Private initiatives to manage health care costs have stimulated change in the health care market.

Private Initiatives to Contain Health Care Expenditures

Health care inflation has outpaced general inflation for the past decade. In 1984, the $400-billion-a-year health care industry represented 10.6 percent of Gross National Product (GNP). Rapidly growing health care costs and the rising cost of health insurance have become major public policy issues to which all health care payers—employers, insurance carriers, the government, and consumers—have responded.

Medicare’s change in financing inpatient hospital services with a prospective reimbursement system based on diagnosis is perhaps the best known. Private employers also have been aggressive in their response to increasing health care expenditures. A survey of 1,115 firms found that 97 percent changed their health plans in response to rising health care expenditures. Sixty-two percent of these had implemented five or more cost containment provisions as of 1984. By 1982, only 14 percent had done so.

In response, the health care market is changing rapidly. Competition is increasing as providers seek ways to expand their market shares and insurance companies compete for employer-based groups. Health maintenance organizations have expanded and preferred provider arrangements, unheard of several years ago, are becoming common. Physicians are entering large, multispecialty practices or for-profit specialty clinics in growing numbers.

These initiatives may be affecting overall health care spending, which in 1984 rose at the slowest rate in 20 years and, for the first time since 1978, declined as a percent of GNP. Employer payments for health insurance as a percent of GNP also fell for the first time. Yet it is not certain that health care costs are under control—health care inflation is still twice the general rate of inflation.

This Issue Brief identifies and examines private-sector initiatives to contain health care spending and discusses the effects they may be having on the health care system.
Introduction

Substantial improvements in our population's health have been made over the past two decades. Life expectancy has increased and infant mortality has been reduced. Some of the improvement in health may be due in part to increased access to health care, particularly by the poor, and because of technological advances in medicine. Health care expenditures have outpaced inflation, growing over 800 percent since 1960, while the Consumer Price Index (CPI) increased 110.6 percent over the same period. In 1984, health care expenditures reached $387.4 billion—10.6 percent of the Gross National Product (GNP).

The rapid growth of health care expenditures has spurred interest in cost containment among all payers of health care—employers, insurance carriers, and government. Employers became particularly alarmed during the 1982 recession, as revenues and profits declined while the cost of health care continued to rise. In 1970 employer payments for health insurance were 2.2 percent of wages and salaries; by 1984 they had increased to 5.3 percent. Employer payments for health insurance rose 89.5 percent, from $51.3 billion in 1979 to $97.2 billion in 1984 (chart 1).

Health Care Expenditures

Reasons for the Growth in Expenditures

The rise in health care expenditures (chart 2) and the growth in the relative importance of the health care sector in the economy (chart 3) have occurred because of a variety of interrelated factors.

Technological Advances—Although technological advances often have been cited as causes of the increase in health care expenditures, it is difficult to generalize about their net impact. While some technologies have raised the costs of treatment by requiring more labor, more specialists, and more tests, they also have changed the fundamental nature of health care. Examples of these technological advances include computed tomographic (CT) and nuclear magnetic resonance (NMR) scanners, renal dialysis, neonatal and intensive care units, coronary bypass surgery, artificial hip joints, and organ transplants.

Some of these technologies require substantial capital costs to expand facilities or purchase equipment. Other technological advances, however, have reduced both the labor intensity of medical care and the need for hospitalization. Examples of cost-reducing technological advances include the development of antibiotics and vaccines and the computerization of laboratory testing and reporting.

Population Growth—Both the growth and the aging of the population have contributed to the rise in health care expenditures. Aggregate population growth may have accounted for 8 percent of health care expenditure increases from 1972 to 1982. Between 1950 and 1984, the population age 65 and older increased 130 percent, rising from 12 million people (8 percent of the population) to 28 million (12 percent of the population). The elderly tend to spend about three and one-half times as much per capita on medical care as younger population groups. Nine percent of the elderly account for

---

1 EBRI estimates based on unpublished data from U.S., Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.


3 Employee Benefit Research Institute, "Financing Long-Term Care," EBRI Issue Brief 48 (November 1985).
70 percent of Medicare expenditures for the elderly's health care.  

Inflation—Nearly 58 percent of the increase in health care expenditures from 1972 to 1982 may have been due to general inflation. General price increases affect the price of supplies and services purchased by physicians and hospitals. In addition, health care labor costs have increased dramatically over the past two decades, in part "catching up" to salaries of comparably skilled workers in nonhealth professions.

Market Inefficiency—Market inefficiencies result in unnecessary procedures, which increase the cost of providing health care. The health care market may fail to be efficient at allocating resources for at least three reasons:

- Third-Party Reimbursement—The traditional method of financing health care is an important source of unnecessary health care spending. Most health care is financed retrospectively by third-party payers, based on provider cost or charges. Such cost-based reimbursement encourages greater health care supply and use as well as more expensive health care, and does not encourage cost-effective allocation of health care resources. Both patient and physician are insulated from the financial consequences of their health care choices.

- Defensive Medicine—The American Medical Association (AMA) estimates that defensive medicine and associated administrative costs contribute $15.1 billion annually to the cost of health care. The AMA Socioeconomic Monitoring System study indicates that 40 percent of the responding physicians prescribe additional diagnostic tests and 27.2 percent provide additional procedures in response to the growing risk of medical malpractice suits. The AMA found that other studies reported that defensive medicine may raise the cost of treatment 25 to 50 percent.

