

Private Sector Approaches to Physician Payment

Introduction

Much attention has been drawn to the problems of the Medicare program in maintaining the viability of a medical insurance system for elderly and disabled beneficiaries in the face of rising medical costs. It is important to recognize, however, that rising costs of medical care do not affect Medicare alone. In 1983, private payers for health care services in the United States spent **\$206.6 billion**, or 58.1 percent of the national total of \$355.4 billion. Private expenditures grew at an average annual rate of 13.6 percent from 1979 to 1983. Private expenditures for physician services totaled \$49.7 billion in 1983, and were projected to increase to \$60.4 billion in 1985 and to \$88.0 billion in 1990 (21).

Many of those private payments are made by third-party payers in the form of health insurance benefits provided to employee groups. In 1979, 73.3 percent of the population had some form of private insurance coverage, and **60.6 percent** of the population was covered under employer group contracts (83). In 1983, an average of \$2,100 to \$2,400 was spent by medium and large employers on each employee's health care (448). The sources for health insurance coverage in the United States have been commercial insurance companies, hospital and medical service plans (e.g., Blue Cross and Blue Shield), prepayment group medical plans, such as health maintenance organizations (HMOs), and others, such as employers or labor unions (201).

In addition to employee groups, an important part of the market for some insurers is "Medigap" insurance.¹ Corporate payers of health care benefits have a stake in controlling the costs of care for the Medicare population, since 58.4 percent of medium and large employers in 1980 maintained health benefit plans for retired employees over age 65 (83).

Although Medicare was designed around the model of private health insurance (287), from its inception, Medicare has differed from private third-party payers in the specifics of its benefits, coverage, payment, and other policies. Furthermore, although Medicare policies are determined by laws and regulations, practices of private health insurers have been developed in response to market demand from purchaser groups, by Federal laws such as the Employee Retirement Income

Security Act of 1974 (Public Law 9346), and by State laws and regulations (329). In addition, corporate payers of health benefits plans have increasingly turned to self-insurance, or self-funding of benefits, in order to have greater control over the outlays for their employees' benefits. Thus, differences between private insurers' methods of physician payment provide another base of experience for Medicare to examine in considering alternatives for physician payment. The first part of this appendix discusses the range of alternatives in private health insurance.

In addition, the recent outcry from corporate payers of health care benefits for controls on health care costs have caused the private sector health insurance industry to respond with many innovations in the provision of benefits and health care services. Although many of these innovations are too recent to have been evaluated for their effectiveness in controlling costs, the private sector may be gaining experience in identifying cost-effective practices and developing methods for rationalizing the provision of health services that may be worthwhile for Medicare to examine. The second part of this appendix discusses these innovations in the private sector.

The Private Insurance Market

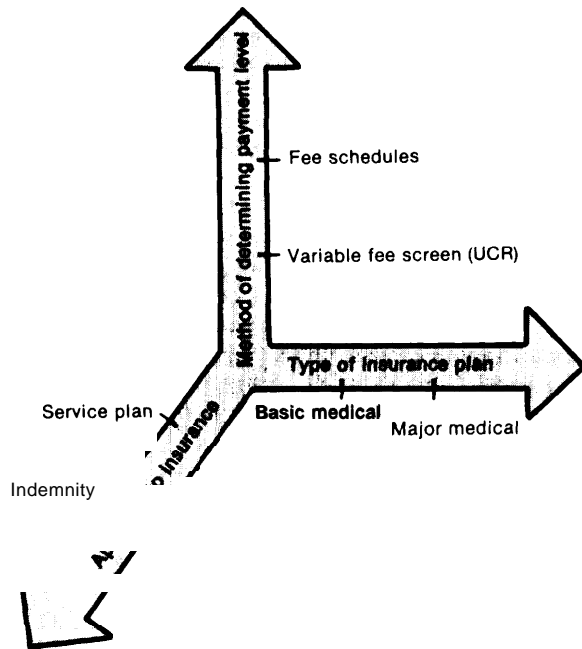
Framework

Like Medicare, private health insurance groups the benefits for which it will pay into broad categories. As is illustrated in figure D-1, in addition to the extent of benefit coverage in an insurance plan and the method of determining payment level, the insurance organization's theoretical approach to health insurance is a dimension of payment. Private insurers also make decisions on a claim-by-claim basis for those services, usually new technologies, not explicitly covered or excluded under the terms of the insurance policy.

Approaches to Insurance.—Indemnity insurance and service plans represent the two theoretical traditional approaches to health benefit coverage. Indemnity insurance guarantees the enrollee a fixed amount for a specific service (95,445). The enrollee pays the physician the physician's billed amount for the service, which may be more than the insurer's guaranteed amount (430), and collects payment from the insurer (439). In contrast, service plans assure their members

¹"Medigap" is described in app. C.

Figure D-1.—Dimensions of Payment for Physicians' Services in Private Health Insurance (Fee for Service)



SOURCE: Office of Technology Assessment, 1985.

specific units of service, for example a day of hospital care, for a regular premium in prepayment of those services (95,445). A physician, if a participating provider, contracts with the plan to accept the plan's allowance as full compensation for his or her services (430), and collects payment from the plan (439). However, the theoretical approaches have become entwined; many service plans incorporate some indemnity features, and some indemnity plans have some service plan features (22).

Methods of Determining Payment Levels.—Both the indemnity approach and service approach use fee schedules and variable fee screens (usual, customary, and reasonable or UCR) in determining payment levels (95,122). In practice, fee schedules are most common in indemnity policies (325), while the UCR method is most often used to determine payment levels in service plans.

Types of Insurance.—In contrast to Medicare, benefits of private health insurance are covered for payment under two principal types of insurance: 1) basic medical expense insurance, and 2) major medical expense insurance. Basic medical expense insurance is further divided into hospital expense insurance, surgical expense insurance, and medical expense insurance. Hospital expense insurance usually includes coverage for hospital room and board and nearly all services provided by a hospital, other than personal

convenience items and most physician fees. Surgical expense insurance typically covers the expenses of surgeons and related professional services. Regular medical expense insurance covers physician's nonsurgical services in a hospital, at home, or in the office, and sometimes covers diagnostic services (587).

