Issues Regarding Health Plan Payments Under Medicare and Recommendations for Reform

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LAW, MEDICARE'S PAYMENT TO A HEALTH Y maintenance organization (HMO) on behalf of an enrolled Medicare beneficiary should be 95 percent of Medicare's cost had the enrollee remained in the fee-for-service (FFS) Medicare sector. It is not clear, however, that current payment rates reflect accurately the expected cost of caring for the Medicare HMO enrollee in the FFS sector. Nelson and Brown (1989) estimate that Medicare may overpay HMOs by 15 to 74 percent because of favorable selection into HMOs and a possible error in estimating the FFS costs of beneficiaries, but those estimates are disputed by the industry trade association (Gold and Palsbo 1989a,b). Evidence from HMO behavior is mixed. The program grew rapidly during 1985 and 1986, but the rate of growth has declined substantially since 1986. Although 55 percent of the elderly live in market areas with at least one Medicare HMO, only about 3.5 percent have enrolled in Medicare HMOs (data from the Office of Prepaid Health Care, Division of Contract Administration). Furthermore, some HMOs have dropped their risk contracts under the Tax Equity and Fiscal Responsibility Act (TEFRA) and either left the Medicare market, or

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switched to other types of Medicare contracts. In 1987-88, 29 HMOs left the program. Of 132 plans with contracts on January 1, 1988, 37 decided not to renew their risk contracts with Medicare for 1989. Three of these 37 HMOs switched from TEFRA-risk contracts to a health care prepayment plan (HCPP), or cost-based contracts. A similar pattern was observed during 1989 when 32 plans did not renew their contracts and six plans converted to cost or HCPD contracts. The terminating plans are small on average, but the majority attribute their nonrenewal decision to dissatisfaction with the current payment method.

The problems with linking HMO payments to the FFS sector, the hallmark of the present payment system, are both technical and conceptual in nature:

- The FFS sector may not promote and maintain the health of Medicare beneficiaries efficiently (Chassin et al. 1986). In some geographic areas, the FFS sector may use resources wastefully, whereas in other areas beneficiaries may receive too few services. All provider payment systems, including payment to Medicare HMOs, should be designed to correct, rather than perpetuate, inefficiency.
- 2. Activity in the HMO sector may affect FFS costs. When Medicare HMOs enroll a high percentage of the elderly in a market area, the remaining FFS beneficiaries may represent a biased sample on which to base HMO payments. Also, the presence of HMOs in a market area could change the FFS style of medical practice, either through competitive pressure or because physicians who see both HMO and FFS patients change the way they treat their FFS patients as their proportion of HMO business increases.
- 3. The current method of calculating the cost of caring for beneficiaries in specific geographic areas is complex and payments may be unstable from one year to the next.

Problems with the current payment method have fostered interest in examining alternative payment methods, which is the purpose of this article. To evaluate the likely success of alternative payment methods we first define objectives for HMO involvement in the Medicare program. In the next section we discuss the effect of different payment methods on those objectives. We then analyze two sources of market failure in the Medicare health plans market, imperfect information and price distortions, and suggest two payment reforms, open enrollment and competitive pricing, to address those problems. We conclude by summarizing our recommendations.

Objectives of the Medicare HMO Program: Efficiency and Equity

The objectives of HMO involvement in the Medicare program are related to both efficiency and equity. When Medicare was implemented in 1966, physicians were reimbursed by fee-for-service and hospitals were reimbursed for their costs. By 1970, the inherently inflationary effects of these payment methods had resulted in serious projected budget deficits for the Medicare program. In their search for alternative payment methods, some analysts and policy makers proposed incentives for the provider community to form competing groups that would both insure and treat patients. The most common model proposed was the prepaid group practice, a large, multispecialty medical group that would sell insurance directly to the consumer and be responsible for maintaining the consumer's health.

Prepaid health care plans have been eligible to participate in Medicare since its inception. However, the retrospective cost-based reimbursement and cost-finding procedures used by Medicare differed substantially from the HMOs' usual rate-setting procedures (Langwell and Hadley 1989). Consequently, Medicare cost contracts were not popular among HMOs. In 1972 Congress added section 1876 to Title 18 of the Social Security Act, which authorized capitation payment for A and B services on either cost or risk basis.

In his proposal for a "consumer choice health plan," Alain Enthoven (1978) suggested that Medicare beneficiaries be allowed to purchase coverage from any qualified health plan in a market area. The government's contribution would be based on the cost of an expanded FFS benefit package, including unlimited inpatient days and an upper limit on out-of-pocket spending. Chairing the Special Committee on Aging in 1979, Senator John Heinz stated that the primary goal of the Medicare HMO program was to open the system to competitive market forces (U.S. Senate Special Committee on Aging 1979). The bills then under consideration set HMO payment at 95 percent of FFS costs, which Senator Heinz believed would result in windfall profits for HMOs. Peter Fox, director of the Office of Policy Analysis at the Health Care Financing Administration (HCFA), suggested during the 1979 hearings that HMOs be required to return any excess profits to enrollees in the form of coverage of preventive care, waiver of coinsurance and deductibles, and additional benefits, in that order. It is important to note that the purpose of involving HMOs in the Medicare program was *not* to expand the benefit package. Expansion of the basic benefit package was viewed only as a method of limiting HMO profits.

An interesting and divergent voice at the 1979 hearings was that of Ralph Saul, a health insurance executive, who testified that the federal government should replace its retroactive cost reimbursement system with a fixed premium contribution. Saul specifically recommended basing the government's contribution on premiums in a competitive environment rather than FFS Medicare costs (U.S. Senate Special Committee on Aging 1979).

As early as 1970, two different equity objectives were espoused for the Medicare HMO program: giving all health plans equal access to Medicare beneficiaries; and permitting Medicare beneficiaries the same access to health plans enjoyed by the under-65 employed population in market areas where HMOs were offered (Saward 1970).

In the early 1980s, the HCFA developed a series of demonstration projects to test alternative forms of Medicare HMO risk contracting. In 1980 and 1981 eight plans began to enroll Medicare beneficiaries at reimbursement rates ranging from 85 to 95 percent of the cost in the FFS sector (known as the adjusted average per capita cost, or AAPCC). If an HMO's projected payments exceeded its projected costs, known as the adjusted community rate (ACR), the HMO was required to refund the difference to the government, offer supplementary benefits to enrollees, or reduce the cost of supplementary benefits. In April 1985, risk contracting became a permanent ongoing program under the TEFRA legislation, and by October 1989, there were 131 participating plans with more than one million enrollees.

