear some financial risk for their resource decisions, the health care system is likely to retain much of its inherent inefficiency.

## The Competition Phenomenon

During the latter part of the 1970s, there was a growing skepticism about the effectiveness of regulatory attempts to control health care costs. In response to perceived market failure, “cost-containment” efforts of the 1970s often took the form of regulating inputs or prices. Yet, a growing body of empirical evidence challenges the value of these regulatory programs. A number of national studies have concluded that certificate-of-need programs failed to reduce capital expansion in the hospital sector (Salkever and Bice 1976; Hellinger 1976; Sloan

and Steinwald 1980; Policy Analysis Inc. and Urban Systems Research, Inc. 1981; Sloan 1981a; Coelen and Sullivan 1981). The most favorable evaluation of Professional Standards Review Organizations finds that program is barely paying for itself (Health Care Financing Administration 1979). Wage-price controls may control prices, but not expenditures (Ginsburg 1978; Holahan et al. 1979). One exception to regulatory failure appears to be hospital rate-setting programs; a number of researchers now report that mature mandatory programs have succeeded in reducing the rate of inflation in hospital costs (Biles, Schramm, and Atkinson 1980; Coelen and Sullivan 1981; Joskow 1980; Melnick, Wheeler, and Feldstein 1981; Sloan 1981a).

As an alternative to regulation, a number of proposals have been introduced to make health care markets more competitive. Legislative initiatives such as the Reagan Health Care Incentive Plan, the Gephardt-Stockman bill (H.R. 7527) and the Durenberger bill (S. 1968), in addition to the Enthoven Consumer Choice Plan, share a number of common characteristics. Basic features of these plans include:

1. Changing the tax treatment for employer contributions of health insurance. Such contributions are currently regarded as employer expenses and therefore are tax-free to employees. (The National Center for Health Services Research estimates that the employer tax subsidy was \$31 billion in 1982 [Taylor and Wilensky 1983].) Competition bills would remove the tax-free status beyond some amount.
2. Mandating fixed contributions by employers for employee health insurance. (Under the Reagan Health Incentive Plan, individual Medicare beneficiaries would receive a fixed federal contribution for purchasing coverage from a federally certified private insurer.) Some competition plans would allow an employee and/or employer a rebate if the employee selects a plan that incurs lower premium expenses than a specified fixed amount.
3. Requiring employers to provide employees with multiple health insurance options.

The goal of competition plans is to contain rising health care costs by making consumers more sensitive to the price of health insurance. Competition advocates then foresee the following scenario:

1. With a reduced tax subsidy, consumers become more sensitive to the price of health insurance and seek lower-cost plans.
2. Consumers buy less comprehensive fee-for-service health insurance, characterized by higher deductibles and coinsurance, or alternatively, join prepaid health plans such as health maintenance organizations (HMOs).
3. Consumers demand fewer health care services.
4. Insurers, under new consumer pressure for lower premiums, negotiate discounts with providers and vertically integrate forming alternative service delivery systems such as HMOs and independent practice associations (IPAs).

We do not take issue with the third statement. An extensive body of literature supports the proposition that patients use fewer health services when out-of-pocket costs increase (Newhouse et al. 1981). Instead, we consider whether consumers will move dramatically from comprehensive health insurance to alternative forms of health care and whether insurers and providers will reinforce such a change.

Finally, competition advocates suggest that reorganization of the health care delivery system could occur by either a "quick fix" or an evolutionary process. The quick fix would occur if employees react to a reduction in their tax subsidy by enrolling en masse in HMOs and other alternative delivery systems. An evolutionary change would occur if employees' increased cost-consciousness compelled insurers to compete through cost-control programs directed at providers which, in turn, lead to the formation of total service delivery systems. In subsequent sections we consider the likelihood that either response will occur.

### Health Insurance Choices after the Tax Subsidy Is Reduced

How will employees react to a reduction in the employer tax subsidy? Will they choose low-benefit, high deductible/coinsurance policies? Will substantial numbers of employees enroll in HMOs or other alternative delivery systems as a reaction to higher out-of-pocket costs? If the latter occurs, then a "quick fix" change in the relationship between insurers and providers will have occurred.