- Uncertainty—Medicine is not a precise science. The uncertainty inherent in both the provision and the receipt of medical care may lead to performance of unnecessary tests and procedures. In a litigious society with an apparent abundance of medical resources, medical uncertainty provides the setting to do more than would be done if medicine were a precise science. One indication of the apparent abundance of medical resources is hospital occupancy rates. In November 1985, according to the American Hospital Association, the average occupancy rate was 64.2 percent. In uncertain situations, physicians are more likely to practice in a manner in which they feel comfortable: that is, a manner in which local medical protocol prevails and one that will yield the greatest financial returns.

Financing Health Care

Over 60 percent of all health care expenditures are privately paid, either by insurance (31.3 percent) or directly by individuals (27.9 percent) (chart 4). In 1984 Medicare financed 18.4 percent of health care expenditures and Medicaid financed 10.7 percent. More than half of Medicaid spending (54 percent) was federally financed.

Employer plans are the largest source of insurance coverage.

---


7 See David M. Eddy, "Variations in Physician Practice: The Role of Uncertainty," Health Affairs 3 (Summer 1984): 74–88. This issue of Health Affairs was devoted to variations in medical practice.


Comptroller General of the United States, pp. 15–16.
health care spending, at 20 percent of all Americans under age 65 not working for the military or in agriculture had employer-provided coverage. Medicare, Medicaid, and CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) together covered 12.8 percent, while private individual insurance covered 12.3 percent. However, 17.4 percent of the nonmilitary, nonagricultural population under age 65 had no coverage.

For nonmilitary, nonagricultural families whose primary earner is under age 65 and steadily employed full time, the percentage of employees covered by employer-provided health insurance increases to 76.8 percent. "Steadily employed" is defined as having worked 35 or more weeks a year and 35 or more hours in a typical week.

Because hospitals are the largest source of health care spending, most cost containment initiatives have focused on controlling expenditures for hospital care (chart 5). In 1984, 40.8 percent of total health expenditures and 54.3 percent of privately insured expenditures were for hospital care. Hospitals rely on private insurance as their most important single source of health care revenue (representing nearly 37 percent of revenue), followed by Medicare (28 percent). Approximately 70.4 percent of Medicare spending is for hospital-provided care.

Physician services represent the second-largest source of health care spending, at 20 percent of total expenditures for health care. In part because Medicare covers physician care less fully than hospital care, physicians receive 72 percent of their health-related revenues from the private sector—44.4 percent from private health insurance and 27.9 percent from direct payments by individuals. Medicare paid 19.4 percent of physician revenues in 1984.

A survey of 1,115 firms found that 97 percent changed their health plans in response to rising health care expenditures.

Initiatives to Contain Health Care Expenditures

Over the last few years, all third-party payers have responded to the rise in health care expenditures. Medicare's change to financing inpatient hospital services through a prospective reimbursement system (known as the prospective payment system, or PPS) based on diagnosis is perhaps the best known. Private employers also have been aggressive in their response to increasing health care expenditures. A survey of 1,115 firms found that 97 percent changed their health plans in response to rising health care expenditures. In fact, 62 percent of these employers had implemented five or more cost containment provisions as of 1984. Two years earlier, only 14 percent had done so.

The changes most commonly initiated by employers include cost sharing, preadmission testing, and coverage of ambulatory surgical care, treatment in extended care facilities, and second opinions. Other changes, although less common, include coverage of home health and hospice care, case management and utilization review programs, coverage of annual physical examinations, wellness programs, and coverage through preferred provider organizations (PPOs) or health maintenance organizations (HMOs).

The processes by which these changes affect expenditures vary. Copayments, deductibles, preadmission authorization, second opinions, and case management reduce the frequency of health service use among employees by increasing employees' costs or by helping them use services more efficiently. Other changes reduce hospital use in particular by encourag-

---

Employers also have made administrative changes to reduce expenditures, such as coordinating benefits with other health plans and auditing bills. Many have become self-funded in an effort to control plan costs. Finally, some employers have invested in health, safety, and employee assistance programs in an attempt to reduce health care claims through improved employee health.

The effectiveness of individual cost-containment initiatives is difficult to assess. None have been introduced within the context of a controlled experiment whereby one group of employees was affected by the change and another group was not. Many changes have occurred simultaneously and most have occurred during the past few years. Furthermore, claims data are generally not available to measure employee responses over time.

Consequently, since empirical evidence is not available, the following discussion of the effectiveness of various initiatives to control health care expenditures relies on the expected or perceived effectiveness of the initiatives. Most of this is based on anecdotal or subjective evidence and the perceptions of benefit consultants and employers.

**Cost Sharing**

Cost sharing aimed at reducing first-dollar coverage by either adding or increasing employee deductibles and/or copayments...

The Department of Labor found that deductibles and copayments have been increasing. In 1982, 9 percent of employees participating in a major medical plan sponsored by a medium or large establishment had a deductible greater than $100; by 1984 the percentage had increased to 22 percent. In 1982, 7 percent of employees participating in a major medical plan sponsored by a medium or large establishment had a copayment greater than 80 percent; by 1984, 9 percent did.

Cost sharing may actually increase health care expenditures in the long run if individuals delay seeking medical attention in the early stages of illness, while treatment is relatively inexpensive.