Relation Between Efficiency and Equity Objectives and Pricing Mechanisms

Health policy discussions in the 1970s and 1980s frequently focused on the relation between efficiency and equity objectives for the health care system and the way in which prices for health insurance and health care services are determined. Most of these discussions juxtaposed two alternative methods of determining prices: competitive markets and regulatory or administered price setting.

The advantage of competitive markets lies in their ability to produce technical, economic, and distributional efficiency in the absence of market failure. In a market for health insurance, such as the Medicare health plans market, technical and economic efficiency means that health plans promote and maintain their enrollees' health using the cost-minimizing quantity and combination of health care resources. Distributional efficiency means that no individual would wish to trade their combination of health insurance and income for another combination, given current prices and their income.

Certain types of natural or irrevocable market failure, for example, significant economies of scale in production, the requirement of "rightsof-way," or abnormally large capital requirements, arise and can be addressed only through the use of administered pricing. Also, a monopoly might be granted to a firm on the grounds of "countervailing power," that is, to combat the effects of monopoly or oligopoly in another industry (Scherer 1980).

Markets for health plans and health services offer textbook examples of virtually every form of market failure. These sources of market failures should be familiar, and include the tax exemption of employeepaid health insurance premiums (and even employer-paid premiums under section 125 of the Internal Revenue Code), overly restrictive licensure requirements, partial exemption of the insurance industry from federal antitrust regulation under the McCarran-Furguson Act, poor information on the price and coverage offered by health plans (except for employees of large firms with well-organized open enrollment periods), and a virtual absence of information on the quality of care one is likely to receive in one health plan versus another.

However, after an extensive review of sources of market failure (Dowd et al. 1990), we found no compelling theoretical or empirical evidence that the health insurance industry exhibits inevitable or irrevocable market failure, or that the health services market is a monopoly or oligopoly that would support the countervailing power argument. The most striking aspect of market failure in health care is not how much of it is inevitable or irrevocable, but how little of it has been addressed by government and how much of it is the direct result of government policy.

Given the damage that government regulation has done to the health

care market and government's apparent reluctance to address inherent problems of the market, such as poor information, it is difficult for us to be enthusiastic about administered pricing systems, including those for Medicare HMOs. Enthoven's (1978) numerous criticisms of the regulatory approach to health care cost containment are still valid today. His concept of a "managed competition" approach (Enthoven 1988b) involving competitive pricing among health plans has not yet been achieved in the Medicare program, nor has it been seriously pursued.

Removal of barriers to competition in health plan markets generally is hindered by two popular misconceptions. The first is that competition forces low-income people out of the market for health care services. Although competitive markets can promote efficiency, competitive markets, per se, are neither equitable nor inequitable. If low-income people are observed to consume a "socially unacceptable" low level of health insurance or health care services it is because of high prices (which could indicate too little competition, rather than too much), their low incomes (which could be remedied by greater willingness on the part of society to transfer income from the wealthy to the poor), or their preference for other goods and services versus health care. Effective competition would increase access for everyone by reducing the price of health care services to the marginal cost of efficient production.

The second misconception regarding competition is that the competitive model was "tried" during the 1980s and failed to contain health care costs. In an article in *Healthweek* entitled "A Decade Later, Free Market Has Shown It Can't Keep the Lid on Spiraling Health Costs," Kimball (1989) writes, "The nation learned a painful lesson in the 1980's: Health care consumption cannot be curbed by traditional freemarket forces or government price constraints applied at a single pressure point."

Statements of this nature are misleading on two counts. First, the purpose of competition is not to curb health care spending, per se, but to produce a set of efficient prices that allows consumers to maximize their welfare without waste in either production or consumption (Pauly 1990). If consumers faced prices for health insurance and health care services that reflected maximum efficiency in production and still wished to spend 13 percent of their disposable income on health care (*Economic Report of the President* 1991), there would be no objection on economic efficiency grounds. Second, none of the many sources of

market failure in health care was rectified in the 1980s, and few received even passing attention from policy makers. Although there was a great deal of talk about competitive markets during the 1980s, most of the changes in health care pricing involved administered pricing. Diagnosis related groups (DRGs) were introduced as a case-mix-adjusted, administered pricing system for inpatient services. HMO activity is the most frequently cited example of competition in health care, but the government's payment to Medicare HMOs is set by the administered-price AAPCC formula, rather than by competitive pricing.

A well-run competitive health care system, managed effectively by a government "sponsor" (Enthoven 1988b), is not a laissez-faire policy on the part of government. In fact, a well-managed competitive system may require as much effort by the government as administered pricing, but the potential benefits are substantial. Improved efficiency in the Medicare health plans market would allow beneficiaries to obtain health insurance coverage more closely matching their preferences at prices they could better afford.

Correcting Market Failure in the Medicare Health Plans Market

Bringing market discipline to the Medicare health plans market will require dramatic changes in market structure and the federal government's role. Medicare policy can address two important sources of market failure: imperfect information and payment policies that distort prices. The following discussion draws heavily on an analogy between Medicare health plans and health plans offered to employees of a large firm or government unit. In fact, there are many similarities between the problems faced by Medicare in the health plans market and those faced by state governments and their employees. Many state governments offer a choice of health plans to employees, just as Medicare offers a choice of health plans in areas with Medicare HMOs. Health benefits offered by state governments, like Medicare, can be influenced by the legislative branch of government, and state employees, like Medicare beneficiaries, vote. Also, many state employees belong to unions, which are similar in agenda and influence (on health plan issues) to organizations lobbying for the elderly.

Imperfect Information

The concept of informed consumer choice depends on consumers having access to at least a minimal amount of information on the price and quality of products. Medicare beneficiaries face considerable difficulty in obtaining this information. Information on the prices of products (including TEFRA plans, HCPPs, and Medicare supplements) can be obtained at some cost, but easily interpretable information on coverage is harder to obtain, and there is virtually no information available on the quality of care in different health plans. In the employed sector, wellmanaged firms hold annual open enrollment periods during which they identify options available to employees and distribute concise summaries of the benefits and costs of alternative health plans. Plans are not allowed to change their coverage or premiums between open enrollment periods, further improving the quality of information. Organized open enrollment generally is not practiced in the Medicare health plans market. In 1987, all but 28 of the 156 risk-based Medicare HMOs had continuous open enrollment. Annual open enrollment periods for Medicare health plans would economize the task of collecting and presenting information to beneficiaries and would help beneficiaries to learn about and compare the available choices. Ideally, state insurance commissioners would require Medigap insurers to participate in Medicare open enrollment periods.

