Cost Management in Employee Health Plans

Paul B. Ginsburg, Jonathan H. Sunshine
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RAND
FOREWORD

Decisionmakers in business and labor share a concern about the rising costs of health care, which are forecast to reach $1.5 trillion by the year 2000. In order to preserve and maintain the health of the workforce, while controlling health insurance costs, employers are increasingly taking full advantage of new health services delivery options. These goals require informed policy choices.

As a retired businessman, the late Gustav O. Lienhard, Chairman of the Robert Wood Johnson Foundation from 1971 to 1986, took particular interest in the project that has produced this book. Mr. Lienhard recognized that today's—and tomorrow's—managers and union leaders would need a thorough knowledge of the health care system to carry out their responsibilities effectively.

We are pleased that the handbook by Dr. Ginsburg and Dr. Sunshine so well fulfills former Chairman Lienhard's hopes—and our own expectations. It is a noteworthy accomplishment that deserves wide attention.

—Robert J. Blendon
—Jeffrey C. Merrill

The Robert Wood Johnson Foundation
PREFACE

As the proportion of payroll devoted to employee health benefits has increased relentlessly, health care cost management has begun to receive higher priority among corporate and union leaders. This handbook is intended to brief those leaders on the causes of rising health care costs, the range of options available to them, and major developments in government health financing programs that are likely to affect employment-based health plans. Its concise but thorough discussion of the health care cost problem—and initiatives that can be taken to deal with it—has been developed for leaders with broad ranges of responsibility rather than for the "health care cost containment" specialists that some large organizations employ. An annotated bibliography containing the sources for this report is included.

The authors have extensive experience in health care cost containment. Paul B. Ginsburg, currently executive director of the Physician Payment Review Commission, wrote this handbook while a senior economist for The RAND Corporation, where he led a major study of preferred provider organizations (PPOs). Prior to that, he directed health policy analyses at the Congressional Budget Office. Jonathan Sunshine is an independent consultant who has advised corporate clients on PPOs, wellness programs, and other health care matters. Both authors hold doctorates in economics.

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TABLES

2. Cost Control Methods Used by Various Types of Programs 18
3. Risk Factors for the Three Leading Causes of Death 47
4. Contribution of Risk Factors to Mortality from Heart Disease and Cancer 47
Evidence of Wellness Programs' Effects ............... 49
What Makes for Successful Wellness Programs? ....... 53

VIII. USING THE ADVANTAGES OF SIZE AND NUMBERS ........................................ 55
      Self-Insurance ........................................ 55
      Private Group Action .................................. 57
      Government Action .................................... 59

IX. MEDICARE ................................................. 62
      Background ............................................ 62
      Policy Options ........................................ 64

X. MEDICAID .................................................. 69
      Background ............................................ 69
      Policy Issues .......................................... 71
      The Poor Not Covered by Medicaid ................. 72

XI. CONCLUDING THOUGHTS ................................. 75

ANNOTATED BIBLIOGRAPHY ............................... 79
# CONTENTS

FOREWORD ........................................ iii
PREFACE ........................................... v
ACKNOWLEDGMENTS ............................... vii
TABLES ............................................. xi

Section
I. INTRODUCTION ................................. 1
II. RISING HEALTH CARE COSTS ............... 4
   Components of Cost Increases ................ 4
   Causes of Rising Costs ....................... 7
   Bases for Concern ............................. 8
III. UNDERLYING METHODS FOR HEALTH COST
    MANAGEMENT ................................... 10
    Reducing the Resources Used in Care ...... 10
    Obtaining a Lower Price for Care .......... 13
    Reducing the Amount of Illness ............. 15
    Shifting the Responsibility for Payment for Care .... 16
    Additional Considerations ................... 16
IV. UTILIZATION MANAGEMENT ................. 19
    Types of Utilization Management .......... 19
    The Results of Utilization Management ...... 21
    Issues in Utilization Management Programs ... 22
V. ALTERNATIVE DELIVERY SYSTEMS .......... 27
    Health Maintenance Organizations ......... 27
    Preferred Provider Organizations .......... 32
VI. BENEFITS REDESIGN ......................... 35
    Overall Degree of Cost Sharing ............ 35
    Varying Cost Sharing by Service .......... 39
    Employee Choice of Benefit Structure ...... 44
VII. WELLNESS .................................... 46
    Rationale for Wellness Programs .......... 46
    Program Examples ........................... 48
I. INTRODUCTION

The rise in the proportion of society's resources devoted to health care is one of the more significant developments in the United States' economy during the last 20 years. In 1965, the nation devoted 5.9 percent of Gross National Product to health expenditures. By 1985, the percentage had increased to 10.7. In constant 1985 dollars, per capita expenditures for personal health care increased 114 percent, from $704 to $1,504.

This increase had a significant impact on employers and on government. According to a U.S. Chamber of Commerce survey, those employers offering health insurance benefits in 1985 devoted 6.5 percent of payroll to them. Health accounted for 12 percent of federal outlays in that year and for 8 percent of spending by state and local governments.

Increasing spending for medical care initially was regarded as a positive development. It distributed the benefits of medical care more broadly, improving access for groups that had faced financial barriers, and permitted many new technologies to be incorporated into mainstream patterns of practice.

But over time, many began to regard the continual increase in resources going to medical care as a decidedly mixed blessing. Employers' contributions to health benefits plans became a large enough proportion of payroll to make some firms less competitive, particularly against foreign competition. Unions began to realize that the rapidly rising cost of health benefits meant that less money was available for wage increases and for other fringe benefits. Governments stopped expanding entitlements to benefits from publicly financed health programs and were forced to raise taxes and cut spending in other programs in order to honor existing commitments.

After years of handwringing about rising health care costs, hopeful signs may be starting to appear. From 1983 to 1985, U.S. health expenditures increased only 8.6 percent per year—the smallest rate of increase in 19 years. Blue Cross-Blue Shield's plans in the Federal Employees Health Benefits Program, which cover federal employees nationwide, experienced a dramatic slowing in the growth of claims. Admissions declined by 14 percent and average length of stay by 9 percent between 1983 and 1984. Only a portion of this reduction was offset by higher rates of use of outpatient services, and the plans paid a rebate to the federal government and its enrollees. Between fiscal
years 1983 and 1986, Medicare outlays increased only 10 percent annually and Medicaid only 9 percent, compared to average annual increases over the previous five years of 18 percent and 13 percent, respectively. Some indicators detract somewhat from the optimism of the above. The slowdown in expenditure growth does not look as impressive when compared to general inflation, for example. And 1987 has brought news stories of large increases in private employers' health insurance premiums. Some fear that relief from rapidly rising costs may be only a one-time change rather than a permanent reduction in the rate of increase.

The recent slowdown in the rise of health care costs is not an accidental phenomenon. In large part it reflects concrete action taken by employers, unions, and government. Employers and unions have redesigned their health benefit packages to include more cost sharing—for example, by introducing deductibles for hospital care. They have increased efforts to review the appropriateness of use of services through devices such as preadmission certification. The Medicare program changed its method of paying hospitals from reimbursement of costs to a predetermined fixed payment per admission. Medicaid programs have increased the use of alternative delivery systems, such as HMOs and hospital prospective payment. The effects of these and other actions taken by payers are likely to restrain rising health care costs for some time to come.

This handbook was prepared to acquaint top business and union leaders with the tools available to contain the health care costs for which employers and employees are responsible. It begins with a brief discussion of the nature of rising medical costs. The discussion covers the dimensions of rising costs, what we know about the causes, and why rising costs are a concern. Section III outlines underlying methods for cost control. These include reducing the use of care, shifting care to lower-cost modalities, obtaining a better price for care, reducing employees' needs for care, and shifting responsibility for health care costs to other parties.

Sections IV through VIII describe the major tools for cost management. These include utilization management; alternative delivery systems, such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs); benefit redesign; wellness programs; and strategies to make use of the advantages of size.

Sections IX and X more briefly describe cost containment options for Medicare and Medicaid. While these programs are not likely to be major direct concerns of the audience for which this handbook was prepared, cost containment policies pursued in these programs will have effects on compensation costs in the private sector. For example,
the payroll tax that funds merely the hospital portion of Medicare already totals 2.9 percent of covered earnings and has grown rapidly. In addition, Medicare and Medicaid reimbursement policies may result in hospitals shifting costs to private payers. Finally, these policies may influence patterns of medical practice that apply to all patients, which will also affect costs of employment-based health benefit plans.

A final section draws together the most important considerations of broad strategy in health cost management and the main social issues to be faced.
II. RISING HEALTH CARE COSTS

Effective cost management strategies need to be based on an understanding of the nature of rising health care costs. This section summarizes what we know about the components of rising costs and their causes. Our conclusions include:

- Changes in medical practice have been more important than particularly rapid price increases in explaining why spending on health services has almost doubled its share of GNP since 1965.
- The extensive use of health insurance has influenced these developments through numerous channels.
- The increase in resources going to health care has probably been excessive.

COMPONENTS OF COST INCREASES

A great deal can be learned about the nature of rising costs by decomposing the aggregate data. Table 1 shows average annual rates of increase for the 1965-1985 period. Spending on personal health care increased by 9.34 percent—or a compounded rate of 12.4 percent per year. Price increases accounted for 7.2 percentage points per year. Much of this was general inflation, but the increase in health care prices exceeded general inflation as measured by the Consumer Price Index by 1.0 percentage point per year.

Demographic trends contributed 1.5 percentage points per year to rising health care spending. The number of persons grew 1.0 percent per year, while aging of the population contributed 0.5 percent per year.

After subtracting the effects of price changes and demographic changes, a 3.3 percent annual increase in resources per age-adjusted person remains. This represents a 92 percent increase over the 20-year period studied.

This near doubling of resources reflects the net impact of productivity increases, which reduce resource use, and increases in the intensity with which medical services are used. Data do not permit a separate estimate for productivity, but if productivity grew by, say, 1 percent per year, then the intensity of application of medical service increased by 133 percent over the period. In any case, it is clear that health care resources used per age-adjusted person have increased greatly over the past two decades.
Table 1

PERSONAL HEALTH CARE SPENDING, 1965-1985

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal health care</td>
<td>571.4</td>
<td>12.4</td>
<td>1.5</td>
<td>7.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Hospital care</td>
<td>166.7</td>
<td>13.2</td>
<td>1.5</td>
<td>7.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Physician's services</td>
<td>82.8</td>
<td>12.1</td>
<td>1.4</td>
<td>7.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Drugs &amp; medical sundries</td>
<td>28.5</td>
<td>8.9</td>
<td>1.3</td>
<td>4.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Nursing home care</td>
<td>35.2</td>
<td>15.1</td>
<td>1.0</td>
<td>7.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Other</td>
<td>58.2</td>
<td>11.9</td>
<td>1.5</td>
<td>7.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SOURCE: Calculations of authors based on data from Health Care Financing Administration.

Focusing on categories of health services, resources per capita (after taking demographic changes and price increases into account) increased somewhat more rapidly than average for hospital care (3.8 percent a year) and less rapidly for physician services (2.5 percent a year). Hospital care now accounts for 45 percent of personal health spending, up from 39 percent in 1965. However, the last decade has seen resources devoted to physician services rising more rapidly than those for hospital services. Nursing home care was the most rapidly growing component, and drugs and sundries the least rapidly growing, both in terms of dollars spent and resources per age-adjusted person.

The changes in medical practice that are responsible for increased intensity of service are difficult to identify since so many different procedures are used for a wide variety of conditions. Nevertheless, careful research on selected specific illnesses representative of those in the general population permits some insight into the nature of technological change over time.

Much analysis of the role of technology has focused on whether dramatic and expensive new procedures ("big ticket" technologies) or increased use of low-cost procedures ("little ticket" technologies) accounts for most of the increase in costs. Studies of the cost of episodes of illness for patients treated at the Palo Alto Medical Clinic indicate that during the 1950s and 1960s, "little ticket" technologies,
such as increased use of laboratory tests and X-rays, were responsible
for most of the cost increases. The only "big ticket" technology with a
substantial effect on costs during that period was the use of hospital
intensive care units for patients stricken by heart attacks.

Using the same methodology to study the 1971–1981 period, the
researchers found that the rate of increase in use of "little ticket" items
had slowed down, but that several new "big ticket" technologies came
into use and raised costs substantially. Examples are new modes of
treatment of breast cancer (addition of radiation and chemotherapy to
mastectomy), new modes of treatment of heart problems (coronary
artery bypass surgery and streptokinase infusion), and an increase in
newborns delivered by cesarean section.

These findings are consistent with those from another recent study
of inpatients at a large teaching hospital. For the ten diagnoses studi-
ed, the number of tests and procedures per hospital stay changed little
over the 1972–1977 period. However, significant increases were noted
in the use of new and expensive technologies such as ultrasonography,
fetal monitoring, and radioisotope scanning.

The use of new tests and procedures is only part of the story of how
Technological change has contributed to the rise in health care costs,
however. Technology is a dynamic process, with older procedures dis-
continued as they are replaced or as new knowledge makes them
obsolete. Some medical practitioners have been slow in discontinuing
such procedures despite consensus that they are no longer effective.
One example that is well documented was the continued use of internal
mammary artery ligation for heart disease after a randomized con-
trolled trial concluded that the procedure was not effective.

Many have the impression that patients with catastrophically expen-
sive illness are responsible for an increasing portion of health
resources, but data generally do not support this notion. A recent
study of Medicare showed that the 4 percent of beneficiaries with the
largest reimbursements accounted for 50 percent of total reimburse-
Budget Office study of federal employees under age 65 showed an
increase in the share of expenditures accounted for by the largest
claims between 1974 and 1978, but its magnitude was small. The
increased attention given to catastrophic medical bills appears to be
due more to medical costs growing faster than income than to an
increased share of health care resources going to those patients with
the largest bills.
CAUSES OF RISING COSTS

While numerous factors have contributed to the rise in medical care costs, the widespread use of open-ended payment by a third party has played a role in both directly fostering it and in magnifying the effects of other factors. The dominant form of financing health care has been open-ended payment by “third parties”—private insurers and government programs that passively reimburse patients for medical bills, with only minimal questioning of the price or the appropriateness of the service to the patient’s condition. With neither the physician nor the patient concerned about the cost of treatment, little restrains physicians from prescribing all services that might be effective, regardless of their cost and how small or unproven their effectiveness.

Third-party payment grew rapidly throughout the post-World War II period. Employment-based coverage developed, in part, in response to tax rules that allow employer payments for insurance to be made from pre-tax dollars while out-of-pocket payments must be made from after-tax income. (Section VI explains this situation further.) In 1965, Medicare and Medicaid were enacted. The result of all these developments was an increase in the proportion of personal health expenditures covered by third parties from 35 percent in 1950 to 48 percent in 1965, 57 percent in 1967, and 72 percent today. Of hospital spending, 91 percent is now paid by third parties, and, as noted, hospital spending has shown especially rapid growth.

Not all experts have agreed that third-party payment has been the major factor behind rising costs. A competing explanation has been that technological change, which was once a major factor in reducing costs for some patients—for example, when antibiotics came into widespread use—became a major factor in increasing costs when new developments became predominantly cost increasing. The fact that other Western countries also had rising costs, but had not experienced an increase in the proportion of care financed by third parties (it already was high) is cited as evidence in support of this notion.

Current thinking is that high levels of third-party payment encourage rising costs, just as increasing rates of third-party payment may have in the past. When third-party payment is high, there is little incentive to consider whether the expected improvement in health from adopting a new technology is worth its cost. When all technologies that might be effective are adopted, signals are sent to manufacturers to bring many innovations to market, regardless of the relationship between health outcomes and cost. Anecdotes of dramatic changes in product development strategies on the part of medical equipment manufacturers in response to the more cost-sensitive market for
medical care that has developed in the past few years lend support to this point of view.

Some factors besides third-party payment have contributed significantly to the rise in health care costs. One is the increased supply of physicians. Due principally to a major federal effort begun during the 1960s to increase the number of physicians trained, the ratio of physicians to population increased 50 percent from 1965 to 1984. Studies indicate that more physicians lead to more spending for health services, either through physicians creating a demand for additional services or through easier access to care for patients resulting from more convenient locations and hours and shorter waits. One study estimated that each 10-percent increase in physicians leads to a 4-percent increase in total spending for health.

Another factor contributing to cost increase has been large-scale federal government support of medical research, principally through the National Institutes of Health, whose budget is over $5 billion per year. This support speeds the development of new technologies for medical care, which have tended to expand diagnosis and treatment possibilities and, on balance, generate cost increases.

Defensive medicine by physicians to reduce risk of malpractice suits may also be a significant factor in cost increases. Problems with the use of the tort system for medical malpractice were first highlighted in the mid-1970s when liability insurers raised premiums dramatically, and some stopped writing coverage. Another “crisis” is occurring now with staggering premium increases. Many believe that concern about possible malpractice charges leads physicians to order numerous additional tests and procedures in order to minimize risks of a lawsuit. Some have estimated the cost of defensive medicine at $15–40 billion per year.

Open-ended, third-party payment is likely to have increased the effect of all of these additional factors, for it makes patients and physicians indifferent to the costs of the extra services ordered.