Major medical expense insurance applies broadly to almost all kinds of medical care. Major medical expense insurance is sold either as a distinct policy to supplement existing basic coverage, or it provides coverage for all medical expenses (subject to deductibles and coinsurance) in a single unit. This type of insurance, called comprehensive coverage, provides extensive benefits, including coverage for most health care services prescribed by a physician in or out of a hospital (587).

Benefits and Coverage.—The specific benefits, the exclusions, and the extent of financial coverage vary from one insurer to another and from policy to policy within each of the organizations. Nonetheless, in general there are some benefits that differ markedly from those offered under Medicare. Dental care, vision and hearing care, outpatient prescription drugs and, more rarely, physical examinations are covered under some private health insurance policies purchased through employer groups (201,203,575). Some major medical policies also offer a relatively high level of protection against catastrophic expenses. Furthermore, although less extensive than other services, coverage for inpatient and ambulatory psychiatric services is considerably greater than that offered under Medicare (414). As can be seen in table D-1, the percent of coverage differed for each category of benefit.

A constraint on the benefits offered by private insurance plans is State and Federal laws and regulations which mandate particular types of coverage. Until recently, it had been believed that the Employee Retirement Income Security Act of 1974 and the National Labor Relations Act preempted State laws regulating the content of insurance policies for employees. On June 3, 1985, however, the U.S. Supreme Court upheld a Massachusetts statute mandating certain types of mental health benefits in employee health benefit plans, thus opening the way for States to regulate the content of employee health plans. This ruling is causing concern to nationwide corporations, who believe that the costs of their plans will rise if they are required to meet differing benefits requirements in all of the jurisdictions in which they operate (35,329).

Physician Payment in Private Insurance Plans

Private health insurance varies from Medicare in relying on both benefit schedules (fee schedules) and variable fee screens in determining payment levels for

Table D-1.—Group Coverage of Selected Categories of Health Care

Category of health care	Percent with benefit		
	Wilensky, et al ^a	Hedger and Schmitt ^b	HIAA ^c
Ambulatory prescription drugs	88.0%	97.5%	75.0%
Dental care	28.3	74.6	46.0
Vision or hearing care.	11.7		
Vision care		28.0	16.0
Ambulatory psychiatric care.	77.0		93.0
Mental health care.		98.7	
Physical exam	6.3		5.2

^apercentage of civilian noninstitutionalized individuals with group coverage (N= 13,916); Data from National Medical Care Expenditure Survey (1977).

^bpercentage of 116 health insurance plans that covered 5 million employees in 1979. Survey performed in 1981.

^cpercentage of 36 employee health insurance plans with 21.8 million employees.

Survey performed in 1961 by the Health Insurance Association of America (HIAA).

SOURCE: G.R. Wilensky, P.J. Farley, and A.K. Taylor, "Variations in Health Insurance Coverage: Benefits vs. Premiums," *Milbank Mem. Fund Q.* 62(1):53-81, Winter 1964; D. Hedger and D. Schmitt, "Trends in Major Medical Coverage During a Period of Rising Costs," *Monthly Labor Review* 106(7):1-16, July 1983; and Health Insurance Association of America, *A Profile of Group Medical Insurance in the United States* (Washington, DC: HIAA, no date).

their fee-for-service business. Furthermore, as is described below, the variable fee screen method is similar, but not identical, to the method used by Medicare.

Fee Screens.—For major medical policies most private insurance companies and health benefit plans use variable fee screens in determining physician payment levels. The amount allowed by a plan or company for a given service is known as the reasonable charge and depends on a fee screen determination of the physician's usual charge and the local customary charge (UCR). In private insurance terminology, the Level 1 fee screen, the physician's usual charge, is comparable to Medicare's customary charge (583). The so-called customary charge, comparable to Medicare's prevailing charge, is the Level 2 fee screen.

The Level 2 (customary) fee screen in private health insurance is generally set at the 80th to 90th percentile, that is, the charge level at or below which 80 to 90 percent of the billed charges occur. Medicare, by contrast, is legally limited to the 75th percentile for its Level 2 (prevailing) fee screen (Section 1842(b)(3), Soc. Sec. Act). The reasonable charge is generally the lowest of the usual charge (Level 1 screen) or the customary charge (Level 2 screen), both of which are generally calculated from the physician's charge pattern over the previous year (430). In special circumstances, such as an unusually complex treatment, the reasonable fee may be the physician's actual charge, even though it exceeds the fee screens (324).

Fee Schedules.—Most private health insurance companies and health benefit plans use benefit schedules (i.e., fee schedules) for determining physician payment

for their basic medical expense policies (430). The insurer generally pays the lesser of the listed amount for a service or the actual charge by the physician, irrespective of medical specialty or geographic location (430). If the physician's actual charge is higher than the listed amount, the patient is responsible for the additional payment for the service. Maximum benefit schedules can be set by negotiation or according to actuarial calculations.

Blue Cross and Blue Shield Plans.—Individual Blue Cross and Blue Shield plans are members of the Blue Cross and Blue Shield Association, which was formed in 1982 when the Blue Shield Association and the Blue Cross Association merged. All plans are not-for-profit organizations organized under State insurance laws or under special enabling legislation. Blue Cross plans originally covered primarily hospital expenses, but enlarged their scope of coverage to include ambulatory care, other institutional services, and home health care.

The Blue Shield plans were founded to cover physician services, but many have expanded their coverage to include other benefits, such as dental services, vision services, and ambulatory services.

As of September 1985, there were 67 Blue Shield Plans and 68 Blue Cross Plans, of which 40 are joint plans, making a total of 89 corporations (122). Each of the Blue Cross and Blue Shield Plans is an autonomous organization with its own staff, organizational hierarchies, and decisionmaking processes (22). Although there are specific standards to which a plan must adhere to be designated as a Blue Shield Plan and a member of the national Blue Cross and Blue Shield organization,³ the plans vary considerably.

Participation of Physicians.—The concept of participating physicians is a cornerstone of the Blue Cross/Blue Shield plans' philosophy, but there are variations among the plans in applying the concept. Generally, the plan and the physician decide on the payment, without direct patient involvement. In return for agreeing to accept the plan's allowance as payment in full, participating physicians are then paid by the plan rather than by the patient (430). In addition to direct payment by the plan, the non-price incentives for participating in the plans include simplified billing, prompt payment, avoidance of bad debts on covered services, a predictable cash flow, and services of a field staff to handle problem claims (324).