Another information problem linked to open enrollment policy concerns the health plans' knowledge of expected expenses for individual beneficiaries. All health plans gain an information advantage over their competitors by observing enrollees' actual cost experience. All plans, therefore, have an incentive to disenroll high-cost enrollees. The willingness of FFS Medicare to accept HMO disenrollees continuously makes selectively encouraged disenrollment easier. This incentive is particularly strong in HMOs that also sell FFS Medigap coverage because their physicians do not lose patients who disenroll to Medigap coverage. The employment-based group insurance market does not allow continuous open enrollment. Restricting plan switching to once a year reduces the likelihood of employees joining a plan to use specific services and then disenrolling. This "hit and run" utilization is very expensive for health plans and could discourage them from providing high-quality care. Waiting periods for treatment of preexisting conditions can provide a barrier to hit-and-run utilization without open enrollment periods, but open enrollment periods do not leave beneficiaries without coverage and, in addition, facilitate the efficient distribution of information.

Does restricting health plan switching to once a year represent an onerous constraint? Employees in multiple-health-plan firms apparently do not think so. In fact, the ability of employees in large, multiple-healthplan firms to choose, annually, among all the health plans offered by the firm regardless of their health status is a luxury denied those in the individual and small group market and Medicare beneficiaries, as well. Comprehensive open enrollment, including all insurers that sell products in the Medicare health plans market, would guarantee beneficiaries annual, unrestricted access to all health plans in the market, including HCPPs and Medicare supplementary insurers, who presently can screen enrollees continuously.

Price Distortions

Medicare's HMO payment policy results in three types of price distortions in the Medicare health plans market. The first is a subsidy of the FFS sector versus the HMO sector. The second is a subsidy of the Medigap insurance industry. The third, and most important, is a distortion in the price of Medicare benefits purchased on behalf of beneficiaries by the government.

Subsidy of the FFS Versus the HMO Sector. Suppose that Medicare HMOs can provide the same coverage and quality of care as the FFS sector for lower cost. Evidence from Manning et al. (1984) and Luft (1981) for the nonelderly population and Christianson et al. (1990) and McCombs, Kasper, and Riley (1990) for the aged Medicaid population suggests that they can meet this objective. Currently, however, HMOs cannot set their premiums less than the AAPCC payment (which is determined by the cost of basic Medicare benefits in the FFS sector). In other words, Medicare HMOs cannot give premium rebates. They only can add supplementary coverage so that their costs for the enhanced coverage are greater than or equal to the AAPCC. A summary of supplementary coverage and premiums for Medicare HMOs in 1989 is shown in table 1.

Supplementary coverage may not be highly valued by all consumers. HMOs might be chosen by more consumers if they were permitted to give premium rebates and to offer a package of basic benefits. Consequently, as noted by McClure (1982) ten years ago, not permitting

Routine physicals	108 (82) ^c	Lenses	21 (17)
Immunizations	100 (76)	Ear exams	41 (32)
Health education	81 (62)	Hearing aids	12 (9)
Outpatient drugs	38 (29)	Dental	17 (13)
Foot care	13 (12)	Mental health	31 (23)
Outpatient eye exams	72 (56)		

TABLE 1 Benefit and Premium Summary: TEFRA HMOs and CMPs^a

Plans charging copayments for basic package: <u>116</u> yes (89%); <u>15</u> no (11%)

Plans offering high-option package: 7, or 6%

Basic premium range:	Number of plans	Range (\$)	Percent
	13	0	10
	18	0.01-19.99	14
	53	20.00-40.00	40
	47	Above 40.00	36
			A-1 1-

Average basic premium, \$13.90; highest basic premium, \$74.69.

Source: Office of Prepaid Health Care, Division of Contract Administration.

^a As of October 1, 1989.

^b "Basic" benefits refers to the basic package of *supplementary* benefits, not the package of basic Part A and Part B benefits that all Medicare HMOs are required to offer. ^c Numbers in parentheses indicate percent.

Abbreviations: CMP, comprehensive Medicare plan: HMO, health maintenance organization; TEFRA, Tax Equity and Fiscal Responsibility Act.

HMOs to give premium rebates protects the FFS sector from this form of competition. This source of distorted prices could be remedied by allowing Medicare HMOs to offer whatever benefit package they choose (at least equal to basic Medicare coverage) at whatever premium the market will bear.

Subsidy of the Medigap Insurance Market. The majority of Medicare beneficiaries in the FFS sector purchases "Medigap" insurance to supplement their basic Medicare coverage. Medicare's expenditures on the basic benefits package increase for these beneficiaries because the coinsurance and deductibles have been removed (Christensen et al. 1987). Up to 80 percent of the supplement-induced increase in Part B services is incorporated into Medicare's cost for basic FFS coverage. For supplement-induced increases in Part A expenditures, the percentage could be even higher because the Medigap insurer's liability is likely to be a smaller proportion of the supplement-induced increase in expenditures. The incorporation of these "spillover" costs into the cost of the basic benefit package represents a subsidy, paid by Medicare, of the Medigap premium.

A simple example illustrates the Medigap subsidy. Suppose that in the absence of a Medigap supplement, average expenditure per beneficiary on services covered by the basic Medicare benefit is \$365 per month in the FFS sector and \$280 in the HMO sector. Also suppose, for simplicity, that Medicare payments plus the Part B premium equals roughly 80 percent of covered expenditures. Again, for simplicity, assume that HMOs are paid 100 percent of the AAPCC rate, rather than 95 percent. Thus, HMO payment is .8 × \$365, or \$292 per beneficiary per month. (The FFS beneficiary pays .2 × \$365, or \$73 out of pocket.) The difference between the HMO's cost and payment is \$12. Because the HMO cannot return the extra \$12 per month to enrollees under the ACR rules, it may cover the coinsurance and deductibles or add supplementary coverages to justify its \$292 payment. The beneficiary's premium expense (beyond the standard Part B premium) for either the HMO or FFS is zero, but benefits are better in the HMO.

Christensen et al. (1987) report that 72 percent of all FFS Medicare beneficiaries purchase Medigap policies, and the aggregate effect of those policies is to increase total expenditures on covered services in the FFS sector by approximately \$85 per beneficiary per month (based on 1987 data presented by Christensen et al. 1987, inflated to 1992 dollars). The government pays 80 percent of the \$85 increase, or \$68, and the beneficiary pays the additional \$17. Thus, the government's cost of basic FFS benefits, and hence its payment to HMOs, rises to .8 × (\$365 + \$85), or \$360 per beneficiary per month. The HMO must find additional benefits that justify the \$68 increase in its payment. Beneficiaries may or may not place a high value on these additional benefits. The beneficiary's premium expense is zero for the HMO and \$73 + \$17, or \$90 a month for the FFS sector including the Medigap policy. (The beneficiary pays the Part B premium in either case.)