Employee contributions for health insurance are becoming more common. In 1982, 29 percent of participants in the health insurance plans of medium and large establishments contributed to their coverage; 54 percent contributed for dependents' coverage. By 1984, 38 percent had contributory coverage for themselves and 59 percent had contributory coverage for dependents.

An extensive evaluation of reasonable and income-related cost sharing conducted by The Rand Corporation indicates that individuals use health services less when confronted with increased deductibles and copayments. A 25 percent copayment reduced expenditures by 20 percent compared to full coverage. In addition, the Rand researchers found that

- deductibles reduced expenditures for ambulatory care more than for inpatient hospital care,
- cost sharing for ambulatory care but not for hospitalizations reduced hospitalizations,
- cost sharing based on family income affected low- and high-income families equally, but children's hospitalizations in either income group were not affected, and
- service use fell steadily as cost sharing increased.

The Rand study suggests that reasonable, income-related cost sharing reduces utilization of routine care and may reduce the incidence of hospitalization.

Cost sharing, however, does not affect the cost of hospitalization. In addition, cost sharing may actually increase health care expenditures in the long run if individuals delay seeking medical attention in the early stages of illness, while treatment is relatively inexpensive. Research evidence, however, has not confirmed that cost sharing provisions create greater expenditures in the long run.

Incentives to Avoid Inpatient Utilization

Preadmission Testing and Ambulatory Surgery—Many tests routinely performed in hospitals can be performed on an outpatient basis prior to admission. Providing coverage for or requiring preadmission testing may save one or more days of hospital room and board charges.

An estimated 20 to 40 percent of the 18 million surgical procedures performed in hospitals each year could be performed in outpatient settings. Savings depend on the relative cost of care in the outpatient-surgery recuperation room versus hospital inpatient room and board expenses.

Preadmission testing and ambulatory surgery are common cost-containment initiatives and are perceived to be effective. The Wyatt Company 1984 Group Benefits Survey found that 82 percent of 1,115 employers covered preadmission testing.


11 Ibid., table 23, and idem, Employee Benefits in Medium and Large Firms, 1983, Bulletin 2213, table 23.


13 Comptroller General of the United States, pp. 15-16.
and 69 percent covered ambulatory surgery. The Equitable Healthcare Survey III, which questioned 1,250 firms with 500 or more employees, found that 47 percent had introduced financial incentives in the past three years for employees to have tests and minor surgery performed on an outpatient basis.

Studics indicate that between 9 and 12 percent of all surgeries might be avoided if employees seek second opinions.

One employer reported reducing medical admissions by 2.3 days and surgical admissions by 3.8 days per patient in 1982 by encouraging preadmission testing. Another reported saving $228 per hospital admission. An insurance carrier found that ambulatory surgery saved an average of $523 per patient in 1981. (It is important that the physicians and the hospital know that the admitted patient has already had certain tests done and that reimbursement will not be made for valid tests that are repeated in the hospital.)

Second Surgical Opinions—Second surgical opinions provide patients with more information on recommended surgery, potentially reducing unnecessary surgery. Studies indicate that between 9 and 12 percent of all surgeries might be avoided if employees seek second opinions. Among other things, mandatory second opinions may act as a quality control screen and help reduce an individual’s anxiety about the need for surgery.

Employer coverage of second opinions for surgery is common. The Wyatt Company’s 1984 Group Benefits Survey reported that 80 percent of employers covered second surgical opinions; The Equitable Healthcare Survey III reported that 54 percent had introduced coverage in the last three years.

However, the perceived effectiveness of second opinions in containing health care expenditures is not consistent. Voluntary second opinions may be less successful than mandatory programs; programs that control the cost of the second opinion may be more successful than those that do not. Benefit consultants recommend that physicians rendering second opinions be reimbursed on a flat-fee basis.

One company reports that 19 percent of second opinions were nonconfirming; in 88 percent of these cases, the individual decided not to have the surgery. This lowered the potential number of procedures by 16 percent for an estimated savings of $180,000 in 1983.

Care in Alternative Settings—Care in alternative settings, such as the home or extended care or hospice facilities, can be substantially less expensive than hospital based care. Coverage for care in these settings may contain expenditures if preadmission and/or concurrent utilization review is used to identify patients who can leave the hospital earlier and ensure that the care provided outside the hospital substitutes for hospitalization.

Home health care can reduce the period of hospitalization associated with recovery, reducing the cost of care and the risk of coming into contact with other illnesses while hospitalized. Home health care can provide occupational, physical, and speech therapy and various levels of nursing care, ranging from skilled nursing to nurse’s aides. In some localities, home health patients that require kidney dialysis have access to portable dialysis machines for use in their homes. (Under some circumstances, however, the home may not be conducive to helping the patient recover.)

Hospice care, either at home or in a hospice facility, can substitute for the hospitalization of terminally ill patients. Hospices counsel terminally ill patients and their families and limit medical intervention to administering pain-reducing medication.

Ethical issues surrounding hospice coverage, however, are controversial. Hospice care may only be useful in cases where the terminal prognosis is accepted. Furthermore, coverage is usually predicated on certification by the physician that death is expected within a specified period of time.

In 1982 the Bureau of Labor Statistics found that 62 percent of health plan participants in medium and large establishments had coverage either for home health care or extended care. In 1984, 62 percent of plan participants had extended care coverage and 46 percent had home health care coverage.