The tax subsidy serves to lower the net price of health insurance to employees. Ginsburg (1981) estimates that, at the margin, the tax subsidy is 43 cents for every additional dollar of health insurance purchased. Employees, facing a choice of an additional one dollar in health insurance benefits or 57 cents of income, can be expected to "over-insure." Although it is difficult to dispute the presumption that individuals will reduce purchases of a good, the crucial empirical question is how much less will they purchase? If one looks more closely at health insurance choices, it is apparent that the employee groups do not face a choice between health insurance or income alone. Rather, other fringe benefits such as employee discounts, child care, in-house subsidized meals, parking, and educational assistance receive a similar tax subsidy (U.S. Department of Labor 1981). So, to be accurate, the choices are: a dollar in health insurance, a dollar for a variety of other fringe benefits, or 57 cents in income. It is noteworthy that since 1970 employee group contributions for most of these fringe benefits have declined as a proportion of total payroll costs (Chen 1981). The implication is that competition advocates may have overstated the effect of the tax subsidy on the purchase of health insurance. The preponderance of comprehensive health insurance may largely reflect consumer preferences. Americans may desire first-dollar coverage not only to reduce uncertainty but to avoid making troublesome moral choices between money and medical treatment during episodes of illness (Fuchs 1979; Reinhardt 1982). They fear dying, disablement, and disfigurement, and do not wish to be in the position of questioning if an injection for urethrocytography is worth the cost (Vladeck 1981).

Considerably less is known about the demand for health insurance than is known about the demand for health care or provider behavior. Researchers have no controlled experiments to guide them, so they must turn to the tools of empiricism. Most of these empirical studies are based on household survey data. Since the employer's dollar contribution for health insurance is not obtainable from these surveys, researchers have constructed crude proxies, such as the number of employees, to measure the price of health insurance to employees. An exception to this is recent work by Taylor and Wilensky (1983). Using data from the National Medical Care Expenditure Survey, which includes information on the tax-filing status of sampled households and employer contributions to health insurance fringe benefits, they examine the sensitivity of expenditures on health insurance to changes

in the price of insurance. From their multivariate analysis, Taylor and Wilensky estimate that a 10 percent increase in price (e.g., from tax law changes which alter marginal tax rates) will yield only a 2 percent reduction in expenditures in the short run. These results suggest that changes in the tax treatment of employer contributions to employee health insurance are not likely to yield a dramatic short-run decline in expenditures.

A number of quasi-natural experiments also provide insight into how consumers will behave without the tax subsidy. The elderly receive no employer tax subsidy in their purchase of supplementary health insurance, so-called "Medigap" policies. While the elderly are a risk-averse group, their preferences may approximate those for older segments of the employed population.

Medicare is a fairly comprehensive policy; unlike many private insurance policies it covers physician office visits. There is no hospital coinsurance for the first 60 days of care, and the deductible is set at a level so that hospital care is essentially free after the first day. For physician services, there is a \$75 deductible and 20 percent coinsurance. Despite the relative comprehensiveness of the Medicare package, and despite Medigap loading costs that are often 50 percent of premium costs, only 23 percent of the elderly are without supplementary coverage (Link, Long, and Settle 1980).

McCall, Wai, and Swenson (1981) report from a 1978 household survey of 800 Colorado Medicare beneficiaries, that beneficiaries are more likely to have two policies than no policies. Most Medigap insurance is not major medical insurance that protects the elderly against major financial losses. Rather, it provides coverage for deductibles and coinsurance; on rare occasions it covers patients' liabilities for unassigned physician claims.

McCall and Wai (1981) provide additional results suggesting that the tax subsidy has little effect on the decision to purchase a Medigap policy. High-income families are more likely to itemize medical expenses on their federal income taxes than middle-income families. Because the tax subsidy is proportional to the marginal tax rate, the net price for a Medigap policy is less to high-income Medicare families than middle-income families, even if the middle-income family itemizes deductions. We would expect, therefore, that high-income families would be more likely to purchase a Medigap policy than middle-income families. McCall and Wai, however, report from their mul-

tivariate analysis that families with incomes between \$3,000 and \$7,499 are as likely to purchase Medigap policies as families with incomes over \$7,500.

The employer-based insurance policy that most closely replicates the incentives under the competition bills is the Federal Employees Health Benefits Package (FEHBP). The federal government contributes a fixed dollar amount equal to 60 percent of the average premium cost for the six largest plans, subject to the restriction that the government contribution cannot exceed 75 percent of the premium of any plan. Unlike some proposed competition plans, there are no rebates for choosing low-cost options. Differences between plans in annual premium costs are significant. In 1981 federal employees who selected the Government Employees Hospital Association plan paid \$522 less in out-of-pocket premium costs than those who selected the Blue Cross/Blue Shield high-option plan (Gold 1981). In 1980, despite their high premiums, 51 percent of all FEHBP enrollees selected Blue Cross/Blue Shield, and another 13 percent selected Aetna. Over 88 percent of all enrollees chose high-option plans. In 1970 only 6 percent of FEHBP enrollees selected HMOs-IPAs. In 1982 that figure was 10.3 percent, with HMO enrollees outnumbering IPA enrollees by 3 to 1.