Suppose, however, that the government removed the effect of Medigap policies from the AAPCC, returning the AAPCC-based payment to its original level of \$292, and added its share of the spillover cost, $.80 \times \$85$ or \$68, to the Part B premium for beneficiaries with Medigap coverage. If HMO benefits returned to their original level (\$292), the beneficiary's premium expense would be zero for the HMO and \$450 - \$292 = \$158 for basic FFS benefits plus the Medigap policy, and benefits might be similar in the two plans. Failure to remove the effects of the Medigap policy from the government's contribution to premiums in the FFS sector subsidizes the Medigap policy. Basing HMO payments on FFS costs, which include the spillover effect of Medigap policies, makes it even more difficult for HMOs to market low-cost policies effectively.

Another feature of the Medigap market that affects Medicare HMOs is the fact that many employers subsidize the purchase of Medigap policies by their retired employees. These policies not only fill the "gaps" in basic Medicare coverage, but often add supplementary coverage (Jensen and Morrisey 1990). The employer subsidy usually is limited to a particular insurer with whom the employer has contracted. This discourages enrollment in Medicare HMOs not included in the employer's plan. If the federal government would stop subsidizing Medigap coverage, employers and retired employees would face the true marginal cost of supplementary insurance policies. They would be more inclined to contract with Medicare HMOs if the HMO offered similar coverage at lower cost.

There are at least two ways to address this price distortion in addition to allowing HMO premium rebates. The first is to apply a tax to Medigap premiums equal to the effect of the Medigap policy on basic FFS Medicare costs. To produce efficient consumer choices the tax probably should be paid directly by beneficiaries along with the Medigap premium. This option would remove Medicare's subsidy of Medigap premiums and, if the tax was applied against Medicare's FFS costs, would allow HMOs to reduce their level of benefits because the government's net cost, and thus the HMO's payment, would be reduced to \$292.

Another approach, which avoids the cost of collecting a Medigap tax, would be to calculate the effect of a Medigap policy on the cost of basic Medicare coverage, set the government's contribution at FFS costs in the absence of Medigap benefits (\$400), and then require both HMOs and Medigap insurers to accept that contribution (plus whatever premium they charge for supplementary benefits) and cover the cost of both basic and supplementary Medicare benefits. In other words, Medigap insurers would enter the market on the same terms as Medicare HMOs. However, even if policies are developed that remove the subsidy of Medigap policies, the problem of basing the federal government's contribution to health plan premiums on costs in the FFS sector would remain.

The Distorted Price of Basic Medicare Benefits. Offering better information, allowing HMOs to give premium rebates, and eliminating the subsidy of Medicare supplementary insurance would be major improvements in the Medicare health plans market. However, these reforms do not address the most important shortcoming of the current HMO payment system: failure to use the HMO program to help determine the correct price of basic Medicare coverage, that is, the price representing maximum efficiency in the production and maintenance of health among Medicare beneficiaries. Indeed, if HMO premium rebates were allowed and became widespread, it would indicate that the government is trying to spend more on health insurance for the elderly than the elderly wish the government to spend on health insurance, or would choose to spend themselves. In other words, the elderly would rather have the money to spend on other things.

If HMOs can provide basic Medicare benefits for lower cost and the same quality of care as the FFS sector, then the government, by basing its premium contribution on FFS costs, is paying too high a price for basic benefits. Paying too high a price will result in inefficiently low levels of Medicare benefits. Some of the resources spent on basic benefits could be used to reduce government expenditures or provide more government services to the elderly. For example, it is difficult to consider covering long-term-care services under Medicare when the government is overpaying for basic Medicare benefits. In addition to being inefficient, overpayment may be considered inequitable by the nonelderly population, which provides a substantial income transfer to fund the Medicare program.

A Competitive Pricing System for Medicare

The greatest contribution that a properly structured payment system for Medicare HMOs can make to the Medicare program is to reveal the correct price of basic Medicare benefits. Unfortunately, in its current form, the program cannot accomplish that task. In fact, the current program almost certainly *increases* the cost of basic Medicare benefits because the government's premium contribution is based on FFS sector costs and because of favorable selection into HMOs (Brown 1988). If, as Nelson and Brown (1989) suggest, the AAPCC estimate is miscalculated, the HMO program is even more likely to increase Medicare's costs. Furthermore, current Medicare HMO payment policy actually discourages HMO growth by shielding beneficiaries from the price difference of basic benefits in the HMO and FFS sectors.

To find the right price of Medicare benefits and encourage the growth of efficient health plans, Medicare must break the link between its contribution to Medicare premiums and FFS costs. Instead, Medicare should base its contribution (in either the HMO or FFS sector) on the premium of the most efficient health plan in a given market area. Retaining the current FFS-based payment system, even if HMO premium rebates are allowed, is distinctly inferior to a payment system based on the most efficient health plan's premium for basic benefits.

The structure of the payment system would be as follows: Medicare, like a self-insured employer offering multiple health plans, would prepare an estimate of its average cost for basic FFS coverage in the coming year in a market area. HCFA already estimates Medicare's average FFS cost in every county in the United States each year as part of the AAPCC. This estimate should be revised to *exclude* the spillover cost of Medigap insurance. Suppose, for example, that this estimate is \$400 per month per beneficiary in a given market area. Prior to the open enrollment period, each HMO in the market area that wished to enroll Medicare beneficiaries would submit its premium for basic Medicare benefits. HCFA's estimate of FFS costs would not be announced until after the HMO premiums were submitted. Possible HMO premiums for basic coverage are outlined in table 2.