BASES FOR CONCERN

Why the concern about rising medical care spending? After all, in most fields, we view rising spending as a sign of economic health and consumer interest. Moreover, there have been many clearly positive outcomes of higher health care spending. For example, access to care for those with low incomes has improved markedly since the early 1960s. And higher spending for nursing home care frees many middle-aged women from the responsibility of caring for elderly parents. As
U.S. society has become more affluent, spending a higher proportion of resources on services—including health care—is only natural.

While the increase in resources devoted to health care services has had positive effects, characteristics of the health care industry make it likely that too many resources are devoted to health care. We have already seen that with most of the costs of medical care paid by either private insurance or public programs, there is little pressure on either patients or physicians to consider costs. Moreover, those who ultimately pay the bills tend not to be represented when medical decisions are made, and that is true even when patients pay the bills. Under such incentives, the medical care system is quite likely to produce more services than society really wants, in the sense that services with only marginal benefits—if that—and high costs are provided.

An analogy with a hypothetical “food insurance” system illustrates the point. Food is a necessity of life, but if a third party reimbursed 80 percent of all spending on food, and close to 100 percent of restaurant spending, consumption would undoubtedly shift toward the most expensive items. Restaurant eating—especially at high-priced establishments—would substitute for eating at home. Chefs’ incomes would rise greatly, especially if only licensed chefs were eligible for reimbursement.

Excessive spending on medical care is a serious problem for employers, employees, and taxpayers. Health care costs that reflect services that are unnecessary or that have only small additional value but high costs may lead initially to problems of competitiveness for employers due to high benefit costs. Over time, part of the burden will fall on employees as total compensation costs adjust and high spending for health benefits makes less money available for wages and other fringe benefits.

Taxpayers feel the effects of high medical care costs in two ways. First, all employer contributions and some employee contributions to health benefits plans are sheltered from taxation, so revenues are reduced. Second, public commitments to finance health care for the elderly and the poor through the Medicare and Medicaid programs become more costly to honor, making government spending for health care increase. This means either higher taxes or less spending for other valued programs.
III. UNDERLYING METHODS FOR HEALTH COST MANAGEMENT

While the number of specific tools for managing health care costs is large, all affect costs through four underlying methods:

- Reducing the resources used in health care.
- Obtaining a lower price for care.
- Reducing the amount of illness.
- Shifting the responsibility for payment for care.

Focusing on these four underlying methods of controlling costs makes it much easier to understand and choose specific programs for health cost management. This section therefore discusses each of these four underlying methods, dealing with such questions as:

- Is it realistic to think the method can yield substantial savings without being harmful to patients?
- How large are the opportunities for economizing?
- What are the collateral effects, i.e., what is the fallout on others?

REDUCING THE RESOURCES USED IN CARE

Resources used in health care can be reduced (1) through physicians performing fewer expensive procedures or (2) through shifting care to lower-cost settings.

Coronary artery bypass surgery offers a good illustration of the first method. Over 200,000 of these operations are performed each year in the United States at an average cost of about $22,000 (in 1983 dollars) each. Angioplasty—using an inflatable balloon at the end of a flexible tube to clear the artery blockage—could replace a large percentage of these operations and costs less than half as much. Another alternative for many of these patients is treatment with medication, which is, in turn, far less expensive than angioplasty.

Most opportunities for shifting care to less expensive settings involve moving care out of the hospital inpatient setting, which is almost invariably far more expensive than alternatives. Examples include:

- Shifting surgery to ambulatory settings—that is, to hospital outpatient units, to freestanding ambulatory surgical centers, or to physicians' offices.
• Shifting the "tail-end," recuperative phase of a hospital patient's stay to a nursing home or to the patient's own home—in the latter case, sometimes with home health care.
• Shifting care of terminally ill patients to a hospice.

Is Reducing Resources Safe?

Reducing the resources used in health care raises an important concern in many people's minds: Won't it seriously harm patients' health? Fortunately, there is a large body of evidence that speaks to this concern. Basically, it shows that resource use can be cut by a large amount with little if any effect on health.

Because evidence of this kind is so contrary to the common notion of medicine as a science that dispenses only necessary care, and because the evidence speaks to the question of how much the use of resources might be cut, the most important findings are presented here in summary form.

First are the findings on health maintenance organizations (HMOs). Research indicates that in effective HMOs, members use about 25 percent less resources than comparable persons with conventional health insurance policies that cover an equally broad range of care without out-of-pocket costs. Savings are achieved mostly through a reduction in use of hospital care—by as much as 40 percent—and in use of surgery. With some exceptions involving low-income, chronically ill persons, studies have not found health of HMO members to be poorer despite a lesser quantity of resources used in their care. (However, all of the research on health status in HMOs is based on the experience of a small number of large, well-established prepaid group practices.)

It is interesting to note that the Mayo Clinic, a world-famous referral center that also provides general medical care to the local population, is similarly economical in its care delivery patterns and—unlike the situation with HMOs—there isn't a chorus of critics who claim the Mayo Clinic provides poor quality or skimpy care.

The second major line of evidence for the possibility and safety of using fewer resources in health care is based upon the very large geographic variations that currently exist in patterns of use of care and in settings used for care delivery. Typical findings include:

• Within one state, the likelihood of women undergoing a hysterectomy by the age of 70 varied from 20 percent in one hospital catchment area to 70 percent in another. Nearly 90 percent of hospitalizations are in diagnostic categories that show even more variability. The variations do not correlate with
population health, and there is direct evidence that they are the result of variations in physicians' practice styles.

- Even across much larger areas, such as entire states, researchers find substantial variations. Among those enrolled in Medicare, many common procedures show at least threefold differences in use rates between highest and lowest areas even after adjusting for age differences in the populations.

- The percentage of surgical operations performed on an ambulatory basis varies from above 40 percent in the highest states to about 20 percent in the lowest states. The variations reflect regional patterns in medical practice, not differences in characteristics of the states' populations.

- Within the United States, hospital lengths-of-stay have typically varied by a factor of about two to one for any given surgical procedure or diagnosis after eliminating extreme cases and variation due to factors other than practice style. Patients with relatively short stays are receiving some of their care (including self-care) at home rather than in the hospital setting.

Normal, uncomplicated childbirth with no surgery involved provides an instructive example of length-of-stay variations: In 1983, average length-of-stay was about two days in California. In settings that encouraged a brief stay, mothers were typically being discharged in one day (i.e., one 24-hour period) or less. At the other end of the spectrum, the normal stay was four days in Detroit, and in Cleveland, physicians on one side of town were keeping new mothers in the hospital for four days, while on the other side of town the usual pattern was a five-day stay.

Although geographic differences in use of care are often very large, corresponding differences in health status are not found. For example, although causes of infant mortality and maternal mortality have been intensively studied, studies do not find length-of-stay for childbirth a factor that has an effect.

Overall, then, the data on variations contradict the notion that medical care is relatively uniform. Instead, the data show that in most areas of the country, a major reduction in the number of patients hospitalized, the time an average patient spends in the hospital, and the number of operations performed would not require anything more than following the usual practice patterns of other localities.

Studies directed explicitly at the question of whether less care leads to poorer health provide the third major body of evidence on the effects of using less care. These studies include both the RAND health insurance experiment and various nonexperimental studies. In general,
these studies find only marginal, if any, health differences associated with differences in the use of health resources. Measured effects tend to be concentrated among low-income persons with chronic disease.

How Much Can Resources Be Cut?

Given this evidence that using fewer resources in providing health care is generally both feasible and not harmful, how large are the opportunities for reducing resources used? The finding on HMOs that was discussed above indicates that savings of at least 25 percent are possible. The data on geographic variations suggest that even larger reductions might be possible. But one cannot expect to reduce use by the full extent of geographic variation, since not all areas start off with the highest rates of use, and the lowest use areas could be examples of underuse.

In addition, the amount that can be saved by shifting care to a lower-cost setting is generally less than might at first appear. For example, one comparison shows ambulatory surgery facilities charge about one-third the amount that hospitals charge for the same surgery performed on an inpatient basis. However, surgeons' charges are about the same in both settings, so savings on total costs (doctors' fees plus facility fees) are less than two-thirds. Moreover, shifts that involve more at-home care often hide a real cost: The additional patient care that family members and the patient have to provide is real work, with a value, even though it is not paid for in cash. Indeed, family members providing care often must sacrifice their own earnings to do so.

OBTAINING A LOWER PRICE FOR CARE

A lower price can be obtained by shifting patients' care to lower-priced providers or by negotiating a discounted price.

Choosing Lower-Priced Providers

The variation in providers' usual prices is large. Typically, in a region with numerous hospitals, hospital prices differ by up to 2 to 1. This range is found both for relatively simple measures of hospital prices, such as daily room-and-board charges or total revenues per patient day, and for more complex measures such as total costs per case adjusted for case mix. The fact that the range is similar across a variety of price measures suggests it is a good indicator of how widely hospital prices vary.
Data from the Health Insurance Association of America indicate that physicians' charges for a given procedure also commonly show a range of 2 to 1 from high to low within large metropolitan areas. This is true even if the highest 10 percent and the lowest 10 percent of charges are excluded in order to keep extreme cases out of the comparison.

Finally, it is instructive to examine differences in prices for ambulatory surgery, since data have been compiled for at least one local area (St. Louis). In 1985, facility charges typically varied by a factor of 3 to 1 between the highest and the lowest of the 22 ambulatory surgery centers reporting. It is interesting that there was no tendency for freestanding ambulatory surgery centers in the study to have generally lower prices than hospital-based ambulatory facilities.

Although prices charged by providers vary by up to 2 to 1 (or even more), expenditures generally cannot be cut in half by shifting patients to low-cost providers. Patients use a broad range of providers, and thus the average price patients pay is not the highest price in the community, but an average across providers. Also, it is unlikely that many cost containment efforts would seek to switch all patients to the provider that has the lowest price in the community, rather than leaving a considerable range of choice among relatively low-cost providers. Thus, a savings on the order of 20 percent is more likely.

An additional constraint on switching to low-cost providers exists in the case of hospitals. Tertiary-care hospitals—those with special facilities to treat particularly severe illnesses—are generally among the most costly in any community. Proper care of some serious illnesses will require that some patients be treated at these hospitals. However, the need to use tertiary-care hospitals is much smaller than the current pattern of use of them. The most common diagnoses among patients in tertiary-care hospitals are simple ones—for example, normal, uncomplicated deliveries. An informed estimate is that no more than 30 percent of patients who are in tertiary-care hospitals need to be there.

Price Discounts

Price discounting, the second means of obtaining lower prices for care, is becoming more common as a more competitive market for medical services develops.

A health plan's ability to obtain price concessions depends in large part on its ability to shift patients to providers with favorable prices. The degree of excess capacity providers have and the proportion of their costs that are fixed also affect the size of discounts they will offer.
Preferred provider organizations (PPOs) commonly obtain discounts of 10 to 20 percent and, in special circumstances, up to 40 percent.

However, to obtain savings, it is important to pay attention to the actual price to be paid, not to the size of the discount. A discounted price offered by a higher-priced provider will often be well above the full price charged by a more economical provider. And, generally speaking, lower-priced providers probably will offer smaller discounts than higher-priced ones. With their lower prices, they may have less margin for discounting, and with purchasers attracted by their low prices, they will feel less pressure to discount.

In seeking discounts, payers have often found it better to negotiate prices on the basis of units broader than single services—for example, on the basis of all-inclusive amounts per hospital day or per hospital case. This gets away from the incentives of the current fee-for-service system that encourage providers to deliver more services to each patient.

REDUCING THE AMOUNT OF ILLNESS

If the amount of illness in a population can be reduced, the amount of health care used—and its cost—can be correspondingly reduced. In addition, improved health is valuable in itself and reduced illness means reduced benefit costs for absenteeism and long-term disability.

Controlling health care costs by reducing the need for care is the subject of Sec. VII, "Wellness." Underlying the wellness concept are the ideas that much illness is preventable, and that prevention is not a concern only of the medical care system.

In principle, the opportunities for reducing the need for care are very large. For example, the Institute of Medicine of the National Academy of Sciences recently concluded, "As much as 50 percent of mortality from the 10 leading causes of death in the United States can be traced to 'lifestyle.'" Add in a contribution to mortality from preventable environmental causes and from chronic illnesses that can be controlled medically (for example, high blood pressure), and the potential improvements from disease prevention and health promotion loom extremely large.

In practice, a difficulty arises from the fact that "lifestyle" is the primary culprit. Bad habits are notoriously hard to change. For example, only 20 to 30 percent of persons who participate in a good smoking cessation program remain nonsmokers for a full year and, of course, many smokers never participate in a program.
With *lifestyle* as the main factor in reducing the need for care, the main techniques for reducing the need for care revolve around educating people about the importance of lifestyle and motivating them to change behavior. A variety of techniques have had a measure of success, as described in more detail in Sec. VII, and major achievements are possible, particularly over time. For example, the percentage of U.S. adults who smoke has fallen by about one-fourth from the levels of two decades ago. In addition, some risk factors—most notably, high blood pressure—can be improved by medical care, particularly in the workplace, which offers logistical advantages for monitoring patients with chronic diseases. Finally, eliminating health hazards in the workplace and in the community can be helpful.

**SHIFTING THE RESPONSIBILITY FOR PAYMENT FOR CARE**

By and large, shifting of responsibility for payment for care occurs in one of two contexts. First, shifting costs to beneficiaries is a major technique for reducing outlays in employee benefit plans and in public programs. Those who currently pay for coverage (generally employers and taxpayers) pay less, but those covered by these programs pay more.

Second, shifting costs to other payers is often an indirect result of cost-saving measures whose objective is to obtain a better price from care providers or to move care to less-costly settings. For example, a provider that gives favorable prices to buyers with strong market power may raise charges to other buyers with less market power, such as those using traditional insurance mechanisms. Shifts in payment responsibility that arise from moving care to lower-cost settings are more complex, but very important. Consider, for instance, early discharge of hospital patients. Early discharges increase hospital costs per day because the last days of a hospital stay (which are eliminated) usually require relatively few services. Overall, the result is increased charges for those whose stay has not been shortened.

**ADDITIONAL CONSIDERATIONS**

Relevant additional considerations include the role of existing cross-subsidies and the variation in potential gains across areas. The health care payment system in the United States involves several major cross-subsidies. For example, care for patients who cannot afford to pay is partly financed by charging higher prices to patients who can pay, and training of physicians is partly financed by charges
to patients. Measures aimed at shifting care to lower-cost settings or at obtaining favorable prices will often reduce or eliminate such subsidies. As a result, we may be forced to deal with the important social question of whether these previously subsidized activities should continue, and if so, how they should be financed.

The overall saving in health care costs that is readily achieved in a community may be less than the foregoing discussion seems to indicate, and less than some individual purchasers can achieve. Some of the cost savings achieved by aggressive purchasers may be shifted to other payers. In addition, providers have fixed costs, and reductions in use of care lead to the fixed costs being spread over fewer patients. Thus reductions in use of care will probably lead to higher charges per patient unless the market is highly competitive and forces providers to absorb the higher costs or leave the market.

Areas with many hospital beds or physicians per capita have had higher rates of hospital and physician service use than other areas. Many students of health care delivery therefore believe that the number of physicians and hospital beds strongly affects the amount of services that are used. Because of cost control measures, this effect is probably weaker today than in the past. However, reductions in use of services achieved by some employee benefit plans will probably still be partially offset by increases in use by patients not directly affected by cost management actions. A reduction in facilities, either through market forces or through regulation, may be required to prevent significant offsetting effects.

The overall potential for health cost savings varies from community to community and from one group of employees to another. Consider three examples: If a community has a low rate of use of a given surgical procedure, the potential for reducing the frequency of that type of surgery will be relatively limited. If a health insurance plan has large cost-sharing requirements, the overall use of care will already be relatively low due to the deterring effect of cost sharing, and opportunities for cutting costs will be correspondingly limited. If few workers in a firm smoke, smoking cessation programs have less potential effect than in workplaces where many workers smoke.

As was pointed out at the beginning of this section, specific programs for cost containment achieve their effect through the use of one or more of the four underlying methods for cost control. Each of the next five sections discusses one group of programs used in cost containment. The following table shows which of the four underlying methods is used by each of the five groups of programs. It shows that no one type of program brings the full spectrum of underlying methods to bear on the cost control problem. Thus, for maximum results, a multiprogram strategy is necessary.
### Table 2

**COST CONTROL METHODS USED BY VARIOUS TYPES OF PROGRAMS**

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Reducing Resources Used</th>
<th>Obtaining Lower Prices</th>
<th>Reducing Responsibility for Illness</th>
<th>Shifting Responsibility for Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization management</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative delivery systems</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit redesign</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wellness programs</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Using the advantages of size and numbers</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
IV. UTILIZATION MANAGEMENT

Utilization management consists of a set of administrative programs for reducing resources consumed in health care. Benefit redesign (see Sec. VI) has much the same aims, but instead relies on financial incentives to patients to achieve these aims. In terms of the typology presented in Sec. III, utilization management programs reduce resources consumed both by cutting care used and by switching care to lower-cost settings.