If consumers are risk averse and prefer full coverage, other problems arise. Brown (1981) observes that, historically, broad entitlements led to a demand for freedom-of-choice among providers. Glaser (1970) has noted the incompatibility between HMOs and entitlements. European HMOs, in the form of union-sponsored health groups, existed prior to the introduction of National Health Insurance but disappeared following its adoption. One might suggest that it is the size of the tax subsidy that will determine the HMO's ability to grow; the most favorable environment for an HMO may be no subsidy. We have, however, no historical experience from which to predict how unions and other employee groups will react if entitlements, in the form of tax subsidies, are withdrawn. It appears unlikely that health benefits, including the loss of free choice of providers, will be easily relinquished. Moreover, employees are likely to fight vigorously any reduction in their health benefits. Ford attempted in 1976 to achieve additional cost-sharing from the United Auto Workers (UAW). A four-week strike ensued, and ended without any UAW concessions on health benefit issues. In 1981 workers accepted wage cuts to save Chrysler

from bankruptcy, but were unwilling to take health benefit cuts. In 1977 disagreement between the United Mine Workers and coal operators over health care benefits was an important obstacle to the signing of a new contract. A prolonged strike ensued. The oil refiners suffered a seven-week strike when they attempted to limit the employers' contributions by a fixed amount. The strike ended after the refiners were granted a considerable increase in health benefits (Sapolsky et al. 1981).

In summary, existing evidence suggests that the reduction in the tax subsidy, and the mandating of fixed employer contributions and multiple employee options is unlikely to stimulate enrollment en masse in alternative delivery systems. Instead, employees are likely to resist reductions in coverage and purchase substantial private supplemental insurance. Comprehensive fee-for-service insurance will probably continue as the predominant health insurance package while HMOs and other alternative delivery systems remain on the competitive fringe. There is unlikely to be, therefore, a "quick fix" in altering insurer-provider relationships.

## The United States Insurance Industry

While health economists have studied extensively how health insurance leads to "overconsumption" of medical services, there is surprisingly little research on the structure of the insurance industry, or its subset, the health insurance industry. Current cost-increasing reimbursement practices and lack of aggressive insurer competition can be better understood by examining the insurance market structure.

In terms of market concentration, the health insurance industry would appear to be sufficiently competitive. Nationally, over 700 for-profit commercial stock and mutual companies compete with 70 Blue-Cross and Blue-Shield plans. (Within a typical state, over 500 insurers compete in the health insurance market.) In 1980 the Blues accounted for approximately 40 percent of the industry's premium volume. The largest commercial insurer had only 4.4 percent of the market share, and the top four commercials only 12.6 percent (Health Insurance Association of America 1981). Within individual states, the Blues' market share varied from 80 percent in Rhode Island to 0 percent in Nevada (General Accounting Office 1981).



The interstate variation in the Blues' market share has important implications for the regulation of health insurance. Each state has established an insurance department which administers state laws. Preserving company solvency and protecting the consumer against insurer misrepresentation are the principal responsibilities of these state regulatory agencies (Lewin and Associates 1975). Researchers have found that disparities in state regulation regarding premium and property taxes on commercial insurers and discounts for Blue-Cross yield important cost advantages to the Blues. These cost advantages explain much of the state-to-state variation in the Blues' market share (Frech and Ginsburg 1978; Greenspan and Vogel 1982). Other factors, such as reserve requirements and regulation of insurance premiums, have not been found to be significant in explaining the Blues' market share (Sloan and Steinwald 1980).

Another important characteristic of the for-profit commercial insurance industry is diversification into many lines of business. In addition to health insurance, commercials sell life, property, and liability insurance. In 1980 the commercials collected nearly \$29 billion in health insurance premium income which represented approximately 18 percent of their gross premium income (Health Insurance Association of America 1981). Property insurance (\$49 billion), liability insurance (\$47 billion), and life insurance (\$41 billion) all were larger sources of gross premium income (American Council of Life Insurance 1981; Insurance Information Institute 1982).

Profits in the health insurance industry are generated almost entirely through investment income. Underwriting profit, the difference between premium income and the sum of benefit plus administrative expenses, averaged a 1.2 percent loss between 1970 and 1974. In 1978 and 1979 health insurers experienced nearly a 3 percent underwriting loss (Carroll and Arnett 1981).

A dollar in health insurance income does not have the same investment income potential as a dollar from other lines of business. In general, the shorter the duration of the policy, the less potential investment profit the premium dollar generates. Policies whose premium income is received monthly, such as health insurance, are less profitable than those whose income is received annually, such as property insurance. Policies that incur benefit expenses monthly or weekly, such as health insurance, are less profitable than policies whose benefit expenses may be 30 years in the future, such as life insurance. Those lines of business

that require less liquidity enable the insurer to undertake riskier but more profitable investments, to diversify investments, and to realize greater scale economies.