¹In the 1930s and 1940s, insurers sometimes negotiated fee schedules with medical societies. The current interpretation of antitrust law requires that schedules be set unilaterally by the carrier (324).

³For example, "A member must be endorsed by the State or county medical societies of the area in which it operates, be nonprofit, maintain free choice of doctor, return at least 75 percent of earned subscription income to members in benefits, maintain professional relations and utilization review programs and meet certain financial and reporting requirements" (372).

Physicians agree to participate in a Blue Shield service benefit program either independently or because of a decision made by the physicians' medical society (although individual physicians may then opt out of their society's participation agreement). About three times as many individual agreements are entered into as are medical society endorsements (439). The findings of a 1978 study indicate that interest in being a participating physician in Blue Shield plans is quite high. When individual physicians were given the option of participation, only **28** percent of office-based physicians declined to do so (**440**). However, the rate of participation is extremely variable among plans. For example, in **1984** only **16** percent of solo physicians participated in Blue Cross/Blue Shield of Florida (45), although the overall participation rate is **70** percent (**122**).

Although under Medicare a physician may accept or refuse assignment of benefits on a claim-by-claim basis, Blue Shield plans usually require participation on an "all-or-nothing" basis, i.e., the physician's participation agreement requires that she or he accept the plan's determination of reasonable charges as full payment in all cases.

As under Medicare, most Blue Shield plans will also pay for services performed by a nonparticipating physician. However, Blue Shield of Massachusetts cannot, by law, pay nonparticipating physicians, or reimburse subscribers who use them (**587**). The billing and payment relationship between Blue Shield plans, the subscribers, and the nonparticipating physicians varies. Under some plan arrangements, the nonparticipating physician bills the patient directly, with the plan paying the patient. Under other plans, the participating and nonparticipating physicians are paid on the same basis. Other plans will pay nonparticipating physicians directly if the physician obtains an assignment of benefits from the subscriber (**587**), but the physician then cannot "balance-bill," i.e., bill the patient for any excess above the plan's allowed charge (**122**).

Beneficiary Cost-Sharing.—Blue Shield plans traditionally have been associated with the service approach to insurance, that is, the plans guarantee to provide services in full, with subscriber cost-sharing limited to levels based on fee schedule allowances or reasonable charges (**122**). Recently, however, market demands for cost containment have led to an increased emphasis on plans with copayments and deductibles. Florida Blue Cross/Blue Shield, for example, has found that comprehensive insurance combining the medical service coverage of both basic and major medical service plans with subscriber cost-sharing in the form of

deductibles and copayments is more marketable to employers than separate basic and major medical plans. Some plans also offer pure indemnity type plans (**22,458**).

Methods of Determining Levels of Payment.—Plans vary in the ways they construct a fee schedule. Blue Cross/Blue Shield of Florida, for example, constructs separate fee schedules for each of its charge areas. Relative values are determined from the 90th percentile of Level 2 charges and then multiplied by a separate conversion factor for each charge area to establish a fee (**45**).

The methodology for determining UCR charge levels also varies. Some plans, e.g., Blue Shield of Pennsylvania and Blue Cross/Blue Shield of Florida merge their Medicare claims and private claims in creating Level 1 and Level 2 fee screens. The construction of specialty-specific fee screens is another area of variation. Some Blue Shield plans, e.g., Blue Cross/Blue Shield of Florida, calculate a Level 2 fee screen (customary charges) for all physicians regardless of specialty. Other plans calculate separate Level 2 fee screens for particular specialties; Pennsylvania Blue Shield, for example, calculates discrete level 2 fee screens for **56** specialties.

The plans also vary from Medicare in how often they update fee screens. Typically the Level 1 (usual) and the Level 2 (customary) fee screens are revised every **6** or **12** months. Indeed, the UCR method of payment is analogous to a floating fee schedule; the maximum amount the insurer pays is updated at specified intervals, and the shorter the interval between updates, the higher the reasonable fee (**22**).

Medicare's Medical Economic Index has a parallel in the Blue Cross and Blue Shield Association's membership standard that suggests controlling the Level 2 (customary) fee screen. Some plans employ the rate of increase in the Consumer Price Index as a cap on the Level 2 fee screen, a few plans use other indices (**324**), and other plans do not use any control on customary charges (**45**).

Commercial Insurance Companies.—At the end of 1981, more than 1,000 private insurance companies, mostly for-profit proprietary companies or subscriber-owned mutual companies, were estimated to be offering individual or group health insurance covering over 108 million persons (**201**). Unlike the majority of Blue Cross and Blue Shield plans, which provide only health benefits coverage and other health-related services, most commercial firms sell other types of insurance as well. In fact, life insurance is the main line of business of the major companies in the commercial health insurance field (**587**).

Moreover, commercial insurers do not have a system of participating physicians. The large number of

¹This agreement, in order to meet antitrust regulations, must not have anything to do with price setting (**122**).

commercial insurers and the lack of standardization in claim forms and benefit programs among insurers make it difficult for physicians to deal with individual companies. Rather, the physicians bill the patients, who must then obtain reimbursement from the insurance company (587).

Like Blue Shield, commercial insurers use both fee schedules and the UCR methodology in determining physician payment levels. However, most commercial insurers do not differentiate payment levels by specialty. The physician payment methodology is often part of the specifications of group policies. When selling group policies, the insurer either bids on a series of benefits and specifications designed by the prospective buyer or plans a group's health and welfare program based on the needs and resources of the buyer.

Large insurance companies, such as the Metropolitan Life Insurance Co. and the Prudential Insurance Co. generate their own data base on which to base levels of physician payment. Smaller companies usually do not have sufficient claims on which to base a credible⁵ payment level and often depend on other sources for guidance. One such source is provided by the Health Insurance Association of America Prevaling Healthcare Charges System, which collects, compiles, and publishes data on charges for surgical procedures by physicians (200). Some of the larger insurance companies, e.g., Metropolitan Life Insurance Co., use the surgical charge program as a "back-up" source in responding to physician questions about payment level, or if the number of claims on which to establish a credible prevailing charge is insufficient (303).

Both Blue Cross/Blue Shield and commercial insurers are providing new types of insurance coverage through the development of preferred provider organizations (PPOs) (see table 7-s in ch. 7). Payment of physician's services under PPOs through negotiated discounts from the physician's charges or through negotiated fee schedules has added a new source of variation in the methods of payment available under private health insurance plans. In addition, these plans usually provide incentives to the enrollee to obtain care from preferred providers by reducing levels of cost-sharing for care from those providers. However, since many groups other than insurers are also currently involved in the development of PPOs, they will be discussed in greater detail later in this appendix.