Health plan	Premium for basic coverage	Government premium contribution	Beneficiary's premium expense
HMO 1	\$300	\$300	\$ 0
HMO 2	375	300	75
HMO 3	410	300	110
FFS Medicare	400	300	100

TABLE 2Monthly Premiums for Basic Coverage

An interesting question is the treatment of the current Part B premium. The government's contribution to the beneficiary's premium could be set equal to the lowest bid (\$300), the lowest bid minus the current Part B premium, or some value in between. The important point is that the beneficiary face the full marginal cost of choosing a more expensive health plan. The beneficiary's cost of the lowest-priced plan would be no greater than the current Part B premium. Each health plan could add any supplementary coverage and charge whatever supplementary premium the market would bear. Under our Medigap proposal, the government also would offer FFS Medigap insurers \$300 per month (or \$300 minus the Part B premium) for each enrollee. Medigap insurers who wished to enter the market would have to cover the cost of basic Medicare benefits, but they could add any additional benefits at whatever additional premium they wished. The health plan's incentive to submit a low price for basic coverage would be to distance its premium expense from those of its competitors. All health plans, including FFS Medicare, would be responsible for collecting any premium owed by beneficiaries. FFS Medicare beneficiaries already pay premiums for Part B Medicate and private health plans collect premiums from beneficiaries as a matter of daily business. Avoiding the cost of collecting premiums, however, would provide an additional incentive for health plans to be the low bidder.

Although *current* FFS Medicare would be an expensive choice relative to the most efficient HMOs, that need not remain the case. HCFA has many cost-containment initiatives in place or under study for FFS Medicare—including DRGs, relative value scales for physician reimbursement, and preferred provider organizations. These initiatives might reduce the cost of FFS Medicare to levels at or below the HMOs' costs.

Government premium contributions based on the most efficient health plan in a given market area could result in different levels of premium expense for the same health plan in different market areas. Beneficiaries' premiums also could vary from year to year as health plans enter and leave the market. If an efficient health plan were available in an urban area, for example, the government contribution might be lower than in a rural area where only FFS Medicare was available. This might seem inequitable. However, health care consumers in urban and rural areas experience many disparities. Some disparities benefit urban residents, who, for example, have better access to tertiary medical care. Whether a larger government premium contribution to FFS Medicare in rural areas would be viewed as inequitable, given other disparities in the health care system, is unclear. It is likely that a higher government premium contribution in rural areas would encourage health plans to enter those markets, thereby increasing access to this form of delivery system for rural consumers. In any case, the FFS alternative would remain available in all areas.

Our proposal for Medicare HMO payment reform is not only feasible, but currently is in place in the employed sector. The state governments of Minnesota and Wisconsin offer multiple health plans to their employees and base their contribution to premiums on the premium of the most efficient health plan in a market area. The Minnesota state government plan is described in the Appendix.

Other Issues

Biased Selection

Whenever multiple health plans are offered, health risks are unlikely to be distributed equally among the plans. Some plans will enjoy favorable selection, (i.e., the enrollment of relatively low-risk individuals), and others will face adverse selection. A crucial question concerns the effect of nonrandom risk selection on efficiency and equity in the health plans market. Those effects depend on the extent to which health plans can identify high- and low-risk enrollees prior to enrollment and the extent to which health plans can risk-adjust their premiums.

As Pauly (1984) notes, if health insurers can identify high-risk enrollees prior to enrollment and are allowed to risk-adjust their premiums, the outcome will be efficient, but may be considered inequitable because high-risk enrollees will pay higher premiums. An individual could be rated high risk because of "permanent" factors such as age and sex, or could become high risk following the onset of illness. Pauly (1970) shows that if health plans are forced to offer the same product to all beneficiaries at the same premium (a "community" rate), the outcome is inefficient. Pauly (1984) argues further that forcing insurers to community-rate may *cause* them to engage in active cream-skimming. The undesirable equity effects of risk-rating could be avoided by structuring income transfers, for example, through premium subsidies, so that lowrisk beneficiaries subsidize high-risk beneficiaries. Pauly (1984) notes that unless those subsidies are means-tested, healthy poor beneficiaries will subsidize wealthy, high risk beneficiaries, and that also may be considered inequitable.

Even if health plans cannot identify high- and low-risk enrollees prior to enrollment, characteristics of the products they offer may serve to segment risks in the market (Rothschild and Stiglitz 1976). These characteristics include the comprehensiveness of benefits, the limited provider networks used by staff and group model HMOs, and HMOs' aggressive management of costs. High-risk individuals with a history of illness often have developed relationships with FFS providers that they are unwilling to sever and the HMOs' reputation for aggressive cost management may encourage high-risk enrollees to stay in the relatively "unmanaged" FFS sector with a Medigap supplement. Low-risk enrollees will join managed care HMOs and will benefit from competition among HMOs. These benefits include enhanced coverage and other amenities that enrollees can easily observe.

Medicare HMOs under the TEFRA-risk program currently are prohibited from risk-adjusting their premiums for either basic or supplementary coverage, but the AAPCC-based payment formula attempts to risk-adjust the government's premium contributions. However, because the AAPCC risk categories explain less than 1 percent of the variance in expenditures in the FFS population, HMOs can be expected to engage in whatever subtle forms of cream-skimming they can devise. Pauly's (1984) recommendations for improved efficiency would imply risk-rated premiums for Medicare HMOs, accompanied by means-tested income transfers. Although we do not take issue with Pauly's logic, we think there might be a simpler approach that should be tried first in the Medicare health plans market.

In large firms, premiums may differ among health plans (if more than one is offered by the firm), but individual risk-rating within a health plan is extremely rare. Why is this form of community rating successful? This question is addressed by Dowd and Feldman (1992). First, employees join the firm primarily to gain employment, not insurance (although insurance occasionally may be an important factor). Thus, employees are not likely to leave a firm simply because they are offered a better deal on their health insurance. Second, the firm is able to guarantee that the pool will be replenished continuously with healthy employees, thus assuring employees that should they become high risk, there always will be low-risk employees available to subsidize their care. Medicare also has the ability to guarantee continuous replenishment of low risks into the Medicare pool and thus, if managed correctly, could offer Medicare beneficiaries the same benefits enjoyed by employees of large, multiple-health-plan firms. A well-organized, annual open enrollment period with limited plan switching at other times would transform the Medicare market from the relatively inefficient individual insurance market to a model more closely resembling a large, multiplehealth-plan firm, simultaneously addressing the problem of poor information and doing more to alleviate concern over risk selection than a complex risk-adjusted payment formula (including different prices submitted for different risk classes) or unrestricted risk-rating accompanied by income transfers. We note again that if all plans marketing to Medicare beneficiaries were required to participate in the open enrollment period, Medicare beneficiaries could be guaranteed annual, unrestricted access to all available health plans.

The concern over risk selection expressed by Medicare TEFRA HMOs originates largely in the individual nature of the Medicare market and the fact that their competitors are allowed to screen potential enrollees. An open enrollment period with all Medicare health plans participating would address these concerns. Although biased selection remains an important issue when multiple health plans are offered, we believe that correcting health plan payments for possible biased selection deserves less attention from policy makers than basic market reforms.