Given this disparity in income potential, health insurance is likely to serve as a loss leader for other lines of business. In a study of the top seven commercial firms, Krizay and Wilson (1974) report that assets attributable to health insurance accounted for only 2.5 percent of total assets for the insurer. While health insurance may be the vehicle to gain entry into employer group markets, the first year of a policy usually incurs greater underwriting losses. Many expenses, such as policyholder physicals, the account set-up, policy and form work are encountered in the first year only (Hays 1981).

### Why Don't Insurers Compete More Aggressively?

Having briefly reviewed the structure of the health insurance industry, let us examine a typical employer-based purchase of health insurance. An employer and employees reach agreement on the specifics of a health insurance benefit package. The employer then contacts the insurance industry, including both commercials and Blues and asks: "Who can provide my employees with this health benefit package at the lowest cost?" With over 700 firms competing nationally in the health insurance industry, it would appear that insurers would have considerable competitive pressure to offer the lowest bid by reducing administrative and benefit costs. Therefore, any insurer that could negotiate preferential reimbursement rates through discounts with providers would seize a competitive advantage over its rivals. An insurer undertaking utilization review or developing innovative reimbursement arrangements that discourage institutional care would likewise gain a competitive advantage. It would appear, therefore, that strong competitive pressures already exist for insurers to move away from cost-increasing reimbursement methods toward reimbursement methods that reward efficiency. The question is, then, why don't insurers compete through cost-containment activities directed at health care providers?

We suggest that there are five forces working against such competition:

1. Health insurers are unable to indemnify the medical event.
2. Cost-containment is a public good.
3. Monopsony power is required to negotiate widespread discounts among providers.
4. Provider freedom-of-choice is a cherished privilege among consumers.
5. Entry costs and state regulation encourage "orderly competition" among insurers.

## Health Insurers Are Unable to Indemnify the Medical Event

Health insurers have a more difficult task than casualty insurers in controlling provider expenses. If an automobile is involved in an accident, an insurance appraiser can estimate the body damage caused by the collision. Alternatively, the auto insurer can contract with "preferred providers," and accept the lowest estimate of the damages from required "second opinions." These estimates enable the insurer to indemnify the collision through a fixed payment to the beneficiary, regardless of which provider actually renders the service and the cost of that service.

Auto insurers are able to control provider costs because they can identify with sufficient certainty the cost of repairing the damage of the event. Consumers buy health insurance because they are risk averse and wish to protect themselves from major financial losses. Consumers, however, lack information not only about the cost of medical care, but also about the efficacy of medical treatment. While the uncertainty of what is efficacious medical care may encourage consumers to purchase health insurance, it is this same uncertainty that makes it difficult for health insurers to control provider costs. Insurers, as well as consumers and providers, are unable to identify with complete certainty the nature of the medical event and the proper course of treatment. Medical care is too complicated and changing too rapidly to permit an insurance contract that defines precisely how much treatment is permissible for each illness or injury. Physicians may disagree on what is the primary diagnosis; moreover, the condition of the patient and secondary diagnosis significantly affect what is the proper course of treatment.

As the difficulty of identifying the event increases, the aggressiveness of the insurer declines. The same health insurers who energetically undertake utilization review for dental services, are relatively passive with regard to medical-surgical services (Greenberg 1982). By analogy, casualty insurers are able to indemnify body damage to the automobile, but are less stringent when the damage is to the motor (Smallwood 1975).

If health insurers are unable to indemnify the medical event, they are faced with a number of less desirable alternatives. First, they can indemnify the individual service. This is less effective in controlling costs than indemnifying the event because it fails to control the utilization of services. The insurer can pay a fixed amount for a hospital day, but the hospital service itself may have been delivered more effectively on an outpatient basis.

The health insurer's second alternative is to indemnify the individual. Let us assume that an insurer offers a voucher-type health insurance policy that allows the patient to choose the provider. The insurance plan covers all annual medical costs to a designated ceiling (e.g., \$5,000). Such policies are not sold because they fail to protect the patient from the risk of major financial loss, and they fail to protect the insurer from "moral hazard." Technically, this hypothetical policy would be a prepayment rather than an insurance plan. The solution for protecting the insurer against moral hazard and the patient against major financial loss is to require that the beneficiary agree to receive all care from preselected providers who have contracted with the insurer. This arrangement describes both the HMO and IPA models of a prepaid group practice. Indemnifying individuals remains a relatively uncommon practice among health insurers because, as will be noted in more detail below, it requires beneficiaries to surrender their freedom to choose their provider.

If insurers lack sufficient information to indemnify the medical event, then controlling health care costs through the setting of a unilateral upper payment limit becomes far more difficult. If insurers are unable to define precisely how much therapy is permissible for each illness or injury, then utilization-review activities are less likely to be effective. In subsequent sections, we will attempt to demonstrate that other mutually reinforcing forces reduce the "rate of return" for private cost-control activities.