Many specific utilization management mechanisms have been developed to curb unnecessary services. This section describes the most prominent of them, summarizes what is known about their results, and discusses major issues in the field of utilization management.

TYPES OF UTILIZATION MANAGEMENT

Utilization management comes in many forms—and even more combinations.

Preadmission certification programs require (or encourage) patients to obtain prior authorization before they are hospitalized, except in emergencies. Although contact with the program may be initiated by the patient or the hospital, the program needs the physician or his or her staff to provide information on both the treatment proposed and the justification (in terms of the patient’s condition) for that course of treatment.

A thorough preadmission certification program does three things: (1)Ascertain if the proposed treatment is indeed necessary, (2) determine if the necessary treatment has to be performed on an inpatient basis (particularly for surgery, most programs have lengthy lists of procedures that are required to be performed on an outpatient basis unless special circumstances are present), and (3) assign a ceiling length of stay if inpatient care is needed. Some programs do little with the first of these three functions because criteria for treatment vary so substantially within the medical profession. Some leave the third to a concurrent review process.

Preadmission certification is becoming increasingly prominent. Its costs are relatively low, and its potential is high since it can reduce both admissions and length of stay. More and more, it is carried on by telephone.
Concurrent review programs vary greatly, having little in common other than taking place while the patient is hospitalized. Some aim merely to complement preadmission programs by reviewing emergency admissions and evaluating physician requests for longer stays than originally were approved. Such programs can be readily conducted by telephone, are inexpensive, and are growing rapidly. At the other extreme are concurrent reviews in which patients' medical records are periodically examined at the hospital to judge if inpatient care continues to be necessary. Such reviews were the backbone of many utilization review programs in the 1970s, but are relatively costly, miss the opportunity to prevent unnecessary admissions, and often manage many cases poorly by carrying out reviews at prespecified intervals not tailored to the progress of individual patients.

Discharge planning refers to activities to expedite the transfer of patients from the acute-care inpatient setting to a less costly setting such as home care. Making arrangements for these alternatives often requires considerable lead time (particularly if nursing home or home care is needed) as well as expertise in marshaling and coordinating the fragmented system of non-acute health care services.

Discharge planning can also serve as a preauthorization program for long-term-care benefits such as care in nursing homes and home health care. Long-term-care benefits may reduce costs by substituting for acute care but, if not managed, are likely to increase costs by ending up as additions to rather than substitutes for acute care benefits (see Sec. VI).

Catastrophic case management goes one step further than discharge planning. It seeks means of reducing costs and speeding recovery in cases—such as major injury or stroke—that are identifiable in advance as likely to be very costly. On a case-by-case basis, it can authorize spending health benefit funds for special purposes that are not covered health benefits. For example, it may pay for the addition of ramps and handrails to a home in order to permit a patient to return home who otherwise would have to remain in an institutional setting.

Second surgical opinion programs provide for patients to obtain the opinion of a second physician when elective surgical procedures are recommended. Programs differ in two respects: Whether they cover all surgery or only a selected list of procedures and whether they are mandatory or voluntary. (In voluntary programs, a second opinion is paid for, but not required.) Second-opinion programs are widespread but are redundant if a relatively thoroughgoing preadmission review process is used.

Second-opinion programs almost always lack standards for when procedures should be approved, leaving that entirely to the second
physician's judgment. Developing a panel of physicians to provide second opinions may reduce this problem somewhat.

Retrospective review comes in many forms. Classic retrospective review is of limited use because its main sanction, retrospective denial of claims, is too severe to be used except in the most extreme cases. Hospital bill audit can save money for a health plan, but mostly through shifting of costs to other payers, as hospitals raise prices to protect their revenues against erosion from billing errors that are found. However, bill audit is virtually the only form of utilization management that patients understand and appreciate without substantial explanation.

Profile analysis, possibly the most useful retrospective activity, amasses information on care patterns by provider (rather than detailed information on individual cases). Such information is potentially useful in a wide variety of applications. It is used for "feedback" to providers to encourage them to change their practice patterns. It can form the basis for selecting providers for a PPO. It can identify which surgical procedures have high rates relative to norms, and thus are candidates for a selective second-opinion program, and which are less problematic. Data collected for profile analysis can also provide an information base for appraising selective benefit design changes.

THE RESULTS OF UTILIZATION MANAGEMENT

Evidence on the results of utilization management programs other than second surgical opinion is generally anecdotal. For typical multi-component programs involving a combination of preadmission certification, concurrent review, discharge planning, and second surgical opinion, businesses report reductions of anywhere from 7 to 30 percent in hospital days per 1000 employees. Costs for such programs are typically $1-2.50 per employee per month. Because the hospital days eliminated are those of the least ill patients, a 20 percent reduction in hospital days (the most commonly reported figure) probably translates into only about a 12-16 percent reduction in hospital charges. Coupled with reductions in physician charges that sometimes result, the overall net saving is likely to be on the order of 6-12 percent of total health benefit costs.

Hospital bill audit programs use criteria to identify hospital bills most likely to contain errors. Programs report reducing charges by 2 to 6 percent on the bills they select for audit, with most programs reporting results in the upper half of this range. Program costs typically run 1 to 2 percent of the audited bills.
Researchers have studied second-opinion programs enough to produce a number of reasonably firm conclusions about their results. Very few persons participate in voluntary second-opinion programs—only about 2 percent of those eligible. Some 30 to 40 percent of second opinions in voluntary programs do not support the first physician's recommendation of surgery. In contrast, in mandatory programs that review all elective surgery, the nonconfirmation rate is approximately 15 to 20 percent. The few patients who use voluntary programs are apparently those for whom the need for surgery is most uncertain. Nonconfirmation rates vary by procedure; those most often not confirmed include orthopedic surgery, bunionectomy, hysterectomy, and prostatectomy. Some 20 to 40 percent of patients who receive a negative second opinion go ahead with surgery. In contrast, two-thirds or more of patients receiving second opinions that confirm the need for surgery have the recommended surgery.

One careful follow-up study of a second-opinion program took into consideration costs of nonsurgical alternative treatment and estimated that over four years, health care costs for patients who do not have surgery were about $4000 lower (in today's prices) than for those who do have surgery. A careful study of a mandatory second-opinion program covering a limited number of surgical procedures for Medicaid recipients in Massachusetts found a 20 percent reduction in rates of surgery for the procedures covered. Of this reduction, 70 percent was due to a "sentinel effect"—that is, to physicians recommending less surgery when a second-opinion program was in effect. Only 30 percent of the reduction was due directly to negative second opinions. Other studies find 10 to 30 percent reductions in overall surgical rates.

Studies repeatedly show savings from second-opinion programs are two to four times the costs of the programs. Such findings hold up over a wide variety of circumstances, assumptions, and methods of calculating savings. In terms of total dollars saved, however, second-opinion programs are far less effective than thorough preadmission certification programs. Since these preadmission certification programs cover much the same ground, the trend is toward second-opinion programs becoming redundant.

ISSUES IN UTILIZATION MANAGEMENT PROGRAMS

A few issues are common to most forms of utilization management and are the primary concerns in the field. These issues include improving acceptability of utilization management to patients and physicians, broadening the scope of utilization management beyond its
current near-exclusive focus on reducing inpatient hospital care, and enhancing program effectiveness beyond the levels just described.

**The Acceptability Problem**

Most utilization management works by inserting an additional person into the physician-patient relationship to judge the medical necessity of the care a physician provides. This easily upsets the physician, the patient, or both. One of the more difficult tasks of utilization management programs is to develop modes of operation that do not alienate physicians and patients.

Some programs seek to reduce the problem by working on an entirely voluntary basis, with their lack of sanctions helping to minimize the tensions generated by inserting another party into the physician-patient relationship. Voluntary programs seek to build compliance through **beneficiary education**. They teach that utilization management is an additional benefit—a means of sparing patients the pain and anxiety of unneeded hospital stays and procedures. Mandatory utilization management programs may obtain compliance through financial sanctions, but beneficiaries tend to resent these sanctions unless the same educational message—that the programs are a benefit, not an unwarranted intrusion—is effectively transmitted.

Beneficiary education is also a potentially effective cost-management tool in its own right. Through it, beneficiaries can be taught to contain costs by using the health care system economically—for example, by not using hospital emergency rooms as a substitute for care in physicians’ offices. Education may be as important in getting beneficiaries to respond to the financial incentives of benefit redesign (see Sec. VI) as it is in building the effectiveness of the administrative mechanisms used by utilization management. Educating beneficiaries—and physicians—to the large variations in use of care that exist in the United States should make them more willing to accept both utilization management programs and benefit redesign that encourages economical patterns of care. There is, however, no systematic information on the actual effect of beneficiary education, and some skepticism seems appropriate, at least for education not accompanied by incentives.

To limit potential patient hostility, mandatory utilization management programs often avoid the ultimate sanction of no payment at all for failure to comply, and instead use a limited financial incentive—for example, an additional deductible of $200 if patients fail to obtain preadmission certification of the need for a hospital stay.

It is also important that utilization management systems be structured so they do not trap patients in the middle of disputes between
the system and their physician. Avoiding retrospective denial of claims is also wise.

A common recommendation for minimizing physician annoyance in utilization management is “only doctors should talk to doctors.” Disagreements should be a matter for polite explanation and discussion, not high-handed fiat, even if the reviewer’s position is quite firm.

Some utilization management programs attempt to minimize hostile reactions and maximize their own effect by concentrating on the sentinel effect. Such programs usually emphasize gathering data on physicians’ practice patterns and feeding that data back together with information on more efficient practice patterns. The more efficient patterns may be either community norms or practice patterns of respected colleagues whose practice style is particularly efficient. By suggesting general changes based on what colleagues do, rather than contesting a physician’s behavior in specific cases, these programs seek to reduce physicians’ hostility. They also can be far less costly than conventional utilization management programs since they avoid the significant involvement in each individual case characteristic of the latter. However, programs that only feed back information on practice patterns, without any additional pressures, often do not work well.

**Broadening Programs’ Scope**

Utilization management programs are costly. The cost of reviewing an episode of care can range from about $20 to several times that, depending on what activities are performed. For this reason, programs concentrate on costly episodes of care and usually attempt to manage only inpatient hospital care. The fact that criteria regarding inpatient hospital care are better established and records are more standardized than for other forms of care also supports this emphasis on inpatient care.

However, an exclusive focus on inpatient care misses some common, costly episodes of care. These are ambulatory surgery, extended psychotherapy, and extended allergy treatment. Utilization management techniques that apply to these forms of care are available. Elective ambulatory surgery, for example, can be managed almost exactly as inpatient surgery should be, with preoperative authorization required and a set of criteria used to decide when surgery is appropriate.

The most common utilization management practice for psychotherapy is to require the therapist to submit a treatment plan if therapy is going to continue beyond an initial “checkpoint”—say five visits. Further reviews are then conducted periodically.

Such approaches can have a substantial effect even though treatment of mental and emotional illness is far less standardized than treatment for
physical illness and the illnesses themselves seem far less uniform in their duration and responsiveness to treatment. Through periodic reviews, utilization management programs can maintain an ongoing concern on the part of the therapist about treatment cost and about limiting its duration. Also, they can explicitly reject high-cost treatments that have been found not to be more effective than lower-cost alternatives. Among such treatments are many-times-a-week psychotherapy.

Similarly, in treating alcoholism it is often appropriate to reject inpatient hospital rehabilitation in favor of treatment in residential rehabilitation centers—which cost approximately half as much—or treatment in outpatient programs, if the particular centers or outpatient programs are effective.

Ostensibly similar programs vary greatly in their effectiveness. Personnel in utilization management programs can develop the experience to know which treatment programs are most effective and can steer patients to these programs.

For the most part, utilization management programs aim to reduce resources used in care, for the incentives of today's dominant reimbursement system encourage overuse of resources. However, utilization management can also identify some instances of underuse of resources, and doing so may be valuable under new reimbursement arrangements, such as capitation payment, which contain incentives that may lead to underuse.

What Makes for Program Effectiveness?

Utilization management programs vary greatly in their results and rarely achieve as low a level of hospitalization as effective HMOs do. Hence, a major concern is how their effectiveness can be enhanced. The remainder of this section presents experts' views on this topic.

Programs that deter unneeded admissions will have larger effects than those that address only length of stay. Therefore, maximum effectiveness requires a preadmission certification program, and one that energetically attempts to prevent unnecessary admissions of all types—medical as well as surgical. As noted, another useful strategy is to expand utilization management to include those treatments with relatively large costs that do not take place in the inpatient hospital setting—for example, ambulatory surgery and lengthy psychotherapy.

Experienced observers also report that programs using stringent standards have much larger effects than traditional utilization management programs that accept local practice norms and focus only on the small percentage of cases that are outliers (i.e., that are well outside the broad range of variation commonly seen). The latter can have only a small
effect for they deal with only a small percentage of cases. Even programs that use the 50th percentile—a common standard for length of stay in more effective programs—exert no downward pressure on at least half of all hospitalizations. Aggressive utilization management programs could embody the care practices used in HMOs with dramatic effects.

The more stringent a program’s norms, however, the more often and the more extensively it will seek to alter what physicians would otherwise have done. That, in turn, will mean more upset physicians and more upset patients. Realistically, those who pay for benefits will need to recognize that the more stringent utilization management is, the more it will give rise to ire. They will need to choose how much annoyance they want to accept in exchange for increased savings.

Most employers and union trusts with utilization management programs obtain these programs from their insurance carrier or from the administrator of their benefit plan, but they can obtain them independently and may find other sources do a better job. Utilization management programs are operated by a variety of organizations including insurers, third-party administrators, state and local medical societies, independent utilization management firms, and hospitals.

The organizations that offer utilization management services tend not to offer buyers a choice of levels of stringency. Each organization typically operates on a single level and does not publicize what its standards are. Employers and union trusts thus face a difficult job in shopping for utilization management programs, but should be able to make informed choices after asking careful questions about program standards, utilization management procedures, and results.
V. ALTERNATIVE DELIVERY SYSTEMS

Alternative delivery system (ADS) is a catchall term to describe health care financing arrangements other than traditional health insurance, with its reimbursement for any provider's fee-for-service bills. Most ADSs encompass at least one of two key elements—providers having financial incentives to keep costs low and patients having incentives to use a panel of selected providers. In contrast to traditional insurance that passively pays medical bills, ADSs attempt to contain the annual medical expenses for an enrollee. In terms of the typology in Section III, ADSs achieve this result primarily by reducing resources used in care and by shifting care to lower-priced providers.

Since ADSs tend to be defined according to what they are not, a wide variety of arrangements are included. They range from well-known health maintenance organizations (HMO), to increasingly popular preferred provider organizations (PPO), to arrangements not yet classified. The past four years have witnessed an acceleration in experimentation with ADSs at the initiative of employers and unions seeking to contain health benefits costs, providers seeking additional patients, and health insurers seeking to offer a more attractive product.

This section describes the different ADSs in operation today and discusses their attractiveness to employers and employees. It distinguishes between success of ADSs in reducing health care costs and success of employers in reducing their health benefits outlays—the latter has been more difficult to come by. The reader will see that some of the methods used by ADSs to manage costs are the same as those under the rubric utilization management (Sec. IV), so that an element of the decision to offer an ADS is whether employers and union trusts should “buy” a cost management package by offering an ADS, purchase specific utilization management services, or undertake these activities directly.

HEALTH MAINTENANCE ORGANIZATIONS

The term HMO originated in the Nixon Administration to promote private sector attempts to contain health care costs. HMOs were defined as organizations that provided comprehensive medical services on a prepaid basis. Included were prepaid group practices (PPGP) in which physicians treated predominantly HMO patients, such as the
Kaiser Permanente plans, many of which had been in operation since the 1930s or 1940s, and individual practice associations (IPA), usually physician-sponsored organizations that provided services through independent physicians whose practices were often predominantly fee for service.

IPAs differ from traditional insurance in that (1) coverage is restricted to services provided or ordered by member physicians; (2) out-of-pocket costs are usually much smaller; and (3) the organization puts its member physicians at some financial risk for the cost of the services they order. IPA members often agree to cooperate with utilization management activities, such as prior authorization for hospitalization and major procedures.

HMO enrollment has been growing at 20–25 percent per year during the past few years. As of mid-1986, 595 HMOs served 24 million persons.

Today's HMOs and their relationships to employee health benefit plans have been influenced significantly by federal legislation enacted in 1973. The Health Maintenance Organization Act defines an HMO not only by prepayment of services but also by the comprehensiveness of its benefits and its marketing and enrollment practices. It requires all but the smallest employers to offer a “federally qualified” HMO as part of any employee health benefits plan, where one is available, and stipulates the minimum contribution employers must make toward the premiums of employees who choose to enroll in HMOs.

**HMOs and Health Care Costs**

Extensive research literature has developed on HMOs, most of it on the PPGP type. As indicated in Sec. III, studies have consistently shown large cost savings stemming from lower rates of hospital admissions and surgery. An exhaustive review of the HMO research literature published in 1981 shows PPGPs having about 40 percent fewer hospital days per standardized person and 25 percent lower costs overall. These reductions in use have come despite generally lower out-of-pocket costs for patients than in traditional insurance. Differences in physician incentives appear to overwhelm differences in patient incentives, particularly where hospital use is concerned.