Anecdotal evidence suggests that coverage of care outside of a hospital can reduce health care expenses. One insurance company reported that cervical spine sprains, which require extensive bed rest, can incur over $9,000 in hospital costs for an eight-day stay, while 30 days of home care would cost $438. One company provides home dialysis equipment at a cost of $14,000 per year, compared to as much as $25,000 for in-hospital treatment. The State of Colorado reports saving

14 Ibid., pp. 128-130.
551 hospital days on 1,820 admissions in its first year of covering home health care, saving an estimated $163,350. One Blue Cross organization reports that terminal cancer patients in the last eight weeks of life incur $1,290 for hospice care compared to $5,509 for traditional care.

Utilization Review—Employer utilization review programs focus on developing protocols to hold down expenditures and manage patient care. In the past, retrospective utilization review (examining records after discharge from the hospital) dominated review programs. Preadmission review and concurrent review, however, have become more common in recent years.

Advances in computerized claims processing and the desire to contain health care expenditures have made preadmission and concurrent review more desirable than in the past. Preadmission authorization requires physicians to call for authorization before admitting patients for elective surgery. Concurrent review requires examination of a patient's hospital chart to determine whether the physician substantiated the need for continued hospitalization. Norms established for specific problems are applied to a patient to determine whether the length of stay is unnecessarily long.

Utilization reviews put pressure on health care providers to document reasons for hospital stays that are longer than indicated by standards established by the review program. Although this creates more paperwork for the physician, it may induce physicians to monitor their actions and may focus attention on variations in medical practice that might be sources of unnecessary health care. Utilization review may
also provide assurances to the patient that appropriate medical care is provided.

Utilization review programs are not yet common, since they are relatively more expensive and complex to implement and administer. The Wyatt Company's 1984 Group Benefits Survey found that 14 percent of the respondents had a preadmission authorization program. The Equitable Healthcare Survey III found that 28 percent of the employers responding had introduced a preadmission authorization program and 27 percent a utilization review program since 1983.

With prepayment, HMOs assume the financial risks associated with health care. Primarily for this reason, many employers encourage workers to elect HMO coverage as a way to contain plan costs.

Among larger employers, however, utilization review programs are becoming more important. A 1985 survey of 633 large employers found that 45.3 percent had a concurrent utilization review program, up from 17.3 percent in 1983, with reported savings of 6.5 percent of paid claims.16 Preadmission authorization programs were used by 37.1 percent of the respondents, up from 16.3 percent in 1983; 29.6 percent used retrospective review programs, up from 18.8 percent. Respondents reported saving 8.1 percent of paid claims for preadmission authorization and 2.3 percent for retrospective review programs.

The same survey indicated that 18.9 percent of the respondents had a case management program and 5.2 percent had a case management program for disability rehabilitation. Annual savings for these programs were reported as 5.5 percent and 0.5 percent of paid claims, respectively. Use of predischarge planning increased from 1 percent in 1983 to 7.2 percent in 1985, while the use of patient advocacy programs grew from 1 percent in 1983 to 3.9 percent in 1985.17

**Initiatives to Encourage Competition**

**Health Maintenance Organizations**

HMOs provide comprehensive medical care for a prepaid fee to patients that agree to use participating physicians and hospitals. With prepayment, HMOs assume the financial risks associated with health care. Primarily for this reason, and partially because of reports of markedly lower hospital utilization by HMOs, many employers encourage workers to elect HMO coverage as a way to contain plan costs.

Federally qualified HMOs receive congressional support through grants and guaranteed loans. They also receive marketing assistance through the HMO Act of 1973, which requires that employers with at least 25 employees offer HMO enrollment as an option if requested to do so by a federally qualified HMO in the geographic area. The law requires that the employer contribute to the HMO at least the same amount per employee as it pays for conventional health insurance. (The Department of Health and Human Services plans to issue a proposal to repeal the equal contribution requirement for employers using federally qualified HMOs, an issue that has been an employer concern for years. An alternative proposal probably will be written in lieu of outright repeal of the rule.)18

The number of HMOs has increased about 900 percent in 12 years, from 39 in 1971 to over 390 as of June 1985, with estimated enrollment of nearly 19 million people.19 Their financial viability has also improved. In fiscal year 1981, 14 HMOs failed; in fiscal year 1983, none did.

Individual practice associations (IPAs) have grown faster than other types of HMOs. In IPAs, physicians accept prepayment but also are free to accept fee-for-service reimbursement. Interstudy estimates that there were 99 IPAs with enrollment of nearly 1.9 million in June 1983. By June 1985, an estimated 181 IPAs were in existence, with enrollment of nearly 4.7 million.20

A 1984 study conducted by The Rand Corporation found that hospital utilization among HMO members was 40 percent lower than that among people with full insurance coverage without cost sharing, using a fee-for-service physician of their choice. Compared to a group of individuals with a 5 percent copayment requirement on services provided by a fee-

---


17 Ibid.


19 Interstudy, HMO Summary (Excelsior, MN: Interstudy, June 1985), table 1.

20 Ibid., and personal conversation.
for-service physician of their choice, hospital utilization among HMO members was 20 percent lower. A study of 12 HMOs by the General Accounting Office in 1982 found that hospital utilization was 59 percent lower than that of the general population and 38 percent lower than the national Blue Cross average. Both studies concluded that the lower utilization was due to HMO controls and procedures and not the age, sex, and health characteristics of the populations enrolled.