In addition, we believe that health policy analysts may not fully appreciate the importance of the positive association between managed care and favorable selection. A health plan that provides more careful management of care is likely to experience favorable selection. Subsidies to health plans that experience adverse selection must be carefully structured to compensate the health plan only for the *partial* effect of risk selection on premiums, controlling for undesirable health plan characteristics, such as "failure to manage care," that may attract poor risks. Obviously, compensating plans for failing to manage care could inflict serious damage on the efficiency of the health plans market.

Some private-sector firms have taken an alternative approach to the problem of risk selection by offering only one health plan. For example, they might aggressively shop for a health plan rather than have their employees choose among multiple health plans. The health plan selected by the firm may develop multiple "options" such as a prepaid group practice, a preferred provider organization (PPO), and a traditional FFS plan. In that case, biased selection among options is a problem for the health plan to manage, rather than the employer's problem.

Despite interest by some employers in replacing multiple health plans with a single plan, many large employers have offered multiple health plans for many years because employees value diversity of choices. Offering multiple health plans provides Medicare beneficiaries the same benefit of diverse choices. We have found that offering multiple health plans, per se, tends to increase average premiums in firms (Feldman, Gifford, and Dowd 1992), primarily because of favorable selection into HMOs and the unaddressed imperfections in the health insurance market discussed earlier. A successful multiple-plan firm does not take a laissez faire attitude toward its health plans. It aggressively manages the FFS plan and negotiates carefully with HMOs. It also provides concise summaries of health plan coverage during annual open enrollment periods. It does not link the employer's premium contribution to the price of any health plan other than the most efficient plan, and especially not to the FFS health plan. We believe that neither employers nor the government should consider offering multiple health plans unless they are prepared to apply every possible form of market discipline on their health plans. To maximize the efficiency gains from competition through multiple health plan offerings, HCFA should undertake research to determine the most effective management strategies for multiple plan offerings, and then be prepared to adopt the strategies that seem to be effective. HCFA can follow the example of successful multiple health plan firms, but it also may have to lead the way in developing and implementing some market reforms.

Do Medicare HMOs Make Excess Profits?

Policy makers have always been concerned that Medicare HMOs will make excessive profits. This concern currently is expressed in the ACR rule, requiring HMOs to spend excess profits on supplementary benefits. We believe that HMOs may be overpaid for basic benefits (Brown 1988; Nelson and Brown 1989). Overpayment, however, need not imply excessive profits. If the market for supplementary benefits is sufficiently competitive, HMOs' profits will be competed away regardless of the ACR rules.

We have examined empirically the competitiveness of the supplementary benefits market by estimating the relationship between Medicare HMO enrollment and supplementary premiums charged by HMOs, controlling for a number of characteristics of the HMO and its market area and the supplementary coverage it offers (Feldman et al. 1991). The results suggest that demand for most TEFRA HMOs is relatively price sensitive, although 13 large HMOs appear to make excessive profits. A relatively low markup, resulting from competition with Medicare supplementary insurers and HCPPs, explains how TEFRA HMOs can enjoy favorable selection and still be dissatisfied with their profit margins in the Medicare market. A low markup also suggests that removing the ACR rules would allow HMOs to offer basic coverage with premium rebates, without risking excessive profit-taking by the HMOs.

Specific Recommendations for Medicare HMO Payment Reform

Our specific recommendations for Medicare HMO payment reform address the problems of distorted prices and poor information. The recommendations can be implemented in three phases.

Phase 1

Some price distortions in the Medicare health plan market can be corrected regardless of HCFA's method of paying Medicare HMOs. These corrections constitute our first set of recommendations. First, HCFA should discontinue the adjusted community rate (ACR) and allow Medicare HMOs to offer whatever benefits they choose (at least equal to basic Medicare coverage) at whatever premium the market will bear. If the HMO can offer a benefit package at least equal to basic Medicate coverage for less than its AAPCC-based payment, and wishes to give a premium rebate, it should be allowed to do so. Allowing HMOs to offer different levels of benefits does not preclude HCFA from establishing a rating system, similar to the Omnibus Budget Reconciliation Act (OBRA)-90 categories implemented for FFS supplementary insurance policies in 1991, to assist consumers in making their choices. Second, to prepare for implementation of competitive pricing, HCFA should study the effect of TEFRA-risk HMOs selling FFS Medigap policies on FFS sector costs. TEFRA-risk HMOs whose physicians also treat FFS Medicare patients have a strong incentive to encourage selective enrollment or disenrollment in the TEFRA-risk plan. Finally, as a part of Phase 1, HCFA should undertake an independent assessment of current methods used to calculate the AAPCC in order to verify Nelson and Brown's (1989) finding that Medicare HMOs may be overpaid by 15 to 74 percent. This assessment should focus on the finding that the current AAPCC may not measure accurately the cost of caring for FFS beneficiaries in the FFS sector, and probably should be directly calculated from average expenditures in the AAPCC risk categories in a national random sample of market areas. The cost of this study is very small compared with the amount of probable current overspending.

Phase 2

The recommendations in Phase 2 are designed to improve information in the Medicare health plans market. Where qualified HMOs wish to enter the Medicare market, Medicare should institute annual open enrollment periods. Annual open enrollment with limited switching at other times during the year would serve two purposes: it would facilitate the collection and presentation of data on health plan choices and it would make the Medicare health plans market resemble group, rather than nongroup, insurance, thereby alleviating the problems of individual risk selection and biased disenrollment. The open enrollment period should extend for one month and include all Medicate-sponsored plans: TEFRA HMOs, comprehensive Medicare plans (CMPs), and HCPPs. State regulatory agencies should be encouraged to coordinate their review of Medigap rate increases with Medicare's open enrollment date and to fix Medigap coverage and rates to cover the same period as HCFA's enrollment year to maximize the quality of comparative price and coverage information available to beneficiaries at open enrollment. Ideally, state regulatory agencies would require Medigap insurers to participate in the annual open enrollment process. In the absence of statelevel initiatives, such coordination should be mandated at the federal level

During the open enrollment period, enrollees could change plans without penalty, but at other times, any enrollee wishing to switch health plans could be subjected to health screening by the health plan he or she wished to join. HCFA, as manager of the FFS sector, should be no more willing than HMOs to accept high-risk beneficiaries between open enrollment periods. Beneficiaries not expressing a choice during open enrollment would remain enrolled in their current health plan. Different market areas could have different open enrollment dates, but a national open enrollment date could be a particularly effective way to focus beneficiaries' attention on their choices.