Some have been skeptical concerning projections from this literature to HMOs today or five years from now. First, most of the studies were on large, well-known HMOs with long histories. Will newer HMOs do as well? Second, an important part of recent HMO growth has been in IPAs, and the 1981 review of the HMO literature found no evidence that IPAs had lower costs than traditional insurance.
Others feel that HMOs will be even more successful at controlling costs in the future. They point out that HMOs have faced little competition in the past, but now must compete with other HMOs as well as with traditional insurance plans that are now controlling costs with higher cost sharing and utilization management. Success requires more attention to costs than in the past, and HMOs are, for example, becoming more active in seeking out lower-cost hospitals or in using their purchasing power to obtain favorable prices. Regarding IPAs, optimists point out that many of the studies were from a period when IPAs were often organized to deter PPGPs from entering a market and had not concentrated on cost containment. A recent analysis of federal data indicates that hospital utilization rates in IPAs have declined 30 percent over the past six years.

The fact that enrollment in HMOs has always been voluntary has led some to suspect that part of their apparent success in reducing costs is due to selection of enrollees whose health is better than average. A carefully controlled trial did not support this suspicion. As part of the massive Health Insurance Experiment conducted by The RAND Corporation, a sample of Seattle-area residents were randomly assigned to Group Health Cooperative of Puget Sound (an HMO) or to traditional insurance. Costs for the HMO sample were 25 percent lower than for those with traditional insurance with no cost sharing and very similar to those experienced by the HMO's regular enrollees. These results do not imply that selection of enrollees is not an important factor in HMOs—the discussion below indicates that it is. They do imply that selection bias does not explain why HMOs have lower costs.

Despite the reasons for believing that HMOs will perform better than in the past, their performance relative to fee-for-service plans may, paradoxically, deteriorate. As the latter become more proficient at applying utilization management techniques, the cost difference between HMO and fee-for-service plans could well narrow.

HMOs and Employers

While HMOs lower health care costs, they do not always lower health benefit costs for employers. Three factors often make the connection between HMO cost savings and savings for employers tenuous: (1) the practical need to share cost savings with employees to induce them to enroll in HMOs, (2) biased selection, and (3) federal regulations.

*Savings to Employees.* Since enrollment in HMOs is almost always voluntary, some of the savings must accrue to the employees, lest they not enroll. However, federal regulations, which apply to those HMOs
seeking federal certification, cause all of the savings to accrue to employees in many instances. If the HMO premium is higher than the employer's contribution to its basic insurance plan, no direct savings are possible for employers because they are required to contribute at least as much to the premium of federally qualified HMOs as to their most popular traditional plan. If the HMO premium is less than the contribution to the traditional plan, employers can save, for they need pay only the HMO premium for employees enrolled in it. However, requirements that HMOs have a relatively comprehensive benefit structure plus HMOs' long-standing rejection of more than nominal cost sharing frequently cause HMO premiums to be higher than those for traditional insurance plans despite lower overall costs in HMOs. Indeed, as a business practice stemming from the incentives in federal regulations, HMOs have apparently sought to peg premiums to those in conventional plans.

However, not all is lost to employers when direct reductions in outlays are not possible. First, the opportunity to enroll in an HMO will be valued by those employees taking advantage of it. Their out-of-pocket costs for medical care will be lower in most cases. Thus, offering an HMO will make the total compensation package worth more to the employee without increasing outlays by the employer. Second, an HMO option may make increases in cost sharing in the basic plan more acceptable to employees since those who find cost sharing especially onerous will be able to avoid it by enrolling in the HMO. Third, increased enrollment in HMOs in a market area may change physicians' practice patterns for fee-for-service patients as well and may make physicians more receptive to utilization management in fee-for-service health plans.

Biased Selection. Biased selection has caused offering an HMO option to lead to increased outlays for some employers. Except for small employers, traditional health insurance is experience rated, which means that premiums are based on the recent claims experience for the group of enrollees. In contrast, premiums of federally qualified HMOs must be community rated, meaning that all groups pay the same premium. Thus, if those who enroll in an HMO have a lower-than-average rate of use of health services, the per capita claims experience for those remaining in the basic plan will rise, increasing the premium, while no reduction in the HMO premium will be achieved. Employers are likely to face increased total costs as a result. Conversely, if those enrolling in the HMO had higher-than-average use of services, the premium in the conventional plan would fall, and with no corresponding rise in premium in the HMO, employers might benefit.
Research indicates that biased selection is important, at least for new HMO options offered by an employer, but that the pattern is quite complex and mixed. The choice between traditional insurance and an HMO has a number of elements—comprehensiveness of benefits, different providers, and a different premium payment by the employee. In general, the option with the more comprehensive benefits—usually the HMO—will attract the higher users. But often preventive benefits such as well-baby care, which are rarely covered except in HMOs, will attract young families, which, aside from maternity care, tend to have low rates of use.

When a change in physician is required to use an HMO, those without an established relationship with a physician, who tend to be low users, are more likely to change to an HMO. This is likely to be an especially important factor with PPGPs, as compared to IPAs, since choice of physician is more limited.

Finally, some of those who have the lowest rates of use tend to choose whichever option requires a smaller premium contribution by employees. Minimizing premium costs is paramount for some of the youngest and healthiest employees, for they do not expect to use care, and so pay little attention to what plans cover or what cost sharing they require. This can benefit either the conventional plan or the HMO.

Thus, different employers are likely to experience different patterns of biased selection. Fortunately, those employers with new or changing offerings can estimate the direction and magnitude of biased selection affecting them. They can look at their own claims data to compare the prior use of those employees switching to the HMO with that of employees continuing in the conventional plan.

This method cannot be used to assess a situation where a longstanding pattern of HMO enrollment exists, but biased selection is likely to be much lower in magnitude in such contexts. When enrollment is stable, many of the factors that lead to biased selection become muted over time. Young families age and some of the healthy become ill. High users will be less likely to disenroll than those establishing less of a relationship with their HMO physicians.

Regulations. Some of the specific provisions of federal HMO legislation and regulations make it difficult for employers to force HMOs to pass cost reductions to them. Above, we discussed the consequences of the equal contribution requirement. The community rating requirement is also significant. Since federally qualified HMOs have to charge all enrollees the same rate, individual employers cannot obtain a favorable rate. They must be price takers. Moreover, the federal requirement that an employer offer an HMO option (if a plan requests to be
offered, precludes a decision not to offer an HMO because the rate is considered too high. Under the present regulations, only competition among a large number of HMOs can result in cost savings being passed on to employers and employees. In this case, an employer can refuse to offer the HMOs with the highest rates, or employees can opt for those plans with lower premiums.

Regulations are currently in flux. The Administration has proposed regulations to abolish the equal contribution requirement and permit employers to demand age-specific premiums from HMOs. Competitive forces are leading many HMOs to depart from community rating either by using loopholes in current regulations or by forgoing federal qualification. By the time this handbook is published, the prospects for employers to obtain favorable rates from HMOs may have improved significantly.

PREFERRED PROVIDER ORGANIZATIONS

PPOs are new organizations somewhat intermediate between HMOs and conventional insurance plans. Their development has proceeded so rapidly that a consensus definition is not yet available. To some, a PPO differs from an HMO in that the insurance company (or self-insured employer) is at risk, rather than the providers. To others, the distinctive feature is the beneficiary’s option to go outside of the preferred panel of providers without complete loss of benefits.

While many variations of PPOs abound, two models are most common. In one, the PPO is an extension of a traditional insurance plan. A preferred list of hospitals and physicians is developed, and insured persons are given financial incentives, such as a reduction in deductibles and coinsurance, to use them. Patients decide each time they use care whether to use a preferred provider.

In the other model, employees enroll in a PPO. The incentive to do so is a lower premium or a more comprehensive benefit package—or both. If nonpreferred providers are used, cost sharing is higher. The enrollment model is most often found in health benefit plans where the traditional plan already has low cost sharing and thus cannot offer substantial PPO incentives through reduced cost sharing.

PPOs can be organized by providers, employers, union trusts, insurers, or independent entrepreneurs. For example, a group of hospitals or physicians may form a PPO to increase the volume of their business. Employers without access to an HMO or not satisfied with local HMOs may organize a PPO, or encourage providers or an insurer to form one. Many of the largest insurers now offer PPOs that they have
developed, making them available to both insured and self-funded employers.

PPOs can save an employer money if the preferred panel of providers delivers medical care at a lower cost to the employer than do other providers. Lower costs can come through a variety of channels. The preferred providers may offer a discount. In some cases discounts are substantial—in excess of 20 percent—but some PPOs succeed without discounts, especially if their providers have regular prices that are lower than average. Some insurers have chosen hospitals for a preferred panel on the basis of charges per case after adjustment for differences in case mix, which is the best measure of prices to use.

Hypothetically, PPOs could save money by selecting physicians with conservative practice patterns—for example, those who hospitalize their patients less frequently. In practice, information needed for such selection is not available, and PPOs seek to obtain low levels of care use through various utilization management activities. A recently published survey of PPOs indicated that extensive utilization review activities are now virtually universal.

Many PPOs claim that their utilization management activities are more effective than those used in conventional insurance. Three factors are involved here. First, providers are likely to cooperate more readily with procedures that they voluntarily agreed to comply with when they joined the PPO. Put a different way, PPOs can ask physicians to abide by a more aggressive review process than can conventional insurers. Second, employees are likely to be more tolerant of stringent review when their use of the PPO is voluntary and they receive financial rewards for accepting the review. Third, the PPO may be more highly motivated to review utilization effectively since employee cost sharing is lower and thus less available to limit utilization. Insurance industry sources estimate that a 15 percent savings from a PPO is typical.

Despite all of the avenues for cost reduction, it is not a foregone conclusion that PPOs will save money for an employer. The incentives to employees to use preferred providers must be considered as a cost. This includes not only the higher proportion of claims that employers pay as a result of reducing deductibles and coinsurance, but also the additional use of service that is stimulated. While utilization management probably precludes increased use of inpatient services, PPOs are likely to experience increased use of outpatient services. Apparently, most employers have allowed the savings from PPOs to be taken in improved benefits for those using preferred providers rather than in a markedly reduced premium.
At present, employers find it difficult to assess the fiscal impact of a PPO. Careful studies are not yet available to use as a guide. To assess the impact of adding a PPO to a health benefits plan, actual outlays with the PPO in the plan must be compared to what outlays would have been in the absence of the PPO—a hypothetical number. Often, PPOs are assessed by comparing the actual increase in outlays to the previous historical trend. This has tended to overstate the gains by the PPO, since growth in health care outlays has slowed nationwide in the last three years. The most promising way for an employer to assess the impact of a PPO is to obtain data on trends in health care outlays in the local area for plans not using PPOs. A coalition might be able to provide such data (see Sec. VIII). With these data, the employer’s experience with a PPO can be compared to what happened to those experiencing the same external forces but without a PPO.

As with HMOs, direct savings for the employer are not necessary for considering a PPO a success. Employees almost always benefit from a PPO; those willing to use the preferred providers get additional health benefits while those unwilling to switch are no worse off. Some employers have introduced a PPO at the same time as cost sharing was raised, thus enabling employees to avoid the increased cost sharing by using PPO providers. While adding the PPO may or may not have saved money for the employer with respect to employees who do use PPO providers, it probably made the benefit cut more acceptable. Indeed, where the addition of the PPO option is a practical necessity to permit benefit cuts, the question of PPO savings is moot.
VI. BENEFITS REDESIGN

Benefits redesign is familiar to most who manage health benefit plans. Whether a plan is self-funded or insured, large employers have long been accustomed to deciding or bargaining with unions as to what services to cover, what the deductibles and coinsurance will be, and what premium contribution from employees will be required.

Surveys indicate that large employers have made significant changes in the benefit structure of their plan in recent years. For example, 63 percent required inpatient hospital deductibles in 1984, compared to 30 percent in 1982. These changes, like benefit redesign generally, seek to manage costs primarily through two of the underlying cost-control methods discussed in Section III: reducing resources used in care and shifting responsibility for payment.

Choice of a benefits package is a complex decision. Patterns of service coverage and cost sharing affect rates of use of services the degree of financial protection afforded employees, the overall level of compensation paid to employees (that is, cash plus the value of fringe benefits), and the degree to which this compensation is sheltered from taxation.

This section will examine these issues and, in light of them, interpret recent trends in benefits design. It begins with a discussion of choice of the overall degree of cost sharing in a health plan. It proceeds to a consideration of the use of selective cost sharing to influence the mix of services and concludes with a discussion of offering a choice of plans with different degrees of cost sharing.

OVERALL DEGREE OF COST SHARING

Employees share the cost of their health care in two ways—by paying a fraction of the premium and by paying a portion of medical bills.

Premium Contributions

Approximately 60 percent of employees covered by health benefits plans must make a contribution toward the premium to participate. A common arrangement has the employer paying the full cost of the employee's coverage and some fraction of the premium for dependents' coverage. Part-time employees usually are not eligible to participate.
Tax incentives have played a major role in employer and union choices of the portion of the premium to pay. Employer contributions to health benefits plans are not subject to either income or payroll taxes. Thus, employer contributions come from pre-tax dollars but employee contributions come from after-tax dollars. A congressional study estimated the rate of tax subsidy to employer contributions at 37 percent, but the 1986 tax reform will lower the rate. Having compensation in the form of an employer contribution to health benefit plans benefits both the employer and the employee, since employees receive more value for each dollar expended by the employer. Hence, the tendency has been toward large employer contributions, for a dollar spent by the employer on health benefits is more valuable to workers than a dollar spent on wages.

Development of cafeteria plans (also known as flexible spending accounts) has made it much easier to shelter the employee contribution to premiums from taxation. Through the use of a salary reduction agreement, the employee share of premiums can come from pre-tax compensation. This increases the tax incentives to expand the benefits of health plans while reducing the incentives to have the employer pay the entire premium.

Duplicate coverage is also a factor in decisions concerning who pays the premiums. With more women working full time, an increasing number of employees are eligible for health insurance through their spouse’s employer as well as their own. Dual eligibility for benefits provides two reasons for employers to limit their contribution. First, those employees covered through a spouse will value the compensation package more highly if less of it is devoted to health insurance, which they already have. Second, requiring a contribution from employees may lead some with dual eligibility to forgo dual participation, thereby reducing the employer’s outlays without decreasing the effective value of compensation.

The defined benefit nature of employer contribution policies has left employers at risk for medical care cost inflation. For example, if claims costs increase by 20 percent, and the employer has a policy of contributing the entire premium, or a fixed percentage of it, total compensation would increase unless other components could be adjusted rapidly.

Following a trend in pension benefits, some employers are moving towards a defined contribution arrangement—for example, paying a fixed dollar amount that is increased at the same rate as overall salary increases. Not only does this increase control of payroll costs, but it gives employees a more visible stake in the cost containment activities that have been initiated. However, it leaves employees entirely at risk for rapid cost increases and is accordingly unpopular.
Deductibles and Coinsurance

Health benefit plans include deductibles and coinsurance for three reasons:

- to deter the use of health services
- to ensure that employees bear a portion of the costs
- to keep administrative costs down by eliminating many small claims

Extensive research literature supports the notion that when the patient must pay a portion of the bill for services at the time of use, fewer services are used. Researchers have analyzed “natural experiments,” in which the degree of cost sharing in a health benefits plan changed. They have used statistical techniques to study differences in patterns of use across individuals facing different required cost sharing. Finally, using research techniques more commonly encountered in biomedical research, the RAND Corporation conducted an experiment in which randomly selected families were given different types of health insurance policies for periods from three to five years.

In each case, findings confirmed the notion that has guided insurers for years—that cost sharing reduces the use of services. According to the RAND study, going from free care to a policy in which the patient pays 25 percent of the bill reduces the use of services by about 20 percent.

An employer should not expect to realize as large a utilization effect as the research literature would indicate. First, most employers start with some cost sharing already in effect, and the literature appears to indicate that a 25 percent reduction in the proportion of the bill covered starting from 75 percent coverage causes a smaller percentage reduction in use than a 25 percent reduction starting from 100 percent coverage. Second, some employees have duplicate coverage and will continue to avoid any cost sharing. For example if each spouse’s policy covers 75 percent of the bill, the full bill would be covered between the two policies. Indeed, vigorous coordination of benefit procedures would be needed to ensure that the payment does not exceed 100 percent.

The following example indicates the potential savings from increasing cost sharing. Consider an initial plan with full coverage for inpatient care, and a $50 per person deductible and 20 percent coinsurance for all services outside of the hospital, with coinsurance limited to $500 per person. Assume it is replaced by a new plan with a $250 deductible and 20 percent coinsurance that is applicable to all covered services, with out-of-pocket payments limited to $1000 per person.
The premium for the new plan would be about 30 percent lower than that for the initial plan.

More controversial than whether cost sharing affects the use of services is the question of what effects the reduced use of services has on the health of patients. For years, many debated this question fruitlessly without relevant data. As discussed in Sec. III, recent results indicate that for the most part substantial cost sharing can be used without significant sacrifices of health, although some adverse effects on low-income individuals, particularly those with chronic illness, do occur.