⁵The credibility of a payment level has legal implications. When the insurer claims reimbursement will cover reasonable fees, or when the insurer claims reimbursement will not create excess physician billing of the patient for charges in excess of the insurer's approved charges, an insurer has to be able to defend the payment methodology as well as the amount of payment if a provider questions an insurers' payment.

Self Insurance.—An increasing number of employee benefit plans and other organizations are self-insuring, i.e., they underwrite their own benefits coverage with a budget funded by the organization. Plans can either self-administer or hire an outside firm to process claims and to perform other administrative services. In either case, the plan prospectively determines its medical expenditures for the year. If costs are lower than projected, the plan retains the savings, and if costs are higher than estimated, the plan absorbs the loss. In order to protect against high or unexpected costs, most self-funded plans re-insure their plan, i.e., purchase "stop-loss" insurance that takes effect when a claim for a specific individual exceeds a predetermined amount and when the overall costs of the plan are higher than a prespecified amount.

The growth of self-insurance in the past few years has been dramatic, although estimates of market share vary. The Society of Professional Benefit Administrators, the national association of independent third-party contract benefit administration firms, estimates that for mid-1984 commercial insurance company fully insured policies have 20 percent of the market for health benefits coverage, Blue Cross and Blue Shield Plans have 35 percent of the market, and self-funded plans have 45 percent of the market. The self-funded statistic includes plans administered by third-party administrators, self-administered plans, and administrative services only arrangements administered by insurance companies (230).

Both the commercial companies and Blue Cross and Blue Shield Plans are responding to this potential loss of market share by contracting to administer self-insured plans for self-funded organizations (149). The Health Insurance Association of America, measuring a subset of self-funded plans, in the form of administrative services only arrangements and minimum premium plans provided by commercial group insurers, has estimated that prior to 1979 only 5 percent of total insurance company group coverage was self-funded insurance. By 1980, these types of arrangements represented approximately 25 percent of total insurance company group coverage; by 1981, they represented 30 percent of such coverage (201).

Innovative Private Sector Approaches to the Provision of Health Services

Historically, the function of insurance has been to protect individuals from the risk of financial ruin from actuarially predictable untoward events by providing either cash or service benefits to enrolled beneficiaries. Private insurers sought business from large purchasers of group insurance, such as employers, by designing

insurance packages, including payment methods, to fit the specific requirements of the purchaser in protecting the beneficiaries from such risks. In fields of insurance other than health, competitive pressures to provide the greatest amount of protection at the lowest price force insurers to initiate actions that will reduce the number and cost of catastrophic events (e.g., risk management techniques used by liability insurers) (171). Yet, until recently, most purchasers of health care have not been interested in demanding alternatives to traditional forms of insurance which would reduce their costs for care (417,454). In the absence of demand, private insurers rarely made initiatives to control costs on their own.

One reason suggested for the previous lack of interest in cost containment among insurers and purchasers of insurance is that the potential variability among services and in patient need make it difficult for third-party health insurers to identify discrete episodes with predictably finite costs whose risks and costs they can then work to reduce (157). To ensure that the care delivered during a hospital stay, for example, is as efficient as possible or to ensure that the care delivered during that stay is rendered in the most efficient site (which may not be in a hospital at all) requires that the third-party payer move beyond the financial function of insurance to develop a system for monitoring and controlling the provision of care itself.

Rapid growth in the cost of insurance premiums to employers has focused their attention on finding alternative, less costly ways of providing care to their beneficiaries. The increase in the number of self-funded plans, for example, is one example of the response of corporate purchasers of health care to rapidly increasing premiums. The private sector is also adopting innovations in the provision of health benefits for employees that may be viewed as stages in the evolution of various managerial technologies for the provision of health care. The remainder of this appendix will describe each of these approaches in turn:

- approaches directed at the **beneficiary's** choice of medical provider and site of treatment, e.g., changing benefit packages to increase beneficiary cost-sharing or to cover particular services in preference to others;
- approaches directed at medical care *providers*, such as systems of utilization review to monitor the cost, choice, and use of hospital and ambulatory services;
- development of alternative provider **arrangements**, such as HMOs and PPOs; and
- development of **coalitions** of health care purchasers to coordinate activities on a local or regional level.

In addition, private sector payers have established other approaches to containing health care costs, such as health promotion and awareness programs, e.g., corporate “wellness” programs that encourage health-enhancing behavioral changes in employees in hopes of lowering the groups’ utilization of services. Although these efforts may have an effect on health care costs by lowering the demand for medical services (with as yet unknowable effects on the unit price of such services), they are not germane to our discussion of alternatives for the payment of services when the demand for them actually occurs.

To date, research to establish the effectiveness of these changes in private sector policy in controlling aggregate health care costs has been scant, and the evidence available is mostly anecdotal. Companies have noted individual savings in their insurance premiums (or, in the case of self-funded companies, their benefit payouts). In a 1984 survey of corporate benefits officers and senior executives of corporations with more than 500 employees, executives of companies who reported changes in their benefit plans to control costs estimated that the changes in health care plans their organizations had instituted had saved between 16 and 18 percent over the last 3 years over what their costs would have been (273). Independent confirmation of these estimates is not available, however.

Nevertheless, the changes in corporate health benefit plans are worth examining as a type of natural experiment in alternative payment for health care and physician services. The very success or failure of those attempts may affect the overall market for physician services in which Medicare must participate. The response of the system to these innovations may be instructive in designing changes in Medicare payment. Changes in Medicare reimbursement may complement these changes in the private sector, having a synergistic effect on controlling health costs. It should be noted, however, that these lessons from the private sector in changing benefits apply to a working population. Whether those results may then be applied to an aged Medicare population is a question for further research to answer.

Managing the Provision of Benefits To Change Beneficiary Incentives

The redesign of health insurance benefit packages to modify beneficiary incentives to seek less costly forms of medical care has two facets. One is to increase employee awareness of the costs of treatment choices by increasing the level of costs the employee must pay out-of-pocket for that care. The other is to encourage or mandate particular providers of care or modes of treatment that are believed to reduce costs.