HCFA should contribute to the cost of providing information to beneficiaries on the coverage and premiums offered by Medicare health plans and should support initiatives to provide information on quality of care in health plans. Also during Phase 2, the federal government should end its subsidy of the Medigap market either by taxing Medigap premiums or by requiring that all Medigap insurers accept the HMO capitation payment and assume responsibility for basic Medicare coverage.

Phase 3

Phase 3 constitutes full-scale implementation of the competitive pricing system. During Phase 3, HCFA should set its contribution to premiums as a function of the lowest price for basic Part A and Part B Medicare benefits (or some other basic benefit package specified by the federal government) submitted by a qualified plan in a predefined market area. This contribution should be paid on a "level dollar" basis to all health plans, including FFS Medicare. The FFS premium, or expected average cost of caring for FFS beneficiaries in a market area, is already being calculated as part of the AAPCC payment. In the competitive pricing system, HCFA should be an aggressive manager of the FFS sector. As manager of the FFS health plan, HCFA should pursue aggressively any cost-containment mechanism it thinks will improve the competitiveness of the FFS plan. Those mechanisms may include both regulatory approaches to cost containment, such as DRGs, and competitive approaches, such as competitive bidding for specific services. No current HCFA cost-containment initiatives in the FFS sector necessarily are affected by our recommendations. As overall manager of the competitive pricing system, HCFA should be permitted to pursue federal prosecution of antitrust violations by health plans participating in Medicare. This enabling legislation should override any exemption granted by the McCarran-Ferguson Act.

At a minimum, these recommendations apply to 57 metropolitan statistical area (MSA) markets with more than one active Medicare HMO, which contain 40 percent of the U.S. elderly population. The recommendations might also apply to 39 additional MSAs with one Medicare HMO and more than one HMO operating in the employed sector. The recommendations would stimulate HMO growth and encourage the development of additional Medicare HMOs in areas currently not served by a Medicare HMO or served by only one.

Our list of recommendations leaves several important details of the competitive pricing system unresolved:

- 1. How should the competitive pricing system be administered? It is important for the government "sponsor" of the competitive pricing system to have intimate knowledge of local market areas, implying state or regional administration.
- 2. How should market areas be defined? In the state of Minnesota's competitive pricing system, HMOs are required to serve state employees in any county where they serve anyone. Medicare might consider a more flexible approach, as long as safeguards against market segmentation were in place.
- 3. How should payment adjustments, such as those for a disproportionate share of Medicare patients, teaching, and capital costs, be treated under the competitive pricing proposal? The answer to this complex question should be based on an analysis of the beneficiaries of these adjustments. By definition, the recipients of charity care are not in a position to pay for the benefits they receive, but one could argue that subsidizing free care for the poor benefits all members of society. If so, the disproportionate-share adjustment should be removed from calculation of costs in the FFS sector and financed out of general tax revenue. We do not have specific recommendations at this time, beyond noting that, in general, those who benefit from each of the payment adjustments listed above should bear the cost.

Not all of our recommendations are new or original. The concept of basing Medicare's contribution on premiums in a competitive market was proposed by Ralph Saul (U.S. Senate Special Committee on Aging 1979). McClure (1982) proposed open-enrollment periods for Medicare, a fixed government contribution to premiums, and legalization of premium rebates. Luft (1984) also wrote on the effects of fixing the government's contribution. Enthoven (1988a,b) has detailed Medicare's role as

an active "sponsor" and manager of a competitive market for Medicare health plans. McCombs (n.d.) drew the analogy between Medicare's current payment policy and a voucher system, suggested a voucher system for setting the AAPCC, and pointed out the problems of omitting the FFS sector from the voucher system.

Our recommendations may not be popular, initially, with Medicare beneficiaries who currently benefit from a large government contribution to premiums based on FFS costs. However, beneficiaries and their lobbyists probably are aware that, in the face of current budget deficits, an expansion of the basic Medicare benefits package will be difficult or impossible as long as the government's price for the current package remains dramatically inflated.

Any recommendation that reduces payment to HMOs will be unpopular with the HMO industry, particularly the less efficient HMOs. The HMO industry may be more enthusiastic about the recommendation that Medicare end its subsidy of the FFS sector and bring the structure of the Medicare market closer to that of employment-based insurance.

Although our primary concern in this analysis has not been the popularity of our recommendations with the interest groups they would affect, we realize that even if our recommendations are technically correct, HCFA may be constrained politically from implementing them. Because the current Medicare HMO program almost certainly increases the cost of basic Medicare coverage and may actually discourage Medicare HMO enrollment, we believe that Congress should seriously consider terminating the Medicare HMO program if payment reforms cannot be implemented. We would make the same recommendation to a large employer that followed Medicare's current policy of basing the firm's premium contribution on FFS costs, distributing little or no information on health plans to its enrollees, and allowing HMOs to disenroll members continuously to the FFS sector. Such a firm almost certainly could reduce total premiums (paid by both the employee and employees) by offering only a FFS plan, even if the FFS plan was rather inefficient. HMOs could reduce this firm's total health care expenses only if the HMOs experienced adverse selection, or if the efficiency of the FFS plan was positively influenced by the presence of HMOs. Current empirical evidence suggests favorable selection into Medicare HMOs, and no published study to date has shown that increased HMO market penetration reduces total Medicare costs in a market area.

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Appendix: Health Plan Contracting Methods Used by the State of Minnesota

The state of Minnesota employee benefits program provides health benefits for 53,000 employees. With dependents and retirees, the program covers approximately 120,000 people, making it the largest employerbased health insurance group in the state. Unlike most employers who have employees in relatively few locations, state employees work in every county, and the state is a major employer in many counties. The state's health benefits program must, therefore, serve the needs of people in urban and rural areas, and in areas with and without HMOs.

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Before 1985, the cornerstone of the state's approach to health plan contracting was a fee-for-service (FFS) plan offered through Blue Cross/Blue Shield. This was the original plan in the program before the advent of HMOs, and the only plan available statewide. During most of the 1980s this plan had half or more of the total group enrollment, and in recent years was offered on a self-insured basis.

Until its repeal in 1985, a state law allowed any HMO into the program that wished to be offered. This law resulted in the state offering a large number of HMOs-at times as many as ten. HMOs are available only in certain parts of the state, with the largest number in the Twin Cities.