Cost sharing might encourage employees to shop around to find the lower-priced care providers in the community. However, types of cost sharing commonly used do little to promote price shopping: If the patient is responsible for 20 percent of the bill, then he or she retains only 20 percent of any savings from using a lower-priced provider. Other configurations of cost sharing might have more potential, and compiling information for employees on providers' prices might also be helpful. However, PPOs appear to be a much more effective tool with which to pursue price reductions and steer employees to low-priced providers.

The possibility that increased cost sharing leads to lower prices for medical care services has not been confirmed in the research literature. In any case, individual employers cannot count on changes in their benefit structure affecting medical care prices in markets where their employees reside.

The fact that cost sharing reduces the use of health services without apparent reductions in health status for most people does not automatically imply that all employers should increase deductibles and coinsurance. Cost sharing is often highly unpopular with employees and unions for a number of reasons.

First, it reduces the degree of financial protection that health insurance provides. Twenty-five percent of a large medical bill is still a substantial burden to many, especially if at the same time earnings are reduced by inability to work. Most health plans with substantial cost sharing limit this risk by placing an annual limit (for example, $1000 per person and $2500 per family) on the amount of cost sharing that is required.

Second, cost sharing transfers a portion of the cost of medical care from the employer to the employee. There are two elements in this. For one, in going from free care to 25 percent coinsurance, for example, the employee must pay 25 percent of the costs of the services. In addition, part of the reduction in use of services may reflect a substitution of the unpaid services of family and friends for paid services provided
by health care professionals. Thus, in going from no cost sharing to 25 percent coinsurance, while the employer will reduce claim payments by about 40 percent, almost two thirds of the reduction is the result of a direct transfer of costs to employees and the rest a combination of efficiencies from more judicious use of health services and increased provision of unpaid services by patients' families and friends. The transfer aspect of cost sharing is the basis for many employees labeling increases in it a "takeaway" or a "giveback."

Employers have taken two approaches to make increased cost sharing more acceptable. One expands offerings of alternative delivery systems. Often an HMO can offer comprehensive benefits without significant cost sharing for a premium that is comparable to that of a conventional plan with cost sharing. A PPO can be offered, permitting those employees willing to use preferred providers to avoid the increase in cost sharing. Some PPOs have been introduced into benefit plans primarily to make increased cost sharing more acceptable to employees.

A second approach involves returning to the employee a portion of the employer's reduced outlays. This can be done in conventional ways, such as increasing the proportion of the plan's premium that the employer pays. A number of companies had experimented with placing funds in employee "savings accounts" from which cost sharing could be paid or cash drawn out at the end of the year, but a provision of the 1984 tax legislation reduced their attractiveness.

Tax considerations also make deductibles and coinsurance generally unattractive. As noted above, employer contributions to health benefit plans are tax sheltered, but deductibles and coinsurance are paid by employees with after-tax dollars. (ZEBRAs—a device for sheltering deductibles and coinsurance from taxation—were ruled illegal by the IRS in 1984.) Unions are well aware of the advantages of nontaxed benefits over taxable wages and have played a leading role in the growth of health benefits. Whether the lower marginal tax rates recently enacted will change attitudes towards cost sharing remains to be seen.

VARYING COST SHARING BY SERVICE

Much of the above discussion focused on the issue of how much cost sharing to have overall—that is, on the proportion of the premium and of medical bills to be paid by the employee. Once an overall level of cost sharing is decided, however, there is substantial scope for planning what services to attach cost sharing requirements to. While we can distinguish conceptually between decisions on the overall level of cost sharing and those on which services it is applied to, most practical decisions
involve both aspects. For example, eliminating coinsurance for outpatient surgery affects not only the relative treatment of inpatient versus outpatient surgery, but the overall degree of cost sharing for surgery. If coinsurance for inpatient surgery were increased at the same time, then overall cost sharing could remain constant, but it would take complex and somewhat uncertain calculations to achieve such a balanced effect.

**Background**

A traditional pattern of deductibles and coinsurance evolved some time ago. Inpatient services, particularly hospital services, were covered fairly completely, but outpatient physician services, prescription drugs, and dental services were either uncovered or had substantial deductibles and coinsurance. A number of sound reasons for this pattern existed—some of which are still present. First, inpatient bills are much larger, so that there is a more compelling reason to insure them. Second, inpatient care is somewhat less subject to insurance coverage stimulating higher rates of health service use. Third, administrative costs as a percentage of claims paid are lowest for large bills. In contrast, they are particularly high for prescription drugs because the average bill is especially small.

The pattern of cost sharing has changed over time, generally moving in the direction of more uniform coverage of different kinds of services. The prime motivation has been interest in expanding the use of health insurance, inspired to an important degree by strong tax incentives to do so. Concern about inappropriate use of inpatient care when ambulatory care could be used has been another factor. However, many plans still have limited or no coverage for outpatient services.

As indicated in Sec. III, use of inpatient care is wasteful when another setting can be used, for inpatient care is almost invariably far more expensive. However, when inpatient care has much lower cost sharing than outpatient care, patients and their physicians have clear incentives to favor the former.

The research literature indicates that improving outpatient coverage, while leaving inpatient coverage unchanged, does not reduce inpatient use. This result, which is counter to the conventional wisdom, has been found in a variety of careful studies. Apparently the increase in office visits stimulated by the improved outpatient coverage results in physicians finding more reasons to hospitalize the patients they see, with this phenomenon overwhelming the substitution of outpatient services for inpatient services. But the expansion of opportunities to substitute outpatient for inpatient services that has resulted from new technologies may mean that these results no longer hold.
Current Options

Much of today's interest in restructuring cost sharing focuses on reducing hospitalization. This includes both shortening lengths of stay and avoiding hospitalization for an entire episode of illness. Attention has also focused on benefits for mental health and drug and alcohol abuse, for many perceive them as a problem area.

The most common step with respect to hospitalization has been to introduce or increase deductibles and coinsurance for inpatient care. This has been highly effective in reducing admissions and length of stay, although many estimates of the savings it produces neglect to subtract out the resulting increase in outpatient claims. The fact that overall cost sharing has increased is also a factor in the extent of the utilization reduction.

In contrast to increasing cost sharing for inpatient services, decreasing cost sharing for services that substitute for hospital care tends to lower the overall degree of cost sharing. We already noted that a general decrease in cost sharing for outpatient services is unlikely to save money overall. Besides the possibility that hospital use might increase, decreased cost sharing will stimulate the use of services already provided on an outpatient basis. In addition, the health benefits plan would pay a larger portion of the cost of services that would have been used anyway.

Take for example, the elimination of deductibles and coinsurance for outpatient surgery. This would lead to some substitution of outpatient for inpatient surgery, but the overall amount of surgery would increase. And those that would have had outpatient surgery in any case would receive higher reimbursements.

Similar considerations apply to posthospital care, such as home health services. In many cases, coverage of home health services would lead to a shortening of hospital stays. But coverage of home health services would increase costs in other cases in two ways: by subsidizing the substitution of paid help for informal services provided by families and friends and by covering the cost of some paid help that patients would have used in any case and paid for out of pocket.

To achieve savings through reduction of cost sharing for services that substitute for hospitalization generally requires one or more of the following:

- an offsetting increase in cost sharing for inpatient services
- narrow specification of those outpatient services subject to lower cost sharing
- use of utilization management techniques in conjunction with the reduction in cost sharing
Narrow specification of eligible services involves an attempt to select those services most likely to be substitutes for inpatient services and those least likely already to be used in the absence of the incentives. For example, a reduction in cost sharing for outpatient surgery could be restricted to a list of those procedures that are often performed on an inpatient basis. This would reduce the magnitude of the induced increase in surgery and minimize the payment for those procedures that would have been done on an outpatient basis in any case. On the other hand, significant complexity would be introduced into the health benefits plan.

Standard utilization management procedures can be used to offset the increase in services associated with reduced cost sharing. For example, if cost sharing were reduced for outpatient surgery, either a mandatory second-opinion program could be added or prior authorization could be required for surgery, both inpatient and outpatient.

Mental Health

Benefit design for mental health services involves issues of both cost sharing and what services to cover. Almost all insurance benefits for mental health care are more limited than those for care of physical illness. The most common difference is to require 50 percent cost sharing for outpatient mental health treatment. However, other special restrictions, such as a 30-day inpatient limit, are also common.

These restrictions stem from a variety of negative stereotypes that range from a belief that expenses for mental health care would increase uncontrollably if the special restrictions were eliminated to a belief that mental health treatment does no good.

The research literature does find that cost sharing affects the use of mental health care more than it does care for physical illness. Ambulatory mental health care is about twice as sensitive to cost sharing as ambulatory care for physical illness. However, reducing cost sharing does not lead to uncontrolled expenditures. Even in situations with very liberal coverage that is the same as coverage for physical illness, mental health benefit costs have been only 8–10 percent of total benefit costs. This was true even in a plan in which substantial adverse selection might be expected.

The literature also shows that a large majority of patients benefit from mental health treatment. Their symptoms become less severe or disappear, and their social functioning improves. Moreover, patients receiving treatment use less care for physical illness—on average, approximately 20 percent less than before treatment. This reduction may occur because what was labeled as care for physical illness was really care for mental
problems or for physical complaints resulting from them. However, the reduction is real, and the overall evidence disproves the belief that mental health treatment does no good.

On the other hand, the literature usually does not find a relationship between effectiveness of care and the length of treatment, the profession of the therapist (psychiatrist, psychologist, etc.) or the method of treatment (for example, classic psychoanalysis). These negative findings provide support for some of the judgments that underlie decisions to limit coverage. Moreover, variability in the treatment used for nervous and mental disorders appears greatly to exceed that for physical ailments. For example, length of hospital stay is much less related to diagnosis than it is for physical illness. All in all, then, it seems appropriate to exert more controls on treatment for mental illness than for physical illness.

In addition, utilization management has a particularly large role to play (see Sec. III). PPO-like arrangements that encourage the use of providers with the most cost-effective practice styles also can be particularly valuable in the mental health field because practice patterns vary so greatly.

Similar issues are involved in coverage of alcoholism treatment and, presumably, drug abuse treatment. (Little is known about the effectiveness of the latter.) A variety of modes of alcoholism treatment appear effective, and treatment seems, in addition, to reduce alcoholics' use of care for physical illness by about 40 percent. Also, major improvements in absenteeism and workplace accidents are reported for those who are treated.

However, experts in alcoholism treatment are disturbed by how frequently treatment takes the form of inpatient hospital care with a duration that matches the maximum number of days covered by insurance. Effective, less expensive alternatives are available, ranging from residential rehabilitation centers (with a daily cost roughly half that of hospital inpatient care) to Alcoholics Anonymous (which is essentially free). As with surgery, an effective solution to overuse of the hospital inpatient setting requires more than coverage of outpatient alternatives. Limiting hospital inpatient care to a brief period for initial detoxification is generally appropriate. In addition, utilization management and/or PPO-like arrangements are particularly useful. Effectiveness—and price—vary greatly from one ostensibly similar program to another. Using utilization management or different cost-sharing rates to steer patients to effective, economical programs can both improve outcomes and reduce costs.
EMPLOYEE CHOICE OF BENEFIT STRUCTURE

Some employers have experimented with offering employees a choice of traditional health insurance options—for example, a high option and a low option, which differ according to the amount of cost sharing that is required. The motivations for offering a choice vary. Perhaps the most common is giving employees opportunities to tailor fringe benefits to their needs. Thus, an employee covered under a spouse’s health plan could reduce his or her contribution or, in the case of a cafeteria plan, take the benefits in another form, such as a larger pension.

In other cases, offering a choice may reflect strategic behavior to increase cost sharing in the standard plan. By pegging the employer’s contribution to the most common plan, and offering a low option plan, the contribution might soon be pegged to a plan with more cost sharing than the previous basic plan.

Choice among traditional plans is likely to be profoundly affected by biased selection. When a choice is offered to employees, the dominant consideration in whether to choose a high or low option is the likelihood of using the benefits. Thus, those in poorer health, those tending to use more medical care in a given state of health, those with larger families, and those without duplicate coverage are more likely to choose the high option plan. Selection bias will be particularly strong if coverage for a particular benefit, such as maternity care or mental health care, differs greatly between plans. Users of such benefits are relatively sure that they will use the benefit, which makes them particularly likely to move to the plan with better benefits. These considerations are likely to dominate differences in employees’ attitudes toward financial risks. The research literature supports this prediction of substantial biased selection in situations where such choices are offered.

When the premiums for the two options are set to reflect their claims experience, biased selection causes a difference in premiums far exceeding what one would expect on the basis of the differences in cost sharing. This pattern has been documented in research on the Federal Employees Health Benefits Program (FEHBP). In 1981, the actual premium for the Blue Cross-Blue Shield high option plan was 14 percent higher than the premium would have been if its enrollees were randomly selected, while the actual premium for the low option plan was 40 percent lower than it would have been with randomly selected enrollees. In some cases, the selection process is powerful enough to lead to the extinction of the high option plan.

Biased selection can be costly to employers. If their contribution to the health benefits plan is pegged to the premium of the high option plan, then biased selection will raise it automatically.
Choice among health plans generally reduces the degree to which those who predictably use fewer health services than average subsidize those likely to be higher users. Whether this is desirable or not is subject to debate. Our impression is that most employers and unions would probably regard the end to such subsidies as undesirable.
VII. WELLNESS

Wellness programs (sometimes known as disease prevention or health promotion programs) attempt to manage costs of health care and disability by reducing disease and accidents. Two broad types of wellness programs have been pursued in the workplace: Individual programs are aimed at specific health problems—for example, programs for high blood pressure detection and control, smoking cessation, stress management, weight control, exercise (fitness), accident prevention, first aid, and good nutrition. In contrast, integrated programs typically include individualized assessment to determine which health problems are important for each employee, education of employees in the value of health promotion, and several individual programs, with employees steered to one or more of these programs according to their individual needs.

This section analyzes the rationale for workplace wellness programs, describes some examples of broad interest, reviews the evidence on their effectiveness, and concludes with a discussion of what makes programs successful.

RATIONALE FOR WELLNESS PROGRAMS

Wellness programs, largely an innovation of the last decade, were developed in response to increased understanding of the nature of serious illness in the United States today. The major causes of death—heart disease, cancer, and stroke—are diseases for which medical care can do relatively little, especially once the disease is well-established. These diseases, however, are very much influenced by “risk factors,” some of which can be controlled by the individual. To take a dramatic example, a male worker over 40 who is overweight, has high blood pressure, has high cholesterol levels, and smokes, is 10 times as likely to die from a heart attack as a coworker of the same age who differs only by not having these four risk factors. Table 3 shows risk factors for the three leading causes of death.

Wellness programs attempt to reduce the risk factors that underlie major illness. Research indicates that lifestyle changes have the greatest potential for reducing risk factors for the major causes of death, although, in a few cases, preventive medicine or environmental change are also important (see Table 4). While less data are available on serious but nonfatal illness, most believe that a similar pattern of
Table 3
RISK FACTORS FOR THE THREE LEADING CAUSES OF DEATH

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Approximate % of all Deaths</th>
<th>Risk Factors</th>
<th>Major</th>
<th>Lesser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>40</td>
<td>Smoking, high blood pressure, high cholesterol</td>
<td>Lack of exercise, diabetes, stress, family history</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>20</td>
<td>Smoking, worksite carcinogens</td>
<td>Environmental carcinogens, alcohol, diet</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>10</td>
<td>Smoking, high blood pressure, high cholesterol</td>
<td>Stress</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Study by C. A. Berry.

risk factors holds for these illnesses and for the medical care costs associated with them.

Lifestyle is difficult to change, as reflected in Mark Twain’s famous quip, “To quit smoking is the easiest thing. . . . I’ve done it a thousand times.” Nonetheless, studies have shown that it is possible to reduce risk factors substantially through wellness programs—both through programs addressed to entire communities and through those located at the worksite.

Table 4
CONTRIBUTION OF RISK FACTORS TO MORTALITY FROM HEART DISEASE AND CANCER

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Contribution of</th>
<th>Health Care</th>
<th>Heredity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lifestyle</td>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td>54%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Cancer</td>
<td>37%</td>
<td>24%</td>
<td>10%</td>
</tr>
</tbody>
</table>

SOURCE: Centers for Disease Control; reprinted in J. E. Fielding, Corporate Health Management.
PROGRAM EXAMPLES

On the basis of evidence on the role of risk factors in serious illness, many companies have developed wellness programs. This section describes some of these programs briefly.

Fitness programs, often directed primarily at improving morale, are among the most common workplace wellness programs. Their costs depend greatly on their characteristics. Programs that provide both company time for participation and extensive athletic facilities are very expensive. The least expensive approaches involve participation on workers' time and include provision of locker rooms and showers, but not gymnasiums; mapping out jogging, bicycling, and walking trails on the grounds or in the neighborhood; and sponsorship of teams in local recreation leagues. Some of these latter approaches are relevant when employees are dispersed and company athletic facilities would therefore not be feasible.