Increasing Beneficiary Awareness of Costs.—Increasing beneficiary cost awareness is not per se an alternative method for reimbursing physicians. Yet, the level of coverage a beneficiary receives under his or her insurance plan is an influential factor in the decision to seek the medical care. Health services researchers have noted that the existence of insurance, while perhaps sparing the individual the risk of financial ruin in the event of illness, also serves to insulate the individual and the physician from considering the direct financial consequences of their joint or separate treatment decisions (342,365).

Increasing Cost-Sharing.—Unlike Medicare, patient cost-sharing in the form of a deductible amount and coinsurance generally has been characteristic of only part of the insurance coverage offered by private insurance, i.e., major medical insurance. The deductible amount usually takes the form of an absolute amount, or very rarely a fixed percentage of income, and may be applied on an illness, a person, or a family basis (587). Recently, there has been a trend for large businesses to incorporate some form of cost-sharing in all the insurance that they offer their employees (149).

There are a number of reasons why corporate benefits plans may wish to increase the portion of the cost of health care borne by beneficiaries. Increasing cost-sharing is believed to be relatively easy to implement and administer (209). All other things being equal, sharing more of the costs of care with the employee immediately lowers the costs of care being borne by the company and therefore its health insurance premiums.

A second aspect of increased cost-sharing is that it will cause the beneficiary to consider more carefully whether or not to initiate an episode of care. Thus, increased cost-sharing reduces not only the expenditures of the third party, but also aggregate health care expenditures. Insurers who were asked to estimate the savings resulting from various cost-sharing requirements said that increasing the deductible from \$0 to \$500 would save an estimated average of 20.8 percent in claims, and a coinsurance rate of 30 percent would save an estimated 27.5 percent in claims compared to a zero percent coinsurance rate (209). Empirical data from the Rand Health Insurance study seem to confirm this; adult beneficiaries with first-dollar coverage of health care were found to use significantly more health care services than those who paid some coinsurance or deductibles (343).

Because of these cost advantages, corporate benefit plans have increased the level of cost-sharing borne by individual employees. One recent survey found that 50 percent of a sample of corporations employing 500

or more employees increased deductibles in the past 3 years, and that 22 percent of those corporations instituted copayment on medical bills (273). Another survey found 71 percent of 150 companies surveyed raised the amount of deductibles, 53 percent increased the level of coinsurance, and 44 percent increased the employee's share of the premiums paid (147). A 1983 survey of companies found that 48 percent were introducing or increasing cost-sharing for their employees (25). Public sector employers were relatively less strict in increasing employee cost-sharing than private sector employers. According to survey data, 30 percent of public sector employers have increased their deductibles, although they are still relatively low. Plans with deductibles of \$150 or less covered 65 percent of salaried public employees and 55 percent of hourly public workers, compared with 43 percent of all workers in the public sector (577). Employers were found to be four times more likely to use deductibles over \$100 in 1984 than in 1982, and that plans which covered all costs after meeting the deductible declined from 67 percent in 1982 to 42 percent in 1984 (307).

The Medicare Part B program already imposes 20-percent coinsurance on the beneficiary, while many private benefit plans are only beginning to approach that level. In 1982, 25 percent of employer group health insurance plans had a 20-percent beneficiary coinsurance rate for inpatient care, while in 1984, the proportion increased to 43 percent (307). Although the effect of Medicare coinsurance may be mitigated by Medigap coverage, lower income elderly persons may not carry Medigap coverage if they feel they cannot afford the additional premium. Further, there is substantial evidence that the imposition of cost-sharing has disproportionately negative effects on utilization of health services by persons of lower income (483). In addition, since the elderly are greater users of medical care, it is believed that substantial increases in beneficiary cost-sharing would thus likely come at the cost of reduced access for Medicare beneficiaries (486).

Positive Incentives To Reduce Utilization.—An alternative to directly increasing the costs of care borne by the beneficiary is to create positive financial incentives for the beneficiary to constrain utilization. An example of a direct positive incentive would be a bonus that is paid to a beneficiary if he or she does not submit any claims. Such incentives may be perceived by employees as less harsh because the person deciding to initiate care may be in dire need of that care and perhaps should not be forced to expose his or her own resources to risk. Alternatively, indirect incentives, such as flexible benefits plans, in which the employee can choose his or her level of health coverage and take some or all of the employer's contribution

as cash compensation, are also being tried in hopes of lowering the employer's expenditure on health care coverage.

The use of positive financial incentives for employee beneficiaries to reduce their use of health services is not nearly so common as increasing the level of financial risk borne by the employee. Neither is it known how effective such positive incentives would be in reducing utilization.

Positive incentives usually come in the form of a cash bonus given to employees for not using any services during the course of the year. Alternatively, the employer establishes a fund in the employee's name to which the employer makes contributions, which can be used to cover medical cost-sharing or which can be carried over from year to year and used when needed, while any balance can be withdrawn on retirement (153). However, the Internal Revenue Service has recently challenged the tax-free status of such benefit accounts, declaring that the funds in the account must be spent within a calendar or fiscal year (448). A.S. Hansen, Inc., found that only 10 percent of its surveyed companies had instituted such incentive plans (25).

A related system of positive incentives to reduce utilization is found in so-called "flexible benefits plans," also known as cafeteria benefits plans, in which employees choose between types of insurance coverage available. One type of flexible benefits plan establishes a "flexible spending account" to which employees contribute pre-tax income as a type of voucher with which they can purchase benefits from a range of options offered by a company. Many employees participating in these accounts have exhibited a preference for greater disposable income rather than for health insurance plans with reduced cost-sharing. The Employee Benefit Research Institute found that health insurance deductibles in these plans averaged \$207, versus a nationwide average for all firms of \$100 (127).

Directing Beneficiaries' Choice of Treatment and Providers.—Health insurance benefits plans are becoming more innovative in the management of their employees' benefits outside the scope of traditional insurance coverage. As was discussed earlier, to direct and manage the provision of health care is a step beyond the insurers' function of providing protection against financial ruin. Several approaches used include the following:

- encouraging or requiring second opinions for nonemergency surgery;
- encouraging or requiring the provision of certain types of surgery and routine laboratory tests on an ambulatory basis; and
- educating employees about and channeling them to efficient providers—i.e., case management.