## Cost-containment as a Public Good

Insurer cost-containment possesses attributes of a collective good. The benefits accrue not only to the insurers who undertake cost-containment but also to other insurers with patients in the same institutional setting. Private insurers face the classic "free-rider" problem since the benefits from cost-containment cannot be denied to rival insurers who did not adopt cost-containment policies (Musgrave 1959; Pauly 1981).

What are the principal benefits and costs of cost-containment? The insurer benefits from reduced payments to providers for medical care services. The costs to insurers are twofold. First, insurers incur additional administrative costs. Second, since limiting payments to providers is tantamount to limiting providers' income, insurers tend to develop an adversarial relationship with providers when they pursue cost-containment programs. Providers may react by refusing to treat patients of the cost-containment insurers (Goldberg and Greenberg 1978; Sloan, Cromwell, and Mitchell 1978; Yett et al. 1981; Paringer 1980).

When a private insurer considers adopting a cost-containment program, that insurer must consider not only the expected benefits and losses for his firm, but also the potential spillover effects on other insurers. If a rival insurer reaps the same benefits without incurring any costs, the active insurer will find that his competitive position has actually deteriorated relative to the passive insurer. This suggests that from a societal viewpoint, private insurers will systematically underinvest in cost-containment programs. The most efficient cost-containment program for the private insurer, therefore, is not necessarily the same program that is most efficient for society.

Once one recognizes the public-good attributes of private cost-containment activities, insurer market concentration takes on an additional dimension. As a private insurer's market penetration increases, the amount of "free-rider" benefits to other insurers decreases and incentives to engage in cost-control activities increase. At the extreme, a monopsonist insurer would avoid spillovers from cost-containment activities. Likewise, HMOs that own their hospital and ambulatory facilities would be de facto monopsonists and, therefore, avoid the "free-rider" problem. Insurers with small market shares would suffer the greatest free-rider losses.

Cost-containment activities may be classified into three categories:

1) reducing provider supply capacity; 2) utilization review; and 3) changing provider reimbursement methods.

Reduction in provider supply capacity would have serious spillover effects. Expected insurer benefits would be roughly proportional to each insurer's representation within the hospital or institution. Although reductions in capacity would serve to increase prices in most industries, the opposite is believed to be true in the health sector. Cost-reimbursement for hospital care, usual customary reimbursement (UCR) for physician services, and the physicians' alleged ability to induce demand for their services are the factors underlying this relationship. The hospital industry has been the focal point for decreasing the supply of health resources. Health planning and certificate-of-need (CON) programs have attempted to limit the number of hospital beds and slow down the growth of hospital capital. The commercials, acting through their trade association, the Health Insurance Association of America (HIAA), and the Blues have supported these efforts. Employers have formed local coalitions that support health planning and CON. Nevertheless, these have been collective efforts rather than an attempt by individual insurers to confront providers. Without the public planning mechanism, private collaboration would appear to be a violation of the antitrust laws.

Utilization-review activities also have important public good attributes. For purposes of this discussion, utilization review includes prior authorization, concurrent review, mandatory second surgical opinion, pretreatment screening, and claims-review techniques (Stuart 1980). Passive insurers receive a "free ride," subsidized by active insurers, when two conditions are present. First, a given provider treats patients from both the active and passive insurers. Second, providers cannot perfectly discriminate among patients covered by different insurers. When these conditions are met, the utilization review efforts of insurer A affect the utilization patterns for passive insurer B's patients. In the extreme case, if providers treat all patients identically, and the case mix for the two insurers is similar, then passive insurer B will reap the same benefits as active insurer A. Since A incurred additional cost and B none, passive insurer B has improved its competitive position.

There is evidence that physicians and other providers are able to distinguish public patients (Medicare and Medicaid) from private patients

without much difficulty (Sloan, Cromwell, and Mitchell 1978). Discriminating among private patients (e.g., between Aetna and Travelers patients) would appear to be more difficult. Unfortunately, because most of the utilization-review literature has evaluated the effectiveness of public programs, little is known about the magnitude of the spillover effects from one private insurer to another private insurer.

The third set of cost-containment activities involves changing the way providers are paid by insurers. This could entail negotiating discounts with providers or restructuring the entire set of incentives facing providers. The latter might involve the formation of innovative alternative delivery systems, such as the SAFECO experiment where primary-care physicians have taken risk for hospital and specialists' services (Moore et al. 1980). Insurers that develop SAFECO or other IPA-type plans may not capture all their benefits. If member physicians change their patterns of care, substituting ambulatory care for hospital and specialist care for all patients (not just their alternative delivery patients), then traditional insurers will receive a "free ride." The risk and marketing costs for developing alliances are greater than continuing a traditional indemnity or service insurer plan, thereby making the formation of alliances less attractive.