Smoking cessation programs. Smoking is the single most important behavioral risk factor, estimated to be responsible for 40 percent of respiratory illness and some 20 to 25 percent of heart disease, cancer, and stroke. Each smoker costs employers an extra $200 to $500 a year in greater health benefits, higher absenteeism, and increased disability and accidents.

Smoking cessation programs come in many varieties including: "cold turkey"; medication, usually aimed at nicotine addiction; counseling by professionals or laypersons; graduated filters; behavior therapy including aversion techniques such as overexposure or electric shock; and self-help, gradual reduction programs. Workplace programs can include an important additional component: supportive modification of the environment—for example, by prohibiting smoking except in specific areas or by eliminating cigarette vending machines.

Employee assistance programs (EAPs)—counseling and referral programs for employees with problems—began as antialcoholism programs. They have grown very rapidly in numbers, with over 5,000 estimated to exist as of the mid-1980s. Their focus has broadened to include drug abuse, emotional problems, and in some programs even financial and legal problems. Confidentiality for employees using the program is a keystone of EAPs. Often, the overall programs include training of supervisors to recognize problem employees—particularly alcoholics and drug abusers—and to refer them to treatment.

High blood pressure detection and control programs are the primary examples of a major opportunity for preventive medicine (rather than lifestyle alteration) to reduce risk factors. The workplace is a favorable setting for these programs, for program staff can relatively easily carry
on the long-term follow-up needed to assure that blood pressure remains under control.

Integrated wellness programs often begin with a computerized health risk appraisal. The appraisal can provide dramatic, individualized statements such as, “My risk of a heart attack is 106 percent greater than average for a man of my age. By altering the risk factors I can control, my risk could be cut to 37 percent of average.” Such attention-catching statements of current and attainable risk serve both to motivate lifestyle change and to channel employees into relevant individual programs. The assessments of risk also provide managers of integrated wellness programs with information on which specific programs are needed on what scale; a matter that varies from worksite to worksite. Integrated programs often include favorable alterations in the workplace environment—for example providing nutritious alternatives to junk food in cafeterias and vending machines. Also, the “corporate culture” can be used to convey supportive behavioral norms—for example that smoking is viewed as undesirable, not attractive.

EVIDENCE OF WELLNESS PROGRAMS’ EFFECTS

The evidence on risk factors provides a good rationale for wellness programs, but does not guarantee that they will be effective in curbing risk factors or that the benefits will exceed the costs. Careful empirical evidence on the effects of workplace wellness programs is needed. Currently, such evidence is scarce. Wellness programs are relatively new, and so there has been relatively little opportunity to evaluate them. Moreover, businesses usually do not undertake the expensive and time-consuming evaluations that are necessary to produce unambiguous answers about program effectiveness.

The quantitative evidence that does exist often has limitations such as anecdotal rather than systematic reporting of results, lack of adequate control groups for comparison purposes, and self-selection of participants—i.e., only those with motivation and interest participate, possibly biasing results.

The difficulty of developing solid outcome-based evaluation is compounded by the fact that wellness programs are instituted for quite varied purposes in different companies. Goals of wellness programs include not only medical cost reduction but also improved employee morale (the most frequently cited goal), reduced turnover, higher productivity, reduced absenteeism, and better health (also more commonly cited as a goal than cost reduction). Even apart from differences in purposes, wellness programs are not standardized at this early stage of
the field's development. Thus, it is likely that one program of a given type (say, smoking cessation) will be substantially more effective than another.

Despite these problems, there is a growing body of evidence that well-designed, well-executed wellness programs produce net cost savings. Although individual studies have limitations, the cumulative evidence clearly points to net savings. Moreover, positive interaction effects among multiple programs probably exist, but are difficult to measure.

Individual Programs

*Fitness programs* anecdotaly, but with regularity, report large reductions in absenteeism among participants—on the order of 50 percent. Very recently, careful studies have indicated that regular exercise has an independent protective effect against major causes of death and that fitness programs can probably generate a net cost saving by reducing costs for disability absence and medical benefits. Net cost savings apparently have been achieved even in a program with extensive (and costly) facilities (annual program cost about $120 per participant), but with exercise carried out on employees' time.

Although the potential benefits of *smoking cessation* programs are very high, they tend to be plagued by low long-term success rates. Many approaches have been developed, but sustained quit rates (measured at six to twelve months after initial program participation) even in good programs are only about 20 to 30 percent. Higher rates are often claimed, but are usually the result of faulty reporting methods. Even so, one careful study that recognized these limited success rates found a 20 to 70 percent annual rate of return on company investments in smoking cessation and identified smoking cessation as an individual wellness program for which cost savings have very clearly been demonstrated.

*Employee assistance programs* (EAPs) have been reported to have benefit-to-cost ratios of from 2 to 1 to 6 to 1. Reported benefits include a 70–80 percent success rate in treatment of alcoholics with drastically reduced absenteeism and accident rates resulting. An estimate for improved productivity is sometimes also included among program benefits. Reported costs, however, almost always fail to include the medical treatment costs that are incurred if the patient is referred to care outside the EAP.

Programs provided by outside contractors reportedly cost in the range of $10–$30 per employee per year. In-house programs may be much less expensive. Costs per individual treated vary widely—
$1000–$2000 is a commonly reported range. Despite these wide ranges, even conservative assumptions indicate benefits well exceed costs. However, in the case of EAPs, it is particularly likely that those alcoholic employees who use the programs are more motivated to deal with their problem than those who do not and that some of these enrollees would have taken action in the absence of a program—for example, through Alcoholics Anonymous. Thus, the benefits attributed specifically to EAPs are probably exaggerated. Also, as EAPs expand from alcoholism into a broad range of other problems, some of which have less severe effects on health and job performance, benefit-to-cost ratios may decline.

High blood pressure detection programs are medically effective if coupled with programs for controlling high blood pressure. The literature generally reports workplace-based programs as superior to community-based programs, either by bringing high blood pressure under control in a larger percentage of persons who have the problem or by costing less per patient brought under control. While workplace programs definitely improve health by reducing risk, their net cost effects are unclear due to variable effects on absenteeism. Absenteeism sometimes increases among workers who are discovered to have high blood pressure, even though their blood pressure is brought under control. In other programs, absenteeism has decreased. Proper patient education plus systems for monitoring absenteeism may prevent increases in absenteeism among program participants. After all, their health, objectively, has improved.

Integrated Programs

Wellness advocates believe integrated programs are superior to a collection of individual programs. Advantages they cite include: The introductory phases, including individualized health assessment, produce attitude changes both through general education about the importance of risk factors and through the individual, attention-catching presentation of appraisal findings. Changes in workplace environment and corporate culture reinforce direct effects of programs.

However, like the evidence on individual programs, the empirical evidence on the effects of integrated programs is limited. So far, it does not show a superiority of integrated programs, but that may partly reflect the absence of careful comparisons.

Integrated programs generally attract a high level of participation and do so across a broad spectrum of employees. Often, two-thirds to three-fourths of all employees participate initially, and Live for Life, Johnson and Johnson's integrated program, has sustained high participation rates for a number of years.
A study of an integrated wellness program for employees of Blue Cross and Blue Shield of Indiana found medical benefit costs for a group of program participants were one-fourth less than those for a comparison group of nonparticipants over the five years after the participants took part in the program. Costs had been about equal for the two groups before participation. With suitable discounting and conservative assumptions, savings were found to be about 2-1/2 times the program’s cost. However, participants were self-selected and presumably were employees with an above average motivation to do something about their health. Thus it is plausible that some would have undertaken improvements in lifestyle in the absence of the program, causing exaggeration of the effects of the program itself.

Johnson and Johnson is supporting an extensive series of studies of Live for Life that are the strongest methodologically in the field. The company is introducing Live for Life gradually among its many worksites, and the studies use worksites without a program as controls for worksites with programs. This study design largely eliminates the self-selection bias problem and provides data on the entire population exposed to a program—i.e., all those at a given worksite—which is a more useful perspective for judging program effects than is studying only participants. Johnson and Johnson’s findings include:

- Vigorous exercise doubled in the Live for Life worksites over two years, compared to a 33 percent increase among employees in control sites that offered only an annual health screen. The increase in vigorous activity took place throughout the workforce at the Live for Life sites, contrary to the patterns in the general population in which fitness activities have largely been a white, male, white-collar phenomenon. Statistically significant improvements in some heart disease risk factors and in psychosocial factors (feelings of general well-being, absence of depression, etc.) were found associated with individuals’ degree of increase in fitness.

- A full-scale integrated wellness program (Live for Life) showed somewhat greater effectiveness than an energetic annual health screen in halting smoking. Of smokers at Live for Life worksites, 23 percent quit smoking by two years after the program began as compared to 17 percent of smokers at the health-screen-only sites. An 8 percent quit rate over two years would have been expected in the absence of any wellness program, judging from detailed data on smoking behavior in the general population.
• Inpatient hospital costs (in constant 1977 dollars) increased only about one-third as rapidly in Live for Life worksites as in worksites without any program. (The control sites for these cost studies did not have the annual health screen.) After as little as two years of program operation, inpatient hospital costs (standardized for age and sex differences, local cost differences, etc.) were about 40 percent lower in Live for Life worksites than in nonprogram sites.

• In a 1979–1981 trend comparison, absenteeism of wage (i.e., blue collar) employees in Live for Life sites fell approximately 25 percent relative to that in control sites. In contrast, absenteeism of salaried (i.e., white collar) employees did not show differences between the two types of sites. However, absenteeism of salaried employees was only about half that of wage employees.

Most likely, the future will bring additional reliable evidence on cost savings from a wider range of wellness programs. The era of careful, methodologically sound studies is in its infancy. As good studies accumulate, some will expand the scope of positive results; this is already happening rapidly. In addition, there is now a considerable body of experience-based knowledge on how to make programs more effective. This will probably be applied to future programs resulting in further broadening of the range of programs that can clearly reduce costs. We are just beginning to get real benefits from the “learning curve.”

WHAT MAKES FOR SUCCESSFUL WELLNESS PROGRAMS?

One of the most important of the lessons from experience is that using advantages that the worksite provides should greatly augment program effectiveness. Worksite programs can easily be offered at convenient places and times, thereby increasing participation. Publicity in company newsletters, in pay envelope “stuffers,” and such, can be used to generate and maintain interest. Competitions and small rewards are helpful to program success—for example, in smoking cessation or weight loss programs—and are easily arranged at the worksite. Support groups can be formed to help in long-term maintenance of lifestyle changes. The sociability provided by support groups and program participation is a major incentive for some employees to become involved. Reshaping the corporate culture to support lifestyle changes should also enhance program success. For example, a company smoking policy
that makes nonsmoking the norm, makes smoking inconvenient, and uses company role models to convey the smoking cessation message is probably much more effective than a stand-alone smoking cessation program.

Choosing program components to match goals contributes to success. For example, if cost saving is the paramount goal, components with demonstrated cost savings effects are appropriately given priority. If broad participation and morale improvement are goals, then focusing on programs that reach only limited groups of the workforce—for example, smoking cessation or alcoholism-focused EAPs—is not in order.

It is also helpful to tailor programs to employee needs and interests. Needs can be identified by individualized health assessments, by surveys of employees' health-related practices, and sometimes by analysis of health benefit claims and workers’ compensation claims. (However, available claims data are not usually sufficiently specific to be useful.) Employee interests can be surveyed.

Techniques to reach and motivate as large a portion as possible of the target audience are helpful. Some experts report that focusing on short-term gains, such as improved energy level, rather than on risk of death is more effective. After initial enthusiasm dies down, marketing is needed. At least with smoking cessation programs, perseverance with programs is important. Permanent quitting often requires repeated tries.

Redesign of programs to reach the target audience more effectively has been assisted by short-term evaluation that tracks which employee groups are participating and what approaches appeal to which types of employees. Multiple program approaches—for example, both classes and self-study options—facilitate reaching a broader audience.

Finally, there appear to be important potential gains—as yet largely untested—in broad integration of wellness programs with other company policies and practices. For example, some firms reduce the required employee contribution for health or life insurance for employees with healthful lifestyle practices (exercising, not smoking, maintaining normal weight, etc.) As another example, flextime is helpful not only in allowing employees to participate in wellness programs, but also in reducing stress on employees who have child-rearing responsibilities.
VIII. USING THE ADVANTAGES OF SIZE AND NUMBERS

When those who pay for care (principally employers and unions) act in unison on behalf of large numbers of workers, they can achieve significant cost containment advantages. Action on this large scale can generate two kinds of advantages: scale economies and increased market power. Scale economies refer to the fact that it often requires little more effort and resources to perform a given function for a large organization or a group of organizations than for a smaller organization. Market power refers to the greater willingness of sellers to respond to buyers' requests if those buyers represent a large portion of the sellers' business and are in a position to buy elsewhere. Market power can also be exercised in the political arena, with employers and unions that pay for the care of large numbers of persons striving to bring about government actions aimed at controlling health care costs.

This section discusses, in turn, three channels through which buyers most commonly exercise the advantages of large numbers: self-insurance, private group action, and government action.

SELF-INSURANCE

During the past decade, large numbers of employers have switched from insured health plans to self-insurance. For example, the proportion of Connecticut General's group medical and dental revenues from self-insured plans that they administer increased from 1.5 percent in 1975 to 56 percent in 1984. An employee benefit consultant reported that 75 percent of employers with 7500 to 10,000 employees self-funded their health plans in 1984, up from 25 percent in 1980.

Self-insured employers often hire an insurance company or third-party administrator to process claims, but payments go directly from the employer to the claimant. The employer bears the insurance risk, though many limit this risk by purchasing “stop-loss” coverage, insurance that puts upper limits on their liability.

There are sound reasons for self-insuring, including better cash management, avoiding insurance regulation, and increased control of the health plan.
Cash Management

Under typical insurance arrangements, premiums are paid in advance, or coincide with the period covered. However, medical claims are not paid until 1–3 months from the date of service, giving the insurer use of the funds for this period. By self-insuring, the employer has the use of the funds until the claim is paid. This may not be the most powerful reason for self-insurance. Health insurance is a relatively competitive business, and competition would be expected to force down premiums so that they reflected the value to insurers of having these funds available.

Insurance Regulation

Health insurance is regulated by the states. In addition, many states assess a premium tax. Regulation attempts to maintain financial solvency of insurers and often mandates that certain benefits be included in all policies. Self-insured plans are generally exempted from state insurance regulation on the grounds that they are subject to regulation under federal ERISA legislation.

Avoidance of state regulation reduces costs in a number of ways. Premium taxes are generally in the 2–3 percent range. Mandated benefit provisions, frequently focusing on mental health benefits, may add substantial costs to health plans. Reserve requirements for insurance impose costs by tying up funds in liquid investments. In some states, insurance regulation imposes restrictions on PPOs, such as requiring the inclusion of any provider willing to meet the terms of the PPO.

Control of Health Plan

Having a self-insured plan gives the employer more control over the management of the health plan. If the plan managers want to pursue a particular utilization management technique, they are not dependent on whether the insurer offers it or will accept an outside organization to carry it out. Instead, managers use internal resources or freely hire a utilization management firm to pursue it. Employers may still draw on the expertise of the insurer or other third-party administrator that is hired to administer the self-insured plan.
PRIVATE GROUP ACTION

Buyers can gain the advantages of large numbers through joint private action. Multiemployer trusts (METs) and coalitions have been widely used to reduce health benefits costs.

METs

Groups covering less than a few hundred persons cannot safely self-insure because year-to-year fluctuations in claims, often caused by a very small number of extremely costly illnesses, are too large. METs provide small employers a way of obtaining some of the benefits of self-insurance. Under a MET arrangement, a number of small employers pay premiums to the MET, and the MET then pays claims.

As specialists in smaller groups, METs are generally more responsive than conventional insurers to small groups' preferences in benefit design and other areas. METs' specialization may also enable them to serve small groups with lower administrative overhead costs and to pass these savings along to buyers.

However, their lower premiums also stem from favorable risk selection. METs' benefit plans often contain particularly extensive exclusions of coverage of prior medical conditions and, for very small groups, METs sometimes require medical statements on the health condition of the persons covered.

Prior to 1982, METs were exempted by ERISA from state insurance regulation, including premium taxes, mandated benefits and cash reserve requirements. Unfortunately, under minimal federal regulation, a significant number of METs failed financially, leaving a tangled situation behind. Employees or employers have been left to pay medical bills that they had every reason to expect the MET to cover. For hospital bills and other large claims, the impact can be severe. In 1982, the federal government repealed the ERISA exemption for METs, leaving the states to decide what aspects of insurance regulation to apply to them.

Coalitions

Coalitions are geographically localized groups organized to carry on a broad range of health cost management activities. Approximately 175 business-sponsored coalitions existed as of 1986. Most cover a metropolitan area or substate region. About half include health care interests (physicians, hospitals, and/or insurers) in the belief that working together with these interests yields better results. The other
half feel that buyers need a forum in which they can act without the presence of health care interests. Typically, business firms are represented by their employee benefit managers. Coalitions are often staffed by personnel loaned by their member organizations rather than by staff paid by the coalition.