Second Opinions for Surgery.—There are three types of second surgical opinion programs, varying in the level of coercion involved: the passive reimbursement of second opinions obtained at the initiative of the beneficiary, the active promotion by the company of second surgical opinions, and the requirement that the beneficiary obtain a second opinion for all elective surgery (149). Second surgical opinion programs of any type are among the most common of the private sector cost containment activities directed at beneficiaries. A survey of Fortune 500 companies revealed that 71 percent had some sort of second opinion program, 64 percent have a penalty associated with failure to obtain a second opinion, and 50 percent mandate that employees use the program before surgery (160). Another survey found that 54 percent of a sample of employers began a mandatory second opinion program in the past 3 years (273). Public sector employers were found to be less likely to use strict second opinion programs with 27 percent having mandatory programs, and 32 percent having only voluntary programs (577).

There is still some controversy over the cost-effectiveness of second surgical opinion programs. It is believed that obtaining the concurring opinion of a second, disinterested physician in the necessity for a surgical operation can help to screen out cases for which indications are weak and that may be amenable to less drastic alternative treatments (62). One study found that the mandatory second surgical opinion programs studied exhibited a cost-benefit ratio of 2.63:1 (i.e., \$2.63 was saved for every \$1 spent to administer the program), while voluntary programs were less effective in reducing costs (146). Some recent studies have determined that 14 to 16 percent of proposed surgeries submitted to second opinions were not confirmed (62). However, one cannot conclude that those nonconfirmations are indicative of unnecessary surgery. Such nonconcurring opinions may often advise delaying surgery, or pursuing medical rather than surgical treatment, and may eventually be followed by the surgery originally proposed (373). At the same time, it is not known whether delay may result in more complicated surgery later (62). The Congressional Budget Office estimated the benefits of a mandatory second surgical opinion program to Medicare at about \$80 million (418). The American College of Surgeons said that "it seems only prudent to consider the alleged advantages of the second-opinion concept as unproved and to postpone widespread implementation of programs" (10).

Ambulatory Surgery and Testing.—The provision of medical services on an ambulatory rather than on an inpatient basis is also being encouraged by employee health benefits plans. Of the companies re-

spending to the Louis Harris survey, 47 percent had initiated financial incentives of the provision of surgery and testing on an ambulatory basis (273). Gardner, et al., found that 82 percent of Fortune 500 companies were encouraging ambulatory surgery where possible, and 79 percent were encouraging ambulatory testing (160).

It is difficult to distinguish on the basis of these surveys what is meant when it is said that an employer will encourage ambulatory care. Encouragement can be either active or passive; there has been no systematic collection of data on the extent to which private third-party payers simply reimburse for or actively encourage ambulatory surgery testing. Although some insurance carriers maintain lists of procedures that will be reimbursed only on an ambulatory basis, others simply provide information about the availability of the coverage without taking an active role in encouraging it. Some carriers have tried to increase the incentive for physicians to perform ambulatory surgery by increasing the level of reimbursement to physicians for performing surgery on an ambulatory rather than on an inpatient basis (149).

Case Management.—In case management programs, an agent is assigned to the beneficiary to direct and coordinate the provision of medical care for that beneficiary. Although a case manager may be a physician or other provider of care whose services are engaged by the beneficiary directly, in this context case management refers to an agent employed by the corporate benefit plan who arranges and directs the provision of care for the beneficiaries of that plan.

The expertise of a case manager is intended to help employees make choices among less costly providers and services and to reduce the cost of care. At the same time, the use of a case manager involves a considerable amount of overhead for the sponsoring plan. Although a few corporations maintain case management teams in-house, most of those using case management programs contract with outside consultants for services. Costs of case management programs are said to run about 1.2 percent of the level of claims. It is not a commonly used method for managing beneficiary incentives. One survey found that only 1.3 percent of surveyed companies used case management techniques in 1983, although the case manager approach was seen to be growing rapidly (207).

Management of Provider Behavior:

Utilization Review

By monitoring the process of care-giving according to some defined standard, utilization review attempts to manage provider behavior in the provision of care to assure the appropriate use of the plan's resources

for the protection of the plan's beneficiaries and of the financial well-being of the plan.

Utilization Review: Types.—The focus of most review programs conducted by private insurers, third-party administrators, and self-funded employee health benefit plans is on services rendered in a hospital, since those services are the most expensive and the payoff to monitoring services in that site is greater. However, utilization review could be performed in an ambulatory care setting, although it would be likely to be more costly because the site base is so diffuse. Utilization review, as currently used, can be divided into particular types based on when they apply to the patient: preadmission review (requiring approval before an elective admission to a hospital), concurrent review (during the hospital stay), and retrospective review (after discharge from the hospital).

Utilization Review: Sources.—Numerous types of private sector organizations provide utilization review for health benefits plans, either under contract to a number of different plans or as a part of the business of providing health insurance benefits (149). Foundations for medical care and peer review organizations are organizations providing utilization review services that are usually sponsored by physicians and are geographically restricted. They have the advantage of having closer relationships with local providers and may thus have a greater ability to elicit cooperation with the goals of utilization review. Corporations also contract with independent commercial utilization review organizations and with third-party administrators for utilization review services (437). Insurance companies are also developing utilization review programs to meet the competitive challenge of the other organizations (172). The latter three need not be restricted to a particular locality, but may provide services nationwide. Lastly, some employers will organize utilization review programs in-house rather than contracting with outside organizations.

Cost-Effectiveness and Prevalence of Utilization Review.—Empirical assessments of the cost-effectiveness of review programs conflict. Studies performed have usually had methodological flaws that have made it impossible to draw conclusions about the effectiveness of particular programs (142,149). Nor has evidence as to effectiveness of utilization review with regard to Medicare beneficiaries been made available (111). However, anecdotal data available from some companies' benefit plans report savings in expenditures of 7 to 22 percent resulting from utilization review programs, at a cost of about \$1 to \$2 per employee per month (142,361). Others have found that the total costs of care have increased in spite of utilization review mechanisms that constrain utilization. One large company found that its utilization review program re-

Table D-2.—Surveys of Use of Utilization Review Mechanisms Among Employee Benefit Plans

Mechanism	Percent of employers using method					Mercer-Meidinger ^e (1985)
	Gardner, et al ^a (1984)	A.S. Hansen, Inc. ^b (1983)	Louis Harris & Associates ^c (1984)	Hewitt Associates ^d (1982)	Hewitt Associates ^d (1984)	
Preadmission certification	32%	100%	280/o	20/0	26%	260/o
Concurrent review		14	NR ^f	8	34	30
Retrospective review	t &	17	NR	18	40	
General utilization review programs; type unspecified	68	48	27			

^aUniverse of Fortune 500 companies, sample and respondents unspecified.