The effects of discounts on physician pricing are well documented. Researchers examining insurers' paid-claim files have concluded that physicians no longer price-discriminate on the basis of list price—the physician's billed charge (Holahan et al. 1980; Sloan, Cromwell, and Mitchell 1978; Hsiao 1980; Yett et al. 1982). Instead, price discrimination takes the form of accepting different transaction prices from different insurers. Blue Shield, Medicare, and Medicaid have negotiated discounts with physicians so that the physician accepts the insurer's "allowed charge" as the transaction price. A number of researchers have examined the relation between the payment level of one insurer and the physician's billed charge, which is believed to represent the transaction price for commercial patients (Holahan et al. 1979; Yett et al. 1981). Using paid-claims data from a sample of 5,000 California physicians, Holahan et al. (1980) estimate that a 1 percent increase in Medicare-allowed charges was associated with a 1 percent increase in charges to commercial patients. Rice and McCall (1982) report from their study of Colorado physicians that a 1 percent increase in Medicare-allowed charges was associated with an increase in charges to commercial patients of 0.94 percent for

general practitioners, 1 percent for internists and .74 percent for general surgeons. Yett et al. (1981) also report that increases in Blue Shield reimbursement were associated with increases in charges to commercial patients. The implication of these studies is that discounts granted to any one insurer are not likely to be exclusive, but rather will yield similar changes in price to most patients.

### Monopsony Is a Necessary Countervailing Power to Change Insurer-Provider Relationships

Having described the reasons that a monopsonistic insurer would not suffer from a "free-rider" problem, we now examine the evidence that monopsonistic power is necessary for insurers to negotiate "discounts" and undertake utilization-review programs.

The Health Insurance Association of America (HIAA) (1978) has been the principal proponent of the monopsony hypothesis. The association has requested exemption from the Sherman Antitrust and Federal Trade Commission acts to allow the commercials to pool information about individual providers, and thereby increase their utilization-review effectiveness. HIAA contends that this will also give the commercials the necessary leverage to negotiate discounts with hospitals, physicians, and other providers.

There is empirical support for the argument that size is needed for negotiation leverage. Large insurers enjoy hospital discounts, whereas commercials must reimburse hospitals on the basis of hospital charges. In 1976, approximately 20 of the 69 Blue Cross plans reimbursed on the basis of hospital charges (Lewin and Associates 1976). The remaining Blue Cross plans reimburse largely on a retrospective cost basis. Similarly, Medicare and Medicaid also reimburse on the basis of costs, with the upper limit constrained by federal regulations. Based on a national study of hospitals, Lewin and Associates (1981) report that the ratio of third-party reimbursement to hospital charges was 81.4 percent for Medicare, 86.6 percent for Medicaid, 87.0 percent for Blue Cross, and 100 percent for commercials.

In the physician-services market, Blue Shield, Medicare, and Medicaid have discount arrangements with practitioners. Commercials have no such arrangement. The transaction price for commercials is believed



to approximate the physicians' charge. Based on a national survey of 2,000 office-based physicians, Sloan, Cromwell, and Mitchell (1978) found the Medicare and Blue Shield's best schedule average 75 to 80 percent respectively of the physician's charge. While the commercials may not have reimbursed the physician at the list price, their beneficiaries paid the list price if one sums their premiums and out-of-pocket expenses.

Other empirical research on the relation between private-insurer market concentration and health care costs has analyzed the effect of Blue Cross market concentration on hospital costs and the effect of Blue Shield market concentration on physician costs. This approach is not without its limitations. First, by dividing health care into hospital and physician sectors, researchers are unable to examine the effect of insurer-market concentration upon total health care costs. Second, because of their links with hospital associations or medical societies, the Blue Cross/Blue Shield market share variable may measure more than monopsony power. About half the nation's Blue Shield plans in 1977 had boards of directors with medical society majority membership (General Accounting Office 1981). Different Blues plans, therefore, may have different goals and objectives. One school of thought views the Blues as attempting to maximize provider income (Sloan 1981b; Kass and Pautler, 1979). Another school sees the nonprofits striving to maximize managerial slack (Blair, Ginsburg, and Vogel 1975; Frech and Ginsburg 1978). Although most empirical research has attempted to control for medical society and hospital association links, their success may be suspect.

The best-known study on the relationship between Blue Cross market share and hospital costs is by Frech and Ginsburg (1978). Using 1969 state-wide hospital charge data, they report that a state with a virtual Blue Cross monopoly would have prices \$18 a day greater than a state without a Blue Cross plan. Their interpretation is that Blue Cross managerial slack and preference for first-dollar coverage swamps the Blues' ability to secure hospital discounts resulting from monopsony power. Alternatively, they suggest that Blue Cross has little incentive to control costs when they dominate the market. Interestingly, the research by Frech and Ginsburg is the only study suggesting that increased Blue Cross market share increased costs.