The early activities of coalitions frequently center on self-education—raising members' level of knowledge about the nature and causes of the health cost problem, and about the range of possible solutions. Later activities include data gathering, fostering alternative delivery systems, technical assistance to members in benefit design and in utilization management, and attempts to control the supply of hospital beds and high-tech health care equipment.

Data gathering is perhaps the most intensive single area of coalition activity. A number of coalitions have compiled data on relative costs of hospitals, often on a sophisticated basis—for example, by DRGs. These activities spread the costs of information gathering broadly (i.e., take advantage of economies of scale) and permit the broader claims database of multiple employers to be brought to the task.

Other data-gathering activities have included measuring local utilization patterns and comparing them with regional and national norms, and developing data on outpatient surgery costs. Coalitions' data-gathering activity underpins other activities, such as the following two.

Coalitions have provided support and encouragement for HMOs and PPOs. In localities where HMOs were nonexistent or few in number, coalitions have viewed increasing the number of HMOs as having major potential for cost containment and have supported planning and start-up activities as well as urged members to offer HMOs to their employees. Coalitions' data are often extremely valuable for selecting hospitals for PPOs, and coalitions have made their data available to organizers of PPOs, as well as again encouraging members to use these alternative delivery systems. However, coalitions have generally avoided direct sponsorship of PPOs because of antitrust concerns.

By concentrating on health cost issues, coalition staff rapidly develop expertise in health cost management beyond that available inside all but the largest firms. The data that coalitions develop often can identify local utilization excesses that utilization management or benefit design measures can deal with. Through technical assistance, coalitions make this expertise and information available to members.

Many coalitions have sought to control the supply of hospitals and high-tech health care equipment. Coalition efforts have taken several forms, including involvement in local and state planning processes; directly pressuring hospitals; and educating businessmen who serve as hospital trustees that "more" for hospitals is not necessarily "better"
for the community, particularly given the health cost problem. Somewhat similarly, a number of coalitions have actively campaigned for state regulation of hospital rates (as discussed below).

We know of no studies systematically evaluating the effectiveness of business-sponsored coalitions. Many case histories of coalitions have been written, but these do not speak to the question of what would have been accomplished in their absence. However, coalitions appear to have met the "market test," in that the number of businesses contributing to coalitions is increasing. Coalitions have also received a boost from a major grant program of the Robert Wood Johnson Foundation.

A small number of coalitions of trade unions focused on health cost problems also exists, although the coalitions of trade unions have received far less attention than the business-sponsored coalitions. Their activities seem to center on PPO-like arrangements, often on developing lists of physicians who have agreed to treat union members and their families at relatively modest prices. Some unions have been extremely energetic in using market power to obtain favorable prices from providers.

GOVERNMENT ACTION

Much as in the economic marketplace, businesses and unions that in total employ or represent large numbers of workers also have considerable market power in the "political marketplace." By using that power in support of governmental cost management measures, they may be able to reduce their health benefit costs.

Rationale

In the United States today, markets are the principal mechanism used to allocate resources. Government regulation generally focuses on improving the functioning of markets (for example, securities market regulation), but in special circumstances attempts to allocate resources directly where markets are thought to have failed. Medical care is one of the areas in which governments have tried to pursue the latter course.

The basis for government's role in health care cost containment is the absence of effective constraints on costs by consumers. With extensive third-party coverage, consumers—i.e., patients—have very limited incentives to economize on the use of care or to choose providers on the basis of price. Governments have attempted to regulate the
rates that hospitals charge and the facilities they construct, substitut-
ing administrative constraints for those not forthcoming from patients.

State Regulation of Hospital Rates

Several states have programs to regulate the rates hospitals charge. Such programs have varied widely—for example, in terms of whether they are voluntary or mandatory, which payers are regulated, and the degree to which rates are set on the basis of detailed review or by for-

mula. Careful data analysis shows that many of the programs have controlled costs, with the most effective programs cutting the rate of increase in per capita spending on hospitals to 3 to 4 percentage points a year below the rate of increase that would have prevailed without a regulatory program. This means that where one of the more effective programs has functioned for five years, hospital costs will be 15 to 20 percent below what they otherwise would have been. However, some state programs did not have significant effects on costs. Research

appears to indicate that when rate controls are stringent, costs will be contained, but obtaining the right political coalition for tight controls cannot be taken for granted.

With the enactment of a prospective payment system for Medicare in 1983 (discussed in Sec. IX), the focus of state-level hospital rate-setting programs has shifted. Medicare patients account for about 40 percent of hospital revenues, and payment for them on the basis of a fixed amount per admission appears to have stimulated hospitals to contain costs for all patients. As a result, current effects of state pro-

grams that regulate hospital rates probably lie mainly in the area of equity among the different payers. Out of a concern for equity, some state rate-setting programs regulate the size of discounts that hospitals can grant payers and attempt to shift resources to those hospitals that provide large amounts of services to indigent persons without health insurance (see Sec. X).

Groups of purchasers have sometimes led the battle to enact legisla-
tion regulating hospital rates. In some states, such as Massachusetts, they have succeeded; in other states, such as Arizona, hospitals have prevailed and legislation has been defeated. Both the business com-
nunity and organized labor have been split on whether state regulation of hospital rates is desirable. Some business leaders have championed rate regulation as a more direct way of placing incentives on hospitals to contain costs than procompetitive measures, such as PPOs, and as a mechanism to limit "cost shifting" to private payers. Others express skepticism concerning the long-term potential for effective control of costs through regulation. They cite the inevitable distortions that are
associated with administered prices, the tendency for the regulated to avoid the intent of regulations, and the widespread history of “capture” of the regulatory process by the regulated industry. They also fear that rate setting will hamper private innovations in cost management, such as PPOs. Firms' attitudes have also depended in part upon whether they were already benefiting from favorable price arrangements that would be jeopardized by regulation. Some Blue Cross plans have enjoyed substantial discounts from hospitals' usual charges, and their customers must weigh the immediate reduction of these discounts against the possible reduction in charges accomplished through regulation.

Union leaders have traditionally been more receptive to government regulation, but are torn between lowering health benefits costs and the sacrifices borne by hospital employees, in the form of lower wages and layoffs, when major cost containment pressures are brought to bear.

Regulating Facilities

Some states regulate major capital expenditures undertaken by hospitals and nursing homes. Quantitative studies of early versions of these regulatory programs generally did not find that they had an effect on either aggregate hospital capital expenditures or costs. Their lack of success was probably due to a combination of the technical difficulty of making defensible decisions about which projects are “not needed” and the political difficulty of translating a general but diffuse interest in cost control into specific measures that have large and direct negative effects on particular hospitals.

Regulation of the supply of hospital facilities and services does, however, appear to have worked in a few localities. Generally, such areas had a small number of very large employers, and these employers pursued an activist cost control strategy. In other words, contrary to the usual pattern, the proregulatory interest was strongly organized and energetically pursued.
IX. MEDICARE

While employers struggle over how to contain the costs of their health benefits programs, governments are pursuing parallel efforts to contain their outlays for the Medicare and Medicaid programs. The policies pursued in Medicare and Medicaid are important to employment-based health plans and vice versa. For example, the Medicare Prospective Payment System (PPS), which pays hospitals a fixed price per admission, undoubtedly has affected the prices paid for hospital care by private health plans.

The following two sections review current developments in Medicare and Medicaid and policy options for further change. They have less detail than the previous sections, because corporate and union leaders are less likely to become involved in any but the most major program issues and because the cost containment tools are broadly similar to those available to employers. The Medicaid section not only discusses Medicaid itself, but takes up the issue of financing care for indigent persons not eligible for Medicaid.

BACKGROUND

For historical reasons, Medicare comprises two distinct health insurance programs—Hospital Insurance (HI or Part A) and Supplementary Medical Insurance (SMI or Part B). Part A covers hospital care, a very limited amount of nursing home care, and home health services. It is financed entirely through a dedicated portion of the Social Security payroll tax—currently 1.45 percent of payroll each for employers and employees. All individuals aged 65 with sufficient participation in Social Security are eligible for Part A, as well those receiving Social Security Disability Benefits for at least two years and those with end stage renal disease.

Part B covers physicians' fees, outpatient hospital services, and laboratory charges. In contrast to Part A, Part B is financed by general revenues, which currently cover 75 percent of the costs, and by premiums paid by enrollees—$17.90 per month for 1987. Persons eligible for Part A and all others aged 65 and over may enroll in Part B.

Medicare has its own distinct pattern of cost sharing. Hospital care is subject to a deductible roughly equal to the average cost of one day in the hospital—$520 for 1987. No cost sharing is required for the second through sixtieth day of a spell of illness, but large copayments
are required for longer stays. Physician and other services covered by Part B are subject to a $75 annual deductible and coinsurance of 20 percent. Unlike many private insurance plans today, Medicare does not limit the amount of cost sharing that a beneficiary can become liable for, although such limits were proposed by the President in early 1987 and are under active consideration by the Congress.

Roughly two-thirds of beneficiaries are covered by private supplemental insurance ("Medigap") that pays much of the required cost sharing. Approximately one-third of those with supplemental insurance obtain it through retiree health plans. (For persons over 65 who are working, the situation is reversed, with employment-based insurance primary, and Medicare a supplement.) Another one-seventh of all Medicare beneficiaries (those with the lowest income) have their cost sharing covered through Medicaid.

Much to the consternation of many beneficiaries and their relatives, Medicare coverage of long-term care in nursing facilities and at home is very limited. Applying only to recovery from acute illness. Custodial care is not covered at all. Overall, Medicare pays for only 2 percent of U.S. nursing home care. Private supplemental insurance also generally excludes custodial care.

Until recently, Medicare paid hospitals on the basis of costs, as determined by Medicare's audit rules. Since certain cost items were disallowed, Medicare's cost-based reimbursements were substantially lower than the hospital charges paid by most patients with private insurance. This spawned controversy over whether Medicare was cost shifting to private purchasers. Hospitals are not permitted to bill patients for the difference between charges and Medicare's payments.

In late 1983, Medicare began to pay hospitals differently. Each patient is classified into a diagnosis-related group (DRG), and a fixed amount per patient, adjusted for factors such as local wage rates, is set for each DRG. Current actual costs now play almost no role in determining Medicare reimbursements. Hospitals appear to have reduced costs in response to the incentives of this prospective payment system, with the most dramatic effect being a shortening of lengths of stay. While some had predicted a substantial increase in cost shifting, in fact the difference between what the hospitals charge and what Medicare pays has narrowed. The combination of this narrowed differential and the discounts that some private purchasers have obtained through PPOs has defused controversy about the Medicare cost shifting issue, at least for now.

Medicare pays physicians on the basis of "reasonable" charges. Under this complex system, physicians are paid their actual charges, unless the charges exceed various screens, which they usually do. In
general, Medicare’s screens are tighter than those used by private insurers. Indeed, in 1984, 82 percent of charges exceeded these screens and were reduced by an average of 24 percent.

Physicians may choose on a claim-by-claim basis whether to bill Medicare and accept its “reasonable” charge as payment in full (“accept assignment”) or to bill the beneficiary, who in turn files a claim with Medicare. In the latter case, the beneficiary is responsible for the difference between what the physician charges and what Medicare pays. Private insurance that supplements Medicare often does not cover charges higher than the price Medicare pays, and so does not eliminate the problem beneficiaries face when physicians do not accept assignment and their charges are above Medicare’s allowed charges.

Recently, Medicare created a “participating physician” category. Physicians agreeing to accept assignment on all claims during an entire year are included in directories published by Medicare and get payments up to 4 percent higher. Development of this category, which resembles aspects of a PPO, caused the assignment rate to increase substantially, despite a freeze on payment rates and the very limited distribution of the directories to date. More than two-thirds of physician claims are now assigned.

Substantial interest has been developing in changing the crazy-quilt pattern of relative payments that has evolved through reasonable charge reimbursement. Indeed, recent legislation reduced payment rates for cataract surgery on the grounds that rates were “unreasonable” in comparison with those for other procedures. A process may be set up to address these issues systematically.

Medicare has made less use of alternative delivery systems than have employment-based health plans. Until early 1985, Medicare did not offer a capitation contract that many HMOs found attractive. Now HMOs can receive a capitation payment equal to 95 percent of what Medicare estimates it would have paid if the enrollee had instead continued in the fee-for-service system. Only 3 percent of beneficiaries are currently enrolled in HMOs or similar plans under risk contracts, compared to 10 percent of the general population, but the percentage might catch up over the next few years.

**POLICY OPTIONS**

Since 1981, when the large federal budget deficit became the dominant factor in domestic policy, substantial efforts have been devoted to reducing Medicare spending. Much attention has been given to the projected depletion of the trust fund that finances Part A of Medicare,
but the budget deficit to date has been the more important influence. Hospital reimbursements have accounted for most of the cuts enacted to date, but physicians and beneficiaries also have been affected.

While the generic cost containment options for Medicare are the same as those for employment-based health benefit plans—that is, utilization management, alternative delivery systems, benefit redesign, etc.—there are important differences between Medicare and private benefit plans in terms of which cost containment measures have the greatest potential. Medicare is in a much better position to pursue cost containment through reimbursement policy, for example, but is in a poorer position to employ utilization management or wellness options.

Reimbursement Policy

Medicare's large market share is crucial to its ability to pursue reimbursement policies. Its beneficiaries account for almost 40 percent of the revenues of the average community hospital. With hospitals legally required to accept Medicare reimbursement as payment in full, and reimbursements no longer tied to costs, the program has a very substantial ability to reduce outlays through restrictions in payment rates. Medicare payments to hospitals are billions of dollars per year lower than they would otherwise have been if not for the reimbursement constraints of the past few years.

But responsibilities accompany this market power. With such a large market share, Medicare reimbursement policy will have a substantial influence on the financial status of hospitals, the nature of the services that they will be able to provide to both Medicare and other patients, and on the prices paid by others. With so many concerned with the effects of Medicare payment policy, the political process will eventually constrain Medicare. Indeed, soon after the initiation of prospective payment, legislation set up a Prospective Payment Assessment Commission to advise both the Administration and the Congress on payment rates and, despite having granted the Administration the discretion to set payment rates, the Congress has repeatedly passed legislation to set rates.

Recent policy debate concerning payment rates has been dominated by the level of profitability in the hospital industry. With profits unusually high, Medicare has increased rates more slowly than general inflation. This pattern is likely to continue until hospital profitability declines substantially. Fixed per-case reimbursement (the DRG system) has changed hospital incentives, and hospitals have responded by controlling per-case costs dramatically, but Medicare is recapturing much of the savings by limiting annual payment increases.
Medicare's market power for physicians' services is more limited, but nonetheless potentially significant. Medicare accounts for a smaller proportion of physicians' revenues—about one quarter—but far more important, the Medicare law allows physicians to bill patients for the difference between their charges and what Medicare pays. The use of this “balance billing” has declined somewhat as a result of the increasing supply of physicians and implementation of the participating physician category described above. The proportion of claims assigned increased substantially between 1983 and 1985, despite a freeze on payment levels.

Other Policies

In contrast to an advantage in containing costs through reimbursement policy, Medicare appears to be at a disadvantage in pursuing utilization management or benefits redesign. The limited discretion afforded public officials and resulting lack of flexibility inhibit the effectiveness of utilization management, while the prevailing view that cost sharing is already too high in Medicare and the extensive use of supplemental coverage rules out significant cost containment through benefit redesign.

Medicare did some of the pioneering work in utilization management during the 1970s through its Professional Standards Review Organization (PSRO) program, but the program was only marginally cost effective, if at all. The absence of workable incentives and explicit goals, and the political needs to constrain only those physicians with the most deviant practice styles, were some of the causes of weak performance.

Medicare's current utilization management system, Peer Review Organizations (PRO), is likely to perform better. The PROs have much stronger direction from Medicare, and they have a more effective tool—pre-admission certification. In addition, fixed payment per admission frees them from the need to review length of stay, which usually is reviewed now only out of concern for risks to quality from premature discharge. Thus, they can concentrate their effort on the necessity for admissions.

Medicare has developed a list of surgical procedures for which coinsurance on outpatient facility charges are waived. PROs review selected surgical procedures for medical necessity as well as appropriateness of setting.

Despite the expected success of PROs, they are unlikely to be as effective as utilization management efforts by employers or their insurers. The fact that beneficiaries have no option other than to write
their representatives in Congress when they feel that utilization management is too stringent limits the degree of stringency that can be pursued. Reluctance to grant government officials substantial opportunities to exercise judgment also limits flexibility, thus making some utilization management activities (for example, catastrophic case management) impossible.

Benefits redesign holds little potential for cost containment in Medicare. Two administrations have proposed increasing deductibles and coinsurance in Medicare and using part of the savings to pay for improved catastrophic protection, but these proposals did not gain serious consideration in the Congress. Most members of Congress believe that Medicare cost sharing is already too high. When options to reduce outlays by increasing the burden on beneficiaries are considered, increases in premiums (for Part B) are favored over increases in cost sharing. To many in the Congress, the distinction is one of spreading the burden of reducing budget deficits widely over all beneficiaries versus concentrating it on those who are ill.

The extensive use of private supplemental coverage that was described above is both an indication that beneficiaries consider cost sharing too high and a factor that would dilute greatly the effects on the use of services of any increase in cost sharing.