^bSample and respondents unspecified.

^cPrograms begun in last 3 years; sample of 1,250 companies with 500 or more employees.

^dSample of 1,185 companies.

^eSample of 256 public employers surveyed in May 1985.

^fNR = Not reported.

SOURCES: S. F. Gardner, J. B. Kyzr-Sheoley, and F. Sabatine, "Big Business Embraces Alternate Delivery," *Hospitals* 59(4):81-84, Mar. 18, 1985; A. S. Hansen, Inc., 1983 *Benefits Survey* (Lake Bluff, IL: A. S. Hansen, Inc., 1984); Louis Harris & Associates, *Corporate Initiatives and Employee Attitudes on Cost Containment* (New York: The Equitable Life Assurance Society of the United States, February/March 1985); Hewitt Associates, "Company Practices in Health Care Cost Management—1984," quoted in J. Goldsmith, "Death of a Paradigm: The Challenge of Competition," *Health Affairs* 3(3):5-19, Fall 1984; and William M. Mercer-Meidinger, Inc., *Healthcare Cost Containment in the Public Sector* (New York: William M. Mercer-Meidinger, Inc., 1985).

duced corporate wide inpatient utilization by 46 percent over a 5-year period; yet its hospitalization costs per person covered increased 60 percent in that same period (52). (One cannot be certain that costs would not have risen even further in the absence of the company's utilization review program, however.) In spite of equivocal evidence, the use of utilization review in the private sector has been expanding among larger employee benefit plans. Table D-2 summarizes some recent survey data on the prevalence of various utilization review methods.

One reason cited by companies for the use of utilization review programs is that, rather than being considered a cost-saving practice in itself, it is seen as a method for collecting provider-specific utilization data that can later be used as a bargaining tool for negotiation of preferred provider arrangements and other alternative health care systems (149) (see discussion below). Still, it is believed that utilization review programs possess a great deal of potential for reducing the costs of care, simply because the known degree of nationwide variation in use of services suggests that reductions in utilization are possible without a loss in quality of care (208). A utilization review program can call attention to patterns of care that fall out of line with established norms, and may educate providers in how their practice patterns diverge from those of others. Another reason for the use of these programs may be a belief in the so-called "sentinel effect," which holds that the process of review need not necessarily call particular episodes of care into question. Rather, the fact that the review process exists at all will cause providers to behave more cautiously in prescribing care.

There is a further difficulty in instituting and coordinating utilization review programs, particularly for

corporations doing business nationwide. Medical service data are not collected in any systematic fashion throughout the country, making it difficult to calculate and compare plan use with nationwide norms for care. Providers have been unwilling to cooperate with utilization review programs in the past, although that reluctance is lessening as providers come to believe that it is in their own best interests to cooperate (149).

Development of Alternative Provider Arrangements

Alternative provider arrangements place the choice of treatment in the context of a system for the provision of care. Although individual treatment choices may still be left to the discretion of the patient and the provider, the presence of a superseding organizational structure may force the provider to account for the economic trade-offs between different treatment choices. If the success of the organization is predicated on the ability to deliver health care in a more cost-conscious manner.

Types of Alternative Provider Arrangements.—Although alternative provider arrangements derive from numerous sources, including hospital/physician joint ventures, insurance companies, and consumer groups, corporate benefits plans have recently become leading figures in the establishment of alternative provider arrangements. The major types of alternative provider arrangements considered in this appendix are PPOs and HMOs. Although health maintenance organizations have been in existence for nearly 50 years and have been extensively studied (see ch. 7), PPOs are a newer form of alternative provider arrangement that has not been extensively studied. Nevertheless, PPOs have attracted attention because of their poten-

tial for creating financial incentives for beneficiaries to choose cost-effective providers.

Preferred Provider Organizations (PPOs).—PPOs include a diverse array of arrangements between a third-party payer and providers of health care, including physicians, hospitals, or both. Estimates of the number of PPOs differ. In January 1985, the American Association of Preferred Provider Organizations identified 143 operational PPOs in 28 States and the District of Columbia (7). According to the Institute for International Health Initiatives, as of June 1985, 229 PPOs were operational, 67 were defined as preoperational, and 38 were of undefined status, in a total of 35 States (237). A conservative estimate of the number of persons enrolled in PPOs in June 1985 was about 5.8 million, a fourfold increase from a December 1984 enrollment estimate of 1.3 million (382). PPOs vary in a sponsorship, membership, and payment methodology. As of June 1985, most PPOs had been sponsored by providers, with 52.3 percent having been sponsored by physicians, hospitals, or physician/hospital joint ventures. Insurance companies and Blue Cross/Blue Shield plans supported 16 percent of the total (237).

Physicians providing services under the auspices of a PPO generally agree to fee-for-service reimbursement at some discount from their customary, prevailing, and reasonable charges, although arrangements have included reimbursement according to a fee schedule or on a cavitation basis. Of those PPOs responding to the survey, 29 used a relative value scale, 23 used a fee schedule, 18 used individual provider discounts, 18 used "modified fee for service," 3 used gatekeeper reimbursement, and 3 used cavitation (7).

Among the characteristics that may be involved in a PPO, those features that distinguish it from other types of payment plans are: 1) that the providers agree to accept payment for medical services at some discounted rate, and 2) that providers are willing to accept the scrutiny of utilization review programs in the provision of care. PPOs are believed to be making increasing use of utilization review programs, although most of the efforts at utilization review so far have concentrated on inpatient rather than ambulatory care (382). A 1984 survey showed that of the operating PPOs responding to the poll, 83.1 percent used precertification of admissions, 63.4 percent used discharge planning, 57.7 percent used concurrent review, 54.9 percent used retrospective review, and 35.2 percent used second surgical opinions (425). The Institute for International Health Initiatives found that 73 percent of its respondents had preadmission certification, 74 percent had concurrent review, 66 percent had retrospective review, and 43 percent had mandatory sec-

ond surgical opinion programs (237). These results suggest that PPOs use utilization review programs more frequently than traditional employee benefit plans (see table D-2).