Feldman and Greenberg (1981a, 1981b) have studied the effect of Blue Cross market share on cost-containment activities. Using 1977 data from the Blue Cross/Blue Shield Fact Book, they report that the

probability of a Blue Cross plan implementing the utilization review programs of concurrent review, prospective reimbursement, and preadmission testing tends to increase with increased market share. The market share coefficient, however, is significant only at the .11 confidence level. In their subsequent article, Feldman and Greenberg (1981b) estimated the effect of the Blue Cross market share on the ability to negotiate a hospital discount. When using an ordinary-least-squares estimation technique, the market-share coefficient was positive and statistically significant. A 1 percent increase in the market share increases the probability of receiving a discount by .12 percent. In a study of Federal Employees Health Benefits Package Blue Cross/Blue Shield enrollees, Greenberg (1980) reported that the Blue Cross market share has a negative effect on per capita hospital days and hospital costs. The coefficients, however, are significant only at the .11 confidence level.

The major work on the relation between physician pricing and insurer market share is by the General Accounting Office (1981). The primary purpose of the GAO study was to determine the effect of public representation on Blue Shield boards of directors on Blue Shield reimbursements. Market share was a control variable. For all 17 procedures examined, the Blue Shield market share was found to reduce the level of the reimbursement, a proxy for transaction price. The coefficient was statistically significant for 8 procedures.

In summary, these empirical studies indicate that insurer market concentration is associated with the ability to secure discounts. There is less evidence that such buying power reduces system-wide health care costs.

During this decade monopsony power is likely to assume an even greater role. As independent nonprofit hospitals are increasingly absorbed by giant for-profit corporations and nonprofit holding companies, insurers will need more economic leverage to negotiate hospital discounts and engage in other cost-containment activities.

## Consumers Prefer Freedom-of-Choice of Providers

Unlike other third-party payers, commercial insurers lack the necessary market power to extract discounts from large numbers of providers. Commercials, on the other hand, do have sufficient buying power to

negotiate discounts and innovative reimbursement arrangements with a select hospital or group of physicians. However, when insurers contract with selected providers, patients' freedom to choose providers is limited. The infrequency of such exclusive arrangements between insurers and providers reflects the esteem that consumers have for provider freedom-of-choice. Donabedian (1981) identifies several reasons why freedom-of-choice is valued so highly. First, free choice from the largest number of possible alternatives is a reaffirmation of personal freedom and dignity. Second, the ability to hire and fire affects the patient-physician relationship. When freedom-of-choice is not limited, the patient is far more likely to perceive the physician as his or her agent, rather than the insurer's or the government's agent. Third, freedom-of-choice allows for a better match between the provider's and patient's social, psychological, and personality traits.

### Entry Costs and State Regulation Lead to Orderly Competition among Insurers

Previously, we examined the structure of the health insurance industry. In this section, we attempt to demonstrate how the institutional structure of this industry raises entry costs and thereby discourages aggressive competitive behavior by commercial carriers.

Health insurance, the least profitable line of business for commercial insurers, serves as a loss-leader for entry into the more profitable lines of business in the employer-based market. Health insurance is less profitable than life, liability, and property insurance because of its greater liquidity requirements. The greater liquidity requirement means that fewer dollars are available for investment; investment income rather than underwriting profits is the source of insurers' profits. During the first year of a new insurance policy, insurers incur a number of one-time underwriting expenses. Marketing costs, administrative costs, physicals, and account set-ups are examples of these first year costs.

Collectively these factors reduce the present value of securing a new employer-based account. Because of risk and uncertainty, today's income is preferred to tomorrow's income. But when an insurer attempts to capture a previously established employer-based account, the present value of the account is greater to the current insurer than to its rivals.

If a rival insurer should win the account, he is likely to suffer above-average underwriting losses in the first year. The income potential of the health insurance premium dollar is less attractive than that for liability, life, and property insurance. The rival insurer's primary economic motive for obtaining the new account may be to gain a tie-in to secure the life, property, and liability accounts. Nevertheless, there is likely to be a time lag between securing the health account and securing the more profitable lines of business, and uncertainty as to whether the profitable lines of business will be obtained. This further reduces the present value of a new health insurance account.

The first-year, one-time expenses of a given account serve as transaction or entry costs. Let us assume there are two employers and two insurers in the market. If the employers change insurers in a given year, then both insurers will bear additional costs. If some of the additional underwriting costs are shifted to the employers (or employees) the employers will also bear extra costs. It is, therefore, in the interest of both insurers and employers to minimize the number of transactions.