In most cases, subscribers to a PPO are free to choose any physician or hospital, but are given financial incentives to choose from among preferred providers.

Despite HMOs' growth and their lower rates of hospital utilization compared to that of conventional fee-for-service providers, they may not reduce the overall rate of cost increase. Preliminary evidence from the Rand study indicates that employers may get at least a one-time substantial saving for each employee joining the HMO, but it is less apparent that the subsequent rate of cost increase is different.

Whether or not HMOs contain health care costs depends in part on how premiums are determined. HMOs usually use community experience ratings to establish premiums, while rates for traditional insurance for most medium and large employers are based on the overall experience of the firm's health plan. The relative difference in the two rates will depend on the firm's experience relative to that of other HMO members in the community. Differences may vary by employer and region.

The subsequent experience of the traditional insurance plan will depend on which employees choose the plan over the HMO option. If younger, healthier employees are attracted to the HMO, the average cost of the traditional plan could rise. Conversely, if employees with potentially costly medical needs are better served by and select the HMO, the traditional plan's average cost might fall. HMO premiums, however, still would reflect community-wide risk rather than the disproportionate share of risk posed by these employees.

Preferred Provider Organizations

PPOs (also called preferred provider arrangements) are arrangements between health care providers and third-party payers to provide fee-for-service health care at a discount. The term "PPO" covers a variety of arrangements that have been established by providers, third-party payers, and employers.

In most cases, subscribers to a PPO are free to choose any physician or hospital, but are given financial incentives to choose from among preferred providers. These providers, in turn, obtain an increased pool of patients and sometimes faster claims processing. Unlike an HMO, however, they do not make prepayment arrangements with members and, as a result, assume virtually none of the financial risk.

An emerging type of PPO is the exclusive provider organization (EPO), established by self-insured employers. EPOs differ from PPOs in that employees must use EPO providers to receive coverage; PPOs merely offer a financial incentive to do so (by providing fuller coverage, for example). PPOs are subject to state insurance regulation unless established by self-funded employers. These employers consequently can establish EPO arrangements, agreeing to reimburse only for services of the exclusive providers.

PPOs have grown rapidly in the last several years. The American Hospital Association estimates that 33 were operating in 1982 and 115 in 1984, covering 1.3 million people. A survey by Medical-Economic Digest indicated that 195 PPOs were operating in 1985. These included 98 physician contracts averaging 1,792 physicians per PPO and 97 hospital contracts averaging 28 hospitals per PPO. The Wyatt Company's 1984 Group Benefits Survey found 7 percent of the employers responding had PPOs; The Equitable Healthcare Survey III found 9 percent of employer respondents had formed a PPO in the last three years.

Bill audits of high-dollar claims, over $10,000 for example, are becoming increasingly common.

Most of the reported savings are based on the discounted price of services provided through the PPO. Efficient PPO providers, however, could reduce employer plan costs without a discount. To be effective, only those physicians and hospitals whose medical practices carefully use health care resources should be among the list of preferred providers.

If PPOs are based on efficiency, market competition will encourage providers to establish controls similar to those of pre-
Employers have begun to incorporate an array of initiatives designed to promote better health.

Administrative Changes

Administrative measures to contain health care expenditures, including self-funding, coordinating benefits, and auditing bills, are mechanisms to administer health plans more efficiently.

Bill audits of high-dollar claims, over $10,000 for example, are becoming increasingly common. A 1985 survey by the Health Research Institute (HRI) indicates that 67.7 percent of the responding firms conducted audits in the preceding two years, compared with 64.5 percent in 1983.21 One bill-auditing firm reports that 97.2 percent of hospital bills it audited in 1984 and early 1985 contained errors resulting in overcharges. The average unsupported or unrelated charge was nearly 4 percent of the average audited bill. One insurance carrier's claims office saved 2 percent of audited claims.

Employers who self-fund benefits retain the risk of providing health insurance coverage to workers. Although stop-loss insurance against large expenses is purchased and employers hire insurance carriers to process claims, the premiums are retained by the employer. A 1983 HRI survey of 1,500 of the largest firms found that 10.7 percent of respondents were self-funded and administered their own claims; 24.8 percent were self-funded but had another party administer the claims.

Employers choose to self-fund for a number of reasons; the relative importance of those reasons has not been substantiated. Employers who self-fund retain premiums that would have gone to the insurance carrier as reserves against future claims. Interest earnings on retained premiums during the late 1970s probably were substantial. (Insurers have responded, however, by charging installment payments that reduce premiums by the amount of required reserves.)

Unlike purchased health insurance, self-funded health plans are regulated by the Employee Retirement Income Security Act (ERISA). As such, they avoid state regulations that require health insurance plans to cover specific services. Finally, employers avoid paying state premium taxes levied on commercial insurers. In the 1983 HRI survey, firms that had begun self-funding reported saving 8 percent of paid claims.

Promoting Better Health

Public health officials estimate that one-half of the costs of illness are from conditions that might be prevented by staying fit, eating wisely, not smoking, and drinking alcohol in moderation. Employers have begun to incorporate an array of initiatives designed to promote better health. Early reports indicate that this investment reduces absenteeism, lowers health care costs, improves morale, and improves employer ability to recruit good workers.