Until 1985, the state contribution toward the cost of health insurance was tied to the FFS plan – 100 percent contribution for employee coverage, 90 percent for dependent coverage. Employees did not receive a rebate for picking an HMO that cost less than the FFS plan; however, they had to pay the difference if they picked a more expensive plan. HMO rates tended to cluster near the FFS rate. The state did not critically examine the rates submitted by the HMOs and Blue Cross/Blue Shield.

The health benefits program experienced a watershed year in 1985, although the full extent of change did not become apparent until 1988. During this period the state consolidated its HMO offerings and changed the basis for determining its premium contribution. These changes eventually led to significantly increased competition among the insurers and HMOs that participate in the state's program. From a high of ten HMOs, the state began 1990 with six. This reduction occurred for a variety of reasons, including:

- 1. 1985 repeal of the state law requiring an open-door policy toward HMOs
- 2. HMO attrition and mergers
- 3. rejection of applications to join the plan from HMOs that did not meet the state's criteria and objectives
- 4. departure of an HMO that could not maintain reasonable premium rates
- 5. the end of the policy of allowing an insurer or HMO to offer more than one option to employees or to add plans at its own initiative

Having fewer HMOs simplified the competitive dynamics among the state's health plans. Fewer HMOs meant that the remaining plans had a better chance of gaining a significant market share, and more to gain from offering an attractive, well-managed plan. It also diminished the prospects for biased selection and for gaming the system by, for example, adding plans to undercut a competitor's position and/or to "shore up" an existing plan.

Perhaps the most significant reform during this period was changing the formula for determining the employer contribution. Through collective bargaining with ten unions that represent state employees, the state replaced the formula based on the FFS plan to one based on the lowcost carrier serving a given county. The state continues to contribute 100 percent for employee coverage and 90 percent for dependent coverage, but the contribution is now based on the low-cost carrier rather than the FFS plan. In the first several years after the low-cost carrier formula was introduced, the FFS plan continued to have the lowest rate, and remained the basis for the employer contribution. However, as cost containment became increasingly difficult in the FFS plan, the HMOs were able to offer lower rates despite having better coverage. Beginning in 1989, seven different HMOs were the low-cost carrier in at least some part of the state.

Introduction of the low-cost carrier formula led to striking changes in the pattern of health plan premiums. Table A1 traces these changes from 1988, the last year before the formula began to have an impact, through 1989 and 1990. As the table shows, in 1988 HMO premium rates still tended to cluster around the FFS rate. However, the low-costcarrier formula created a substantial incentive for plans to submit the lowest possible rate regardless of the FFS rate. In 1989 most of the HMOs submitted bids substantially less than that of the FFS plan. Any plan now has a chance to be the basis for the employer contribution, and to attract more enrollees as a result. The competitors also know that it is better to stay "within range" of the low-cost carrier because employees must pay 100 percent of the differential if they pick a higher-cost plan. Finally, the new formula enhances regional competition among HMOs—even if a plan is not the low-cost carrier in the Twin Cities, it may be low cost in another area.

Plans with the greatest structural ability to control health care costs, such as staff-model HMOs, submitted the lowest premium rates. In contrast, the highest premium rates were submitted by plans with open networks, like the FFS plans and the independent practice association (IPA) model HMOs, and by plans that allow out-of-network coverage.

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TABLE A1	Premium for Family Health Coverage in Minnesota State Program
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Percent increase Abbreviations: FFS, fee for service; HMO, health maintenance organization; IPA, independent practice association; PPO, preferred provider organization. 11.0 5.0 6.4 11.4 6.2 8.7 ł ı I I 4,477 4,537 4,790 4,257 \$3,715 3,891 1992 I ı I I Percent increase 5.6 12.0 14.7 11.8 12.7 14.5 20.1 ı ł I \$3,492 3,665 3,834 4,405 4,263 3,822 4,087 1991 ı I ı increase Percent 15.0 14.6 15.3 14.9 10.3 29.0 ۱ ۱ I ۱ \$3,050 3,273 3,343 3,909 3,182 3,655 4,037 1990 ۱ ۱ ۱ increase Percent 15.0 23.8 19.0 32.2 19.9 35.0 37.0 62.6 52.5 I 2,848 3,398 \$2,662 2,759 2,834 3,655 3,031 3,241 3,461 1989 ł 2,128 \$2,315 2,228 2,394 2,293 2,363 2,400 2,481 2,397 1988 ۱» ^a - indicates that a plan was not offered. (PPO with out-of-net coverage) Central MN group health MedCenters Health Plan (IPA-model HMO with (network-model HMO) (network-model HMO) (network-model HMO) (network-model HMO) Blue Cross/Blue Shield Physicians Health Plan (network HMO with out-of-net coverage) out-of-net coverage) (staff-model HMO) (IPA-model HMO) Mayo Health Plan State Health Plan First plan HMO Group health HMO Gold (FFS plan) Share

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This pattern was not evident until the low-cost-carrier formula took effect.

It remains important for employee and union perceptions that a single plan be available on a statewide basis with uniform benefit levels and premium rates—criteria that no HMOs have been able to satisfy. However, tremendous cost increases in the self-insured FFS plan have made its survival uncertain. In order to offer a statewide plan, the state and the unions negotiated reforms that substituted a PPO for the traditional FFS plan. Aggressive management of the new PPO cut the 1990 premium increase to 16.6 percent. The largest percentage increase for 1992 is 11.4 percent and three plans show increases of less than 6.5 percent.

The change in the statewide plan has also had beneficial effects in rural areas. In converting this plan to a PPO, the state limited the health care providers in the network. In some rural areas, this meant that employees would need to change physicians, or incur the higher costs of going out of network. This change was very controversial, but necessary in the judgment of the state and the unions. Rather than risk the loss of long-term patients, some physicians who were not in the new PPO sought to join an HMO plan. In the fall of 1989, initiatives of this kind led to an HMO plan becoming available in 11 rural counties where employees previously had no choice of plans. In other words, aggressive management of the statewide plan led to reduced premiums and created a stimulus to rural HMO development that would not otherwise have occurred. The expansion of HMOs in rural areas will further reduce the state's costs in future years, through the competition encouraged by the low-cost-carrier formula.

In the future the state may consider refinements in how it reimburses HMOs, such as risk-adjusted premiums (e.g., incorporating age, sex, and health history adjustments). This would significantly diminish health plans' risks from adverse selection, and could lead to more aggressive bidding. The state would not wish to pass risk-adjusted costs on to employees, however, raising the need to ensure that money collected from employees matches in aggregate the money paid to HMOs and the self-insured plan. The technical and policy issues associated with risk-adjusted HMO reimbursement may be a key issue for state/union discussions in the next several years—if the state chooses to pursue this option.