Rising health care costs are in the collective interest of the insurance industry. Because increasing health care costs expose the uninsured to greater financial risks, a risk-averse public should increase its demand for health insurance. The health industry faces an inelastic demand curve. Using the state as the observation unit, Frech (1979) has estimated the price elasticity of health insurance as  $-0.22$ . If the health insurance industry can translate increasing health care costs into higher premiums, premium income for the industry will increase. Higher premium income may not be associated with underwriting profits, but it should result in increased investment income. Increased premium income makes possible not only a greater absolute amount of investment, but also enables insurers to realize scale economies and greater diversification of investment.

The preceding discussion suggests that insurance firms have a stake in "orderly markets." Few industries do not. What may distinguish the insurance industry from others is that it has the mechanism to facilitate "orderly competition." That mechanism is state regulation of the insurance industry.

To protect the financial solvency of insurers, most state regulatory insurance commissions follow the recommendations of the National Association of Insurance Commissioners and place an upper limit on the ratio of new premiums written to policy surplus (or equity) of

3:1. Since surplus is usually 6 to 8 percent of total assets, this ratio limits annual growth to 18 to 24 percent of total assets (Anderson and Fetters 1975). This regulation may serve as a signal to insurers that aggressive behavior will yield limited financial rewards.

## Conclusion

This article has examined the hypothesis that "competition plans" will fundamentally change insurer-provider relationships. Through a review of the literature, we have investigated whether a reduction in the tax subsidy, the imposition of fixed employer contributions, and the mandating of employee multiple insurance options will provide sufficient stimuli to set off a chain of events. That chain of events would change the way insurers compete with one another, and ultimately alter reimbursement methods and the delivery of health care.

The reorganization of the health delivery system could occur through a "quick fix" or as a result of a prolonged evolutionary process. Competition advocates argue that, with a reduced tax subsidy, consumers, facing a higher net price for health insurance, might choose high deductible-coinsurance policies, or alternatively, enroll in HMOs and IPAs. The latter would constitute a "quick fix." Next, the increased sensitivity of consumers to the price of health insurance would compel traditional insurers to compete through cost-containment policies directed at providers. Insurers would negotiate discounts with providers, undertake utilization review, pressure providers to reduce excess capacity, negotiate innovative reimbursement arrangements, and, ultimately, vertically integrate into organized health care systems.

Our review of the literature leads us to conclude that neither the "quick fix" nor the evolutionary scenario is likely to occur. The natural experiment that most closely replicates the incentives under the competition bills is the Federal Employee Health Benefit Package (FEHBP). In 1982 only 10 percent of federal employees were enrolled in an HMO or IPA, compared to 6 percent 12 years earlier. Only 13 percent of federal employees have chosen low-option, fee-for-service indemnity or service plans.

With over 700 insurers competing nationally, it would appear that there are currently significant market forces to encourage insurers to compete through cost-containment policies, and thereby offer similar

health policies at lower premium costs to employers. However, the same impediments to competition in today's "precompetition" world would still exist in the "competitive" world. We identified five reasons why insurers do not compete through cost-containment policies directed at providers. First, health insurers are unable to indemnify the medical event. Health insurers lack the information to define with sufficient certainty what the event is, and what constitutes the proper course of treatment. Inability to indemnify the medical event reduces the effectiveness of controlling costs through the setting of an upper payment limit. Second, cost-containment is a public good. Spillover effects and the free ride given to passive insurers encourage private insurers to underinvest in cost-containment. Those cost-containment policies that are efficient to the private insurer may not necessarily be efficient from a societal perspective. Third, monopsony power is necessary to negotiate widespread discounts and innovative arrangements from providers. As the nation's health care system moves from "independent" enterprises and toward corporate conglomerates, monopsony power should assume greater importance. Fourth, freedom-of-choice is a cherished privilege among consumers. This deters insurers from negotiating exclusive contracts with select hospitals or physician groups. Fifth, transaction costs and state regulation of the insurance industry encourage orderly behavior in the insurance industry. Since competition plans fail to address these impediments to efficient behavior, they are unlikely to significantly alter the existing system of health care delivery.

In sum, it may take more than the stimulus from increased consumer cost-sharing and reduced tax subsidies to create an environment conducive to competitive provider behavior. Given the structure of the health care market, competition plans are more likely to produce a world similar to the experience of FEHBP. On the competitive fringe will be the HMOs and IPAs, while the majority of patients and providers continue business-as-usual in the fee-for-service sector.

In this world of fee-for-service medicine, physicians will continue to prescribe, and pharmacists to dispense, brand name drugs at a cost 25 percent greater than their bioequivalent generic counterparts (Goldberg 1981). Patients will be hospitalized for diagnoses that could be treated in outpatient settings, and other inefficiencies will continue because the decision maker does not bear the financial risk of his or her decision.

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