The Equitable Healthcare Survey III found in 1985 that 26 percent of the firms questioned had initiated a wellness program within the last three years; The Wyatt Company's 1984 Group Benefits Survey found that 10 percent had initiated such a program. A 1985 Hewitt Associates survey of 1,185 companies found that the most common wellness programs were first aid training, including cardiopulmonary resuscitation (CPR); exercise classes; stress management courses; and smoking-cessation programs.

The Prudential Insurance Company of America examined the effectiveness of a structured fitness program for white-collar workers. Among employees in the program, days of absence decreased 20.1 percent after one year and health care costs were reduced by 45.7 percent. The fitness program saved employers $1.93 for every dollar spent.

The Response by Public Payers

Medicare and Medicaid are among the federal government's largest non-defense spending programs. Estimated federal government spending for Medicare and Medicaid in fiscal 1986 exceeds $93 billion. As a result of these programs, the federal government has become the single largest purchaser of personal health care services in the United States. In 1984 the federal government paid nearly 30 percent of the nation's $101 billion bill for personal health care. Federal government spending for personal health care has risen at an average annual rate of nearly 13 percent since 1980, somewhat more slowly than the average annual growth rate in the 1970s of

---

21 Health Research Institute, "Health Care Cost Containment Survey," Bobbin (February 1984): 49–58. Survey population for the 1983 survey is 1,500 of the largest U.S. employers, including all Fortune-listed companies. The 1985 survey was reported in Kittrell, pp. 1, 22–23.
nearly 16 percent but well in excess of other nondefense federal spending.

The federal government's response to rising Medicare spending has been complex. In 1982 Congress authorized a major revision of Medicare's hospital reimbursement formula to allow prospectively determined, fixed-price payment based on patient diagnosis. The prospective payment system replaces Medicare's former practice of retrospective, cost-based reimbursement. Medicare prospective payment is being phased in over a five-year period; fiscal 1988 will be the first year that Medicare payments for hospital care are fully prospective.

In addition, Medicare has frozen physician fees and aggressively encouraged physicians serving Medicare patients to accept assignment (that is, to accept Medicare payment as payment in full). The Health Care Financing Administration (HCFA), which oversees Medicare, is evaluating the feasibility of prospectively determining payment for physician services.

Health care expenditures have increased rapidly because of increases in service use and price. Effective cost containment relies on controlling both factors.

The federal response to rising Medicaid spending has differed. Rather than focusing on the specifics of states' reimbursement formulas, the federal government has sought to give states more flexibility in designing Medicaid benefits to control spending. As a result, several states have changed hospital payment methods and/or now limit covered hospital days. Many have applied to HCFA, Medicaid's federal administrative agency, for waivers to alter their program structure by limiting beneficiaries' choice of providers, establishing case management programs, or covering community-based care as an alternative to nursing home care.

The Effectiveness of Cost Containment Initiatives

Health care expenditures have increased rapidly because of increases in service use and price. Effective cost containment relies on controlling both factors. An individual employer who is not a large-enough buyer of health care to affect price might be able to coordinate with other major purchasers in the community to encourage competition among providers and reduce employer costs. (Alternatively, price can be affected through government rate regulation. Rate regulation can benefit all payers, not just large buyers or those that have initiated cost containment measures. An all-payer rate-setting mechanism also can be used to address other issues, such as uncompensated care.)

Competition may work to lower service use among employees, as well as prices, as insurance carriers compete for groups of insured and self-funded plans try to lower expenditures.

Even without coordination, however, individual employers may be able to reduce use among plan participants. Consequently, employer cost containment initiatives commonly focus on controlling use by removing, for example, first-dollar coverage for hospital and medical care. Research suggests that modest cost sharing can have a pronounced effect on routine service use, testing, and hospital admissions with no apparent short-run compromise of the quality of health care.

Plans can also be redesigned to encourage employee use of lower-cost ambulatory care. Common changes include more complete coverage for or required use of preadmission testing and fuller coverage for specific surgical procedures done on an outpatient basis.

Hospital stays may be shortened by providing plan coverage for home health and hospice care and managing patient use of nonhospital care effectively. Preadmission authorization and concurrent utilization review also may be effective in shortening hospital stays by encouraging same-day surgery, avoiding weekend admissions, and monitoring emergency room usage. Finally, mandatory second opinions may assist employees in avoiding some admissions altogether.

Such changes might affect employers' health care costs and could affect the capacity of the local health care system, especially if an employer is large or if all employers in an area initiate similar controls. Otherwise the savings of one employer could become the additional cost of another as revenue shortfalls are shifted to those willing to pay.

Administrative changes such as self-funding, benefits coordination, and bill auditing may save an employer money without shifting costs or affecting the capacity of the health care
market. However, while these changes improve administrative efficiency, they do not contain health care expenditures, nor do they change the cost of health care.

Finally, employers are turning to HMOs and PPOs to lower their expenditures and promote competition. Competition may work to lower service use among employees, as well as prices, as insurance carriers compete for groups of insureds and self-funded plans try to lower expenditures.22

♦ Rate of Health Care Spending Slows

Health care expenditures in 1984 experienced the slowest rate of growth in 20 years. For the first time since 1978, health care expenditures as a percent of GNP declined. Employer payments for health insurance as a percent of GNP also fell for the first time. This decline has been viewed by some as an indication that cost containment initiatives have been successful.