Given the limited potential of utilization management and benefit redesign in Medicare, alternative delivery systems are likely to offer the beneficiary substantial advantages over traditional Medicare, perhaps ultimately gaining a larger market share than among those covered by employment-based plans. HMOs are strongest in those respects that Medicare is most limited; as decentralized, private organizations, they may use substantial discretion in utilization management. If enrollees or physicians find an HMO's practices unacceptable, they can leave for another HMO or traditional Medicare. Thus extensive negotiation of standards for each type of care with wide segments of the medical profession is not required. The very limited use of cost sharing in HMOs also makes them an especially attractive choice for the elderly.

Much as has happened with employers, Medicare has found it difficult to reduce its own outlays through HMOs. Currently, Medicare bases capitation payments on its costs in the fee-for-service system, so most (if not all) of HMO cost savings accrue to the beneficiaries and the owners of the HMOs. While Medicare aims for a 5 percent savings when it sets capitation payment rates, biased selection is likely to consume this savings and more. Significant budget savings from HMO enrollment await the point at which their market share among Medicare beneficiaries is large enough that capitation rates can be based on HMO premiums rather than on the experience of traditional Medicare.
One of the most interesting options being discussed in Washington at this time would authorize capitation payments to large employers or unions to provide Medicare benefits through retiree health plans. This would make available to large numbers of Medicare beneficiaries the innovations in utilization management that employment-based plans are developing.

Despite the substantial progress that Medicare is making in slowing the growth of program outlays, additional resources are likely to be required over the long term. With those eligible for Medicare increasing as a proportion of the total population, and with spending on health care likely to grow at least as rapidly as gross national product (GNP), the costs of Medicare will rise relative to GNP. The debate on how to finance Medicare will ultimately shift to the question of who should pay these additional costs—the working population or those among the beneficiary population who are better off.
X. MEDICAID

Since its implementation beginning in 1967, Medicaid has been the dominant public program financing medical services for the poor. In recent years, however, eligibility rules have been tightened while the proportion of the population with private insurance has been declining. The result has been an increasing population facing financial barriers to medical care. In March 1984, almost 17 percent of the population under age 65 were uninsured, compared to 14 percent in 1980. Two-thirds of those uninsured in 1984 had incomes below twice the poverty standard.

BACKGROUND

Medicaid is a Federal-State matching program providing medical assistance payments for low-income persons who are aged, blind, disabled, or who are members of families with dependent children. Medicaid programs are designed and administered by the states within federal guidelines, so they vary in important ways in terms of persons covered, scope of benefits offered, and amounts of payments to providers.

Eligibility

Eligibility for Medicaid is tied very closely to eligibility for cash assistance under the federally assisted Aid to Families with Dependent Children (AFDC) program and the federal Supplemental Security Income (SSI) program. All of those receiving AFDC benefits and most of those receiving SSI benefits are eligible for Medicaid.

The group eligible for Medicaid does not include all of the poor, however. Single persons and families without children are not eligible, regardless of income. Families with two parents are not eligible except in certain states where a family with an unemployed breadwinner may be eligible. Recent legislation has, however, extended coverage under Medicaid to two groups almost without regard to family category. These are low-income children under 5 years of age and low-income pregnant women.

Some states grant Medicaid eligibility to medically needy persons—those meeting the family category standard for AFDC or SSI but whose income is somewhat too high to receive cash assistance. Medical
expenses can be subtracted from income for this calculation. Thus, many who gain eligibility as medically needy do so as a result of large medical bills. The medically needy account for 27 percent of Medicaid spending. Much of this goes to recipients with long stays in nursing homes. Some low-income Medicare beneficiaries are also eligible for Medicaid, which then serves as supplemental coverage as noted in the previous section.

Many who meet the categorical requirements and have incomes below the federal poverty standard nevertheless are not eligible for AFDC and Medicaid. States vary widely in the "need" standards used to determine eligibility for AFDC benefits. For a one-parent family of three, the 1986 standards varied from $197 per month in Kentucky to $777 per month in Washington state.

The proportion of the poor eligible for Medicaid has been decreasing. One study estimated that Medicaid served only 53 percent of those with incomes below the poverty standard in 1983, compared with 65 percent in 1976. The principal factor behind the decline has been the AFDC standards for cash assistance to keep up with inflation. Between 1970 and 1986, the median AFDC standard declined 33 percent after adjustment for inflation.

Benefits

The scope of Medicaid benefits varies from state to state. Some benefits are required by federal standards, while others are optional. Even the minimum benefits are much more comprehensive than Medicare's, however. Virtually no cost sharing is required. In addition to hospital care and physicians' services, which are mandated, some states cover dental care and prescription drugs. Coverage of long-term care in nursing homes is extensive, and it accounts for fully 44 percent of Medicaid spending. High spending on nursing home care has led to Medicaid becoming more a program for the aged and disabled than for AFDC families. AFDC children and adults account for only 12 and 13 percent of Medicaid spending, respectively, although they are, respectively, 42 and 25 percent of the recipients. Thus three-fourths of the program's spending goes for the one-third of recipients who are aged or, in much smaller numbers, blind or disabled.

Payments to Providers

Reimbursement policies also vary from state to state. While hospital reimbursement originally followed Medicare principles, states now may use any method that results in payments that are "reasonable and adequate," and, in fact, use varying methods. Some programs use
Medicare rates for physician payment but others use fee schedules that result in payments that are much lower. Physicians are not permitted to charge Medicaid recipients the difference between billed and allowed charges. In states where allowed charges are low, access to private physicians is severely limited, and recipients often make use of much more expensive hospital outpatient facilities, which are often reimbursed on the basis of costs.

Medicaid is financed through general revenues of the federal and state governments. The federal government makes matching payments to states on the basis of a formula that varies the rate according to state per capita income. The federal share currently ranges from a minimum of 50 percent in states that are better off to 78 percent in the poorest states.

POLICY ISSUES

Medicaid programs have been under severe pressure to cut costs for some time. The state share of Medicaid spending has become a very important component of state budgets, leading proponents of other state activities to take an interest in reducing the Medicaid budget. Federal signals have been mixed. Budget legislation passed in 1981 provided both additional incentives for states to limit spending and additional discretion to change eligibility and reimbursement policies. More recently, federal policy has required states to expand coverage of pregnant women and young children.

States have responded to the need to contain costs by improving administration, making selective cuts in eligibility and optional benefits, and by paying hospitals and nursing homes less.

Limiting construction of nursing homes has been an important component of state policies to slow the growth in outlays for long-term care. States have included nursing homes in the facilities regulation process (see Sec. VIII) and have denied permission for many projects, sometimes using construction moratoria. With existing facilities essentially full, fewer new beds has meant slower growth in outlays. States have not set up rationing mechanisms to allocate the increasingly scarce beds available to Medicaid recipients, however.

A viable overall policy to contain costs for long-term care has not yet evolved. While research has indicated that some in nursing homes could be served at home at lower costs, most analysts are skeptical about the potential of home care to reduce program outlays. Waiting lists for nursing homes are long and beds released by those able to remain at home would be taken up by other Medicaid recipients. An
expanded home care benefit would thus not reduce nursing home expenses and would lead to paying for more at-home services. In essence, current policies may not foster efficient use of nursing homes, but they nevertheless are the lowest cost to the taxpayers.

Increasing discussion has focused on the potential of private long-term care insurance. Many of those receiving Medicaid benefits for long-term care were not poor until faced with the enormous costs of lengthy nursing home stays. To the extent that those of middle income could pay insurance premiums to protect against these costs, a substantial responsibility would be removed from Medicaid programs. Major problems of selection bias exist, however, and it is questionable whether a viable commercial market for long-term care insurance could be developed.

Medicaid programs have recently been making significant use of HMOs. Michigan reports enrolling 87,000 recipients in HMOs in the Detroit area and saving a significant amount. There is interest in the use of case management—that is, assigning each recipient to a primary care physician who would serve as a gatekeeper—but it is still in experimental stages. The Robert Wood Johnson Foundation is sponsoring demonstrations of this approach in a number of states. Current law permits Medicaid programs to be much more aggressive than Medicare in directing beneficiaries to arrangements that promise cost containment. Experimentation is also proceeding with social HMOs—HMOs that provide some long-term care as well as acute care.

THE POOR NOT COVERED BY MEDICAID

We noted above the substantial number of persons with incomes below the poverty standard not eligible for Medicaid. While some of these have private insurance, many do not. Census data indicate that 36 percent of the under-65 population with incomes below the poverty line, and 25 percent of those with incomes between the poverty line and two times that amount, lacked health insurance coverage in 1984. A poll sponsored by the Robert Wood Johnson Foundation indicated that one million families had at least one member who needed medical care in 1981 but did not receive it for financial reasons.

Lack of insurance coverage is becoming a more serious problem. Small employers have been reducing contributions for dependents’ coverage in response to rising premiums. Also, the composition of the work force has shifted toward smaller establishments, which are less likely than large firms to provide health insurance, in part because they face higher premiums. On the other hand, recent legislation
requires employers to offer continued coverage at group rates to those laid off and those divorced from employees. This gives many persons continued access to insurance at attractive rates, though lack of funds may preclude some from taking advantage of this opportunity.

Coinciding with the increase in the numbers of the poor without health insurance coverage has been a decline in the ability of hospitals to serve the uninsured. Hospitals have traditionally provided some charity care, financed in large measure through markups of charges over costs. With reimbursement cuts by Medicare and Medicaid and increased price competition in the market for private payers spurred by increasing use of HMOs and PPOs, hospitals will find it increasingly difficult to maintain such cross subsidies.

While the federal government appears to be precluded by its large budget deficit from supporting an increase in assistance to the uninsured poor, states have begun to take a variety of actions. Some have expanded Medicaid programs in selected areas—especially maternity care. Such expansions cost the states little, since states would bear an important part of the costs in any case through subsidies to public hospitals to defray the costs of treating indigent patients. By expanding Medicaid coverage, they may achieve cost savings from prenatal care reducing the need for neonatal care. In addition, the costs of Medicaid services are partly borne by the federal government, while public hospitals are subsidized entirely by state and local funds.

Some states have devised mechanisms to provide subsidies to hospitals delivering substantial amounts of care to those unable to pay bills. States with all-payer rate setting often build in an allowance for uncompensated care when setting rates. In Florida, which does not have rate setting, a tax is levied on gross hospital revenues to generate a pool of funds for uncompensated care. These approaches place the burden of unpaid care largely on the purchasers of health insurance rather than on the state’s taxpayers. Given the large federal tax subsidy to the purchase of health insurance through employment, the federal government will bear an important portion of these costs.

Public policy faces a difficult dilemma with respect to financing health care for the poor. Many feel that essential medical services should not be denied on the basis of inability to pay, but the most efficient ways of ensuring this access would be through some type of universal coverage. Universal coverage would entail huge budget outlays, however, since many of those covered today would discontinue their insurance if free or highly subsidized public coverage were available. Such a substitution could be limited by mandating employer coverage, but that has proven to be a highly unpopular idea, especially to small employers that would pay the highest premiums for it.
With universal coverage appearing to be out of the question for now, governments are searching for more piecemeal methods of solving the problem, such as highly focused Medicaid expansions and assistance for those institutions delivering large amounts of charity care. By narrow targeting of benefits toward persons unlikely to have private coverage and by limiting the attractiveness to individuals of the expansion of access, these approaches attempt to avoid inducing people to drop private coverage.
XI. CONCLUDING THOUGHTS

Employers, unions, and public payers have available to them a common set of underlying methods for managing the costs of health care. They can reduce the resources used in care, obtain a lower price, reduce the need for medical services, or shift payment responsibility to other parties. They also have available a common set of tools with which to pursue these four cost management methods.

Payers will, in general, choose tools that are most consistent with their philosophy towards health benefit plans. Thus, some will eschew the use of substantial cost sharing and emphasize administrative measures instead. Payers also should use tools with which they have a comparative advantage. For example, public payers, because of their large market share, have a particularly good opportunity to obtain lower prices, but may be at a disadvantage in employing utilization management due to political limitations on exercising judgment. To obtain the best results, however, payers need to use multiple tools.

Despite this, most cost management activity in the private sector has to date concentrated on one tool—increasing cost sharing. This focus may stem from broad familiarity with this tool and the somewhat experimental nature of many of the other tools. However, increased cost sharing has a number of drawbacks. It shifts costs to workers, at least in the short run. For some low-income persons, it seems to have negative health consequences. Given the tax treatment of health insurance, cost sharing loses a tax benefit available to employees and employers. As the number of two-worker families grows, cost sharing’s effect on health care use will be increasingly undermined by dual coverage. Continued progress in cost management will require more emphasis on utilization management, wellness programs, and tools focused on obtaining a better price from care providers.

To use this wider range of cost management tools effectively, payers will have to invest more resources in health cost management programs. While investment of one of their most valuable resources—the time and attention of senior staff—is required, the findings in the preceding sections suggest that returns will be high.

Currently, many of the tools that purchasers can use have somewhat uncertain results. Experience is often too limited or techniques too variable from one setting to another for there to be reliable rules of thumb as to the savings to be expected. With many techniques proprietary, researchers have had relatively few opportunities to
conduct evaluation studies. Moreover, the specifics of how a technique is implemented can have a major impact on its effectiveness.

Thus, employers and unions will have to make commitments to pursue health cost management strategies even though the outcomes are uncertain. Such uncertainty, however, is often the norm in the main business of a firm. For example, when a new marketing strategy is being considered, its prospects are uncertain, and should it be implemented, the results will have to be compared with the hypothetical outcome of an alternative strategy.

Over time, something closer to a "cookbook" is likely to evolve. With more experimentation and refinement of methods, we will arrive at a point where the outcomes of particular techniques will be better known in advance and purchasers can consider options with known outcomes.

Even at present, new developments are easing the difficulties of health cost management. For example, new market forces have made it possible to negotiate prices with providers of care. Another example is the growth of firms providing advice and technical assistance—sometimes of a highly specialized type—in health cost management.

An important policy issue that must be faced as additional cost management efforts are pursued is how to provide some services that are currently financed in the United States through cross-subsidies. For example, as purchasers become more aggressive, hospitals will become less able to use markups on insured patients to finance charity care, graduate medical education, and some services with large standby costs (such as burn units). If society chooses to continue these activities, substitute financing methods will have to be devised.

Some large purchasers may choose to take these subsidies into account in their cost management practices. In forming a PPO, for example, the price paid for hospital care can be reduced by avoiding hospitals whose rates are high because of substantial cross subsidies. However, unions and employers may want to consider choosing hospitals on the basis of their efficiency rather than the absence of cross subsidies and thereby to continue to patronize hospitals that provide large amounts of charity care. Alternatively, purchasers may want to work through the political process to establish mechanisms more appropriate in a competitive environment for accomplishing what cross subsidies currently do.

Will cost management techniques lead to a change in the fundamental dynamic that has caused the rapid increase in health costs over the past 20 years? Or will these techniques lead only to a one-time slowdown, after which the rapid increase will resume? While reductions in health care costs are being achieved now, there are good reasons to be
concerned about the future. Consider one small example: between 1984 and 1985, inpatient cataract surgery for Medicare beneficiaries declined by 80 percent, reflecting a shift to outpatient settings. Obviously, the potential for further savings from a change in setting for this procedure are now very limited.

Some of the research on the experience of prepaid group practices that have been operating for many years may point to an answer. Costs of these HMOs have been substantially lower than costs of traditional insurance plans, but have had similar growth rates. The likely explanation is that the norms of medical practice—and changes in them—were dominated by the fee-for-service system, and prepaid group practices could achieve no more than a constant percentage savings through efficiencies.

This suggests that a permanent reduction in the rate of health cost growth will be achieved only—if at all—when a broad range of cost management forces are brought to bear across the general spectrum of the health care system. The current concentration on one underlying method (reducing the use of care) and one tool (higher cost sharing) is unlikely to provide more than temporary relief.

Some expect that research and development will slow because of increased cost management activities, and, as a consequence, the rate at which expensive technologies enter medical practice will decrease. This might well lead to a long-term reduction in the rate of health care cost increases, a reduction that will continue after the one-time savings from using less care are achieved.

The long-term dynamic is important, because it is relevant to the question of whether the easy cost reductions—the changes in medical practice and prices that do not impair health outcomes to any significant degree—will generate a large enough cost savings. If not, society must confront the issue of whether or how to ration services that have noticeable effects on health.
ANNOTATED BIBLIOGRAPHY

There are few good general sources of information on health cost management. That is why this handbook was commissioned. Its authors generally recommend

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Fox, P. D., W. B. Goldbeck, and J. J. Spies, Health Care Cost Management, Health Administration Press, Ann Arbor, 1984

Both cover many of the topics addressed in this handbook.

Beyond these books, there are many information sources dealing with specific topics in health cost management. The following bibliography lists some of the more useful references, arranged topically in accord with the chapters of this report. Readers should recognize that many of these references are quite technical, that evaluating them often requires professional knowledge of the field, and that much important information is unpublished. In particular, information on practical applications and on experts' insights is often unpublished.

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