One example of a PPO developed by a private insurer is one sponsored by Blue Cross/Blue Shield of Florida (45). Its strategy involves agreements with selected hospitals that have a reasonably low payment level based on the hospital prospective payment system of diagnosis-related groups (DRGs). If a hospital agrees to participate, Blue Cross/Blue Shield of Florida will then negotiate a DRG contract with it and request the hospital's assistance in signing its medical staff for the PPO.

For the PPO program, the plan has divided the State into four regions. A fee schedule based on 90 percent of the average billed charges for 1983 is being developed for each of three regions. If a physician agrees to become a preferred provider, he or she will accept the lower of his or her billed charges or the scheduled fee. The physician also agrees to a system of preadmission certification, certain locally determined surgical procedures requiring to be performed on an ambulatory basis and a medical necessity retrospective review of claims. In return, Blue Shield promises to review, but not necessarily update, the fee schedule annually.

A different method had been designed for determining the level of physician payment for physicians in the southern region of Florida, which differs markedly from the other regions in numbers and types of physicians and beneficiaries. For the southern region, a UCR fee schedule is being developed that is based on the 75th percentile of the physicians' 1983 billed charges. Since the 90th percentile is used for determining the reasonable charge for the plan's traditional business, basing the payment on the 75th percentile assures a discount. The payment is tailored to each physician's charges as contrasted with the regionwide fee schedule described above, since each physician will be paid the lowest of the usual, billed, customary, or reasonable charge.

Health Maintenance Organizations (HMOs).—HMOs are organizational entities that accept payment for the provision of medical services on a per-enrollee cavitation basis. The HMO makes arrangements with a panel of physician and hospital providers to provide services to those enrollees, and bears risk for the costs of services in excess of the cavitation payment. Except in an emergency or with prior authorization, the enrollee is required to obtain health care services only from those providers with whom the HMO has contracted to obtain care. HMOs increased from 39 to 337 between 1972 and 1984, and the number of subscribers

increased from 3.5 million to 16.7 million (240). In 1983, roughly 40 percent of HMO members were in one of the Kaiser plans (239).

Commercial insurance companies are actively involved in a growing segment of the HMO industry, “national HMO firms,” which are firms that own or manage separate HMO firms in two or more States (239). Commercial insurance companies sponsored about 10 percent of HMO plans in 1983, which enrolled 11 percent of HMO clients (239).

Potential for Cost Savings.—PPOs can be seen as a competitive response by insurers and health care providers jointly to market their services as a unique “product” that may be superior to others’ services because it is less expensive on a per unit basis, or, more importantly, less expensive in aggregate because of the efficiency of the providers. Beneficiaries enrolled in the PPO are encouraged to use PPO services by benefiting from reductions in cost-sharing. However, their choice of caregiver is not restricted to these preferred providers; they may choose any other provider outside of the arrangement as long as they pay the applicable deductible and coinsurance.

Preferred providers who simply offer to discount the price of their services while recouping their losses through expanding their volume of services do not offer the same cost savings as preferred providers who both discount their services and maintain strict efficiencies in the provision of their services. Few existing PPOs maintain the necessary sophistication of data collection, however, and the record of PPOs in constraining costs has not been evaluated (52). Nevertheless, many believe that the development of more sophisticated information systems and utilization review mechanisms will allow PPOs to distinguish truly efficient providers and offer their services to the marketplace as a distinct medical product.

Development of Health Care Coalitions: Cooperative Ventures in Health Care Cost Containment

Coalitions have evolved on a regional basis to address some of the unique variations in health care utilization. Although the name “coalition” connotes the ideal of a merger of a broad range of interests in the health care field, up to this time coalitions have been organized largely by employers (308). Estimates of the number of coalitions differ. The U.S. Chamber of Commerce reported that in 1984 there were 135 coalitions with 6,500 members, an increase of 14 percent from the year before (380). The American Hospital Association found 151 coalitions operating in 1984, with an additional 14 in the development stage (12,

381). This was an increase of 13 percent from the year before.

Coalitions, though perceived by some as underrepresenting some of the responsible parties in health care cost containment (308), do provide a mechanism for participating corporations to cooperate in the pursuit of specific goals defined by the membership of that particular coalition. To the extent that the coalitions have unique goals specific to the conditions of the health care market in their regions, the members establish their own criteria for success and predicate the continued existence of the coalition on those criteria (149).

Among these goals is the development of provider-specific utilization data systems, which are crucial to the identification of efficient providers. Having identified these providers, one can construct an alternative, cost-conscious provider system. According to U.S. Chamber of Commerce figures, 80 percent of the coalitions are involved in such activities (380). The American Hospital Association found that 71 percent of the respondents to its survey of coalitions were involved in the development of data systems (12). Coalitions have served as foci for political action in attempts to change local and State regulations in order to foster a more competitive market for health services, and have been instrumental in establishing State all-payer rate-setting regulations in Massachusetts and Connecticut (73,208). Other coalitions have served as a mechanism for employers to establish alternative provider arrangements. According to the U.S. Chamber of Commerce, 70-percent of existing coalitions are active in developing such arrangements (380). According to the American Hospital Association, 44 percent of coalitions responding to its survey were active in developing alternative provider arrangements (12).

Conclusion

The pace of change in the private health insurance market has become very rapid, as the industry has responded to the demands of its customers to provide new approaches to financing and providing health care. Many of these changes in the financing and provision of care are too recent to evaluate for their effectiveness in reducing costs while retaining quality of care. Corporate benefits managers are taking on the role of being the informed buyer for their employees/beneficiaries amid the plethora of new alternatives in insurance coverage and alternative provider arrangements. Nevertheless, individual insurance beneficiaries will require greater access to information in order to make rational choices about the purchase of health care (483).

The lessons learned from the private insurance industry in the provision of health care relate to changes in payment to physicians under the Medicare program, but results from that experience should be applied with caution. The effectiveness of many private sector initiatives in controlling costs and preserving quality is unknown. In addition, there are distinct differences between the populations covered by Medicare and those covered by private insurers. Further research will be required on such issues as:

- Does increased cost-sharing cause beneficiaries to

forgo necessary health care and result in greater expenditures later?

- How effective are various forms of utilization controls in assuring cost-effectiveness and quality of care?
- How effective are PPOs in restraining costs?
- To what extent can the experience of private sector insurers in providing care for their beneficiaries be duplicated for public sector beneficiaries? **(368).**