Some have concluded, primarily because of the timing of the decline of the rate of growth, that the new prospective payment system for Medicare hospitalizations has been the underlying cause. Others would argue that health care providers have become more efficient, while others believe that the innovations of private employers are responsible.23 While all of these factors affect change in the health care market, it is difficult to determine the underlying cause of this downturn and whether health care costs have been contained.24

Hospital use declined dramatically in the year following the initial implementation of Medicare's PPS in October 1983. However, a significant portion of this decline was due to the drop in hospital admissions among people under age 65. Overall, hospital admissions declined 3.3 percent from 1983 to 1984.25 For persons age 65 and older (those most likely covered by Medicare), hospital admissions declined 1.6 percent; for persons under age 65 (those unlikely to be covered by Medicare), admissions declined 4.1 percent during the same period.

On the other hand, hospital length of stay for those age 65 and older declined more rapidly than for those under age 65 during the same year. For those age 65 and older hospital length of stay declined 7.2 percent; for those under age 65 it declined 3.6 percent. Overall, length of stay declined 4.7 percent from 1983 to 1984.

The decline in hospital admissions and length of stay has meant a decline in hospital days. The decline in days from 1983 to 1984 was 7.8 percent overall, 7.2 percent for people age 65 and older, and 7.4 percent for those under age 65.

Crediting Medicare's PPS as the cause for the decline in hospital use becomes questionable when the trend is closely examined. The decline in hospital usage since 1983 has been substantial, but the trend toward a decline in admissions for people under age 65 and the reduced length of stay for those age 65 and older began prior to PPS implementation.26

---


24 Donald R. Cohodes, "Where to, Health Care Prices?" Inquiry 23 (Spring 1986): 5-6. Also "Why Health Care Costs Are Having a Relapse," Business Week, 12 May 1986, p. 34.

25 Years cited are federal fiscal years. Data is from the American Hospital Association, as published in Karen Davis, Gerard Anderson, Steven C. Renn, Diane Rowland, Carl J. Schramm, and Earl Steinberg, "Is Cost Containment Working?" Health Affairs 5 (Fall 1985): 81-94, exhibit 3.

26 Davis et al., exhibits 1 and 2.

---

The decline in hospital use is only part of the explanation of the slowing of health care expenditures. Most of the decline is due to a drop in general prices.

---

When the degree of coverage and implementation is considered, Medicare's PPS begins to look even less like the primary cause for the slowdown, since PPS payments were only partially in effect in the first year of implementation (October
1, 1983, to September 30, 1984). During that time, 25 percent of hospital payments for Medicare patients were based on PPS. Furthermore, each hospital became subject to the new system as it began its respective fiscal year. Consequently, if a hospital's fiscal year began July 1, PPS payment for 25 percent of its Medicare reimbursement was not realized until nine months after implementation.

Furthermore, certain hospital services, such as psychiatric care, were excluded, and hospitals in Maryland, Massachusetts, New Jersey, and New York were exempted, since those states had already implemented alternative all-payer hospital rate systems. Consequently, Davis et al. estimate that "... at most, 5 percent of all hospital revenues were paid on the basis of Medicare" PPS during the first year.27

Davis et al. argue that there is no conclusive evidence suggesting that Medicare's PPS is the underlying cause of declining hospital length of stay for the elderly. They suggest that the decline may have been initiated by the restrictions in Medicare reimbursement instituted under the Tax Equity and Fiscal Responsibility Act of 1982. This law imposed a limit on the increase in reimbursement to each hospital. On the other hand, the rhetoric heralding the coming of the new program and the promise of reforms from the private sector may have caused providers to reevaluate their medical protocols. Anticipation of financing reforms may be a very powerful influence.

The decline in admissions among the nonelderly is also not well understood. Davis et al. suggest that changes in employer-provided health benefits might be a likely cause. They cite, in particular, utilization review and the growth of care provided in settings other than hospitals. They also suggest that there may be some reduction in access to care for those without insurance coverage as payments are restricted, particularly those by Medicaid.

Finally, in looking at hospital costs, revenues, employment, and capacity, Davis et al. conclude that there is not "any convincing evidence that hospital efficiency or productivity in providing a day of hospital care is increasing at a rapid rate."28 Although admissions fell 3.3 percent and inpatient days fell 7.8 percent, total personnel fell 1 percent. On a per-patient basis, personnel increased 7.4 percent, suggesting that hospital staff have not declined as rapidly as patient days. This may have contributed to the increase in cost per day, which rose just as quickly from 1983 to 1984 as in the period 1975 to 1983.

It is likely that part of the increase in cost per day is associated with the decline in hospital length of stay and the decline in admissions. A shorter hospital stay would eliminate the lower-cost recovery days, leaving the more intensive and expensive days of care and raising the average per-day cost. In addition, admissions may be limited to relatively sicker patients, which would tend to raise the average cost per day. Nevertheless, hospitals were able to increase average operating margins, which may have been due, in large part, to patient revenues rising faster than costs.29

Given the uncertainty of what affects quality, it is not surprising that little is known about how initiatives to contain health care costs affect the quality of health care.

The decline in hospital use is only part of the explanation of the slowing of health care expenditures. Most of the decline is due to a drop in general prices.30 However, employer expenditures for health care and health insurance increased more than twice as fast as the general level of prices. The medical care component of the CPI rose 6.2 percent in 1984, compared to 4.3 percent for all goods and services. Furthermore, the decline in health care growth rates as a percent of GNP can also be explained, in part, by the overall increase in GNP.

Implications for the Quality of Health Care

Whether health care services are effective in improving health depends, in large part, on the quality of care. Quality, in turn, involves the amount of care provided to patients and the technical merits and appropriateness of that care, as well as the interpersonal skills of providers in achieving a working

27 Ibid., pp. 90–92.
28 Ibid.
29 The operating margin is the ratio of net earnings to revenues. The margin increased from 4.3 percent prior to 1983 to 5.7 percent for that year. Data from American Hospital Association, Trends, 1984, as reported in Davis et al.
relationship with their patients.\textsuperscript{31}

Given the uncertainty of what affects quality, it is not surprising that little is known about how initiatives to contain health care costs affect the quality of health care. It would appear that reductions in health care expenditures pose a potential conflict with providers' abilities to maintain quality and could ultimately lead to sacrifices in quality.\textsuperscript{32} However, cost containment may enhance quality by reducing unnecessary procedures. The point at which reduced revenues improve or diminish quality is likely to vary among procedures and by individual circumstances.

Initiatives to contain costs may impair quality by impeding access to care, distorting clinical judgment, or both. Clinical judgment may be distorted by reimbursement rules or the pressure to meet the challenge of growing competition by minimizing expenditures. Providers may wish to avoid patients with complicated diagnoses, as well as uninsured or inadequately insured patients, as providers lose their ability to cross-subsidize inadequately financed or uncompensated care by passing the charges on to other payers.\textsuperscript{33}

EBRI tabulations of the March 1985 Current Population Survey indicate that 35 million Americans (17.4 percent of the population) did not have public or private health insurance in 1984. This is an increase of 4.4 million people from two years earlier.

The trade-off between quality and cost raises empirical and ethical issues. Empirically assessing the cost-effectiveness of particular procedures is replete with methodological problems. If clinical experiments succeed in measuring quality, other issues ensue. For example, can the current payers of health care finance all the quality care that will be demanded by a growing population? If not, to what extent should health care be rationed? These questions are of growing concern as employers attempt to reduce spending for health care.

\textbf{Conclusion}

Inflation in health care costs has led inflation in consumer prices for more than a decade. Rapidly growing health care costs and the growing cost of health insurance have become major public policy issues to which all payers have responded. Employers, in particular, have implemented a wide array of initiatives to contain health care expenditures. The federal government has responded by implementing the Medicare prospective payment system and by giving states more flexibility in redesigning Medicaid benefits to contain health care costs.

In response to the initiatives by employers, insurance companies, Medicare, and Medicaid, the health care market is changing rapidly. Provider competition is increasing. Both horizontal and vertical integration of health care services is occurring as providers seek ways to expand their market shares and insurance companies compete for employer-based groups. Nonprofit hospitals are marketing new services and reorganizing to compete with the growing numbers of for-profit hospitals. HMOs have expanded and are also undergoing organizational change. Preferred provider arrangements, unheard of three years ago, are now common. Physicians are entering large, multispecialty practices or for-profit specialty clinics in growing numbers. These marketing changes by providers are probably in large part a response to changes initiated by third-party payers.

It would be convenient to assume that cost containment initiatives were the reason for the decline in the growth of health care expenditures and that health care costs are under control. However, evidence of the effectiveness of these initiatives is not conclusive. Furthermore, employer expenditures for health care and health insurance currently are increasing more than twice as quickly as the general level of prices. In the first three months of 1986, the medical component of the CPI increased at an annual rate of 8.7 percent, while the overall index fell 1.9 percent.

The response to rising health care costs and the subsequent decline in the rate of increase in health care expenditures suggests a simplistic cause-and-effect relationship. However, careful evaluation of the effectiveness of cost containment initiatives and the trends in hospital usage indicate that the assessment is more complex. More time and additional analysis are needed to fully understand the consequences of these initiatives.

The research for this Issue Brief was partially funded by a grant from the Atlantic Richfield Foundation.

\begin{thebibliography}{99}
\end{thebibliography}
The Employee Benefit Research Institute (EBRI) is a nonprofit, nonpartisan public policy research organization based in Washington, DC. Established in 1978, EBRI provides educational and research materials to employers, employees, retired workers, public officials, members of the press, academics, and the general public. Through its books, policy forums, and monthly subscription service, EBRI contributes to the formulation of effective and responsible health, welfare, and retirement policies. The Institute has—and seeks—a broad base of support among interested individuals and organizations, as well as among private-sector companies with interests in employee benefits education, research, and public policy.

EBRI Issue Brief and Employee Benefit Notes (a monthly newsletter featuring the latest news on legislation, corporate trends, statistics, events, and reviews in the field of employee benefits) are written, edited, and published by the staff of the Employee Benefit Research Institute and its Education and Research Fund (ERF). For information on periodical subscriptions and other EBRI publications, contact EBRI-ERF Publications, 2121 K Street, NW, Suite 860, Washington, DC 20037-2121, (202) 659-0670.

Nothing herein is to be construed as necessarily reflecting the views of the Employee Benefit Research Institute or as an attempt to aid or hinder the passage of any bill pending before Congress.

© 1986 by the Employee Benefit Research Institute. All rights reserved. ISSN: 0887-137X

issuebrief is registered in the U.S. Patent and Trademark Office.