

**THE UNITED STATES HEALTH-CARE SYSTEM:
Recent History and Prospects**

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Introduction

After a decade during which the annual growth of national health spending in the United States had abated markedly relative to the rapid growth of health spending during the previous decade and the ratio of national health spending to gross domestic product (GDP) virtually stabilized at around 13.5%, that spending appears to have resumed its earlier, rapid pace. Current projections suggest that in the coming year the premiums paid by private employers for the group-health policies they purchase on behalf of employees may be between 12% to 15% higher than they were this year (2001) for large employers, and that they frequently will be in excess of 20% for medium-size and smaller employers.

Private health insurers cover about 35% of total national health spending in the United States and out of pocket payments by patients about 19%. The remainder (about 46%) is covered by various government programs, notably the federal Medicare program for persons aged 65 and over and the federal-state Medicaid program for low-income families. Per-capita spending under these programs currently is rising at rates below those experienced in the private sector. It is only a matter of time, however, before the factors that drive private-sector spending—among them the rapidly rising cost of prescription drugs and rising labor costs driven by an emerging shortage of health workers--will spill over also onto the public programs.

These trends in health spending are all the more troublesome, because the current, pluralistic American health-insurance system still excludes millions of American from adequate health insurance coverage. As the American economy prospered during the 1990s, the number of Americans under age 65 without any health insurance coverage of any sort actually rose, from about 35 million at the beginning of the decade to somewhere between 40 to 44 million now. If economic growth in the near future remains sluggish, that number is apt to increase, as more Americans lose their job to which their insurance coverage has been tied. Although the total number of American who find themselves without health insurance at any moment in time includes many persons only temporarily without insurance, at least half of the uninsured are without coverage for periods in excess of a year, and a good many are chronically uninsured.

In addition to Americans without any insurance coverage whatsoever, millions more have shallow coverage, because of very high deductibles and coinsurance, ceilings on the total that is covered by insurance, or exclusions of important items from the insured benefit package. About 12 million elderly Americans, for example, do not have any insurance coverage for prescription drugs, which are excluded from Medicare's benefit package. Additional millions of elderly Americans have private, supplementary insurance coverage for items not covered by Medicare; but that coverage is increasingly expensive and often has low ceilings on the annual spending that is covered.

Uninsured Americans typically can procure, from neighborhood hospitals or other health facilities, critically needed health care during spells of serious illness, on a charitable basis. Unfortunately, that care is typically untimely and, therefore, needlessly expensive. Earlier preventive care probably could reduce the total cost of caring for these Americans and also alleviate much of their suffering. Furthermore, the fiscal

pressure on the providers of health care to collect bills for health care from uninsured Americans¹ can easily push uninsured families to the brink of personal bankruptcy.

Although it is not much discussed in the media or in policy circles, the uninsured also pose difficulty for the business conduct of American health care enterprises, be they investor-owned or not-for-profit. To illustrate, a hospital's five-year business plan can easily be shot out of the water by an unforeseen increase in the number of uninsured in the hospital's neighborhood. Depending on the location of the hospitals, such an event can quickly turn a budgeted positive operating margin—usually paper thin in any event—into a negative one, for reasons that have nothing to do with the hospitals own managerial acumen. The nation's academic health centers, in particular, are forever hostage to that possibility. Ironically, this possibility has also served the hospital industry as a shield against any cost-containment proposal before the Congress. The plight of the uninsured, for example, quickly became the chief ammunition in the hospital industry's attack on Congress' *Balance Budget Act of 1997*, which sought to reign in the growth of spending under the Medicare program.

The remainder of this essay offers a very brief retrospective on the American health system, which will include a description of what was originally meant by the increasingly fuzzy terms “managed care” and “managed competition.” Thereafter, some speculation will be offered on the probable course of the health system in the near future, even though such a prognosis at this time is fraught with a great deal of uncertainty.

A Brief Economic History of U.S. Health Care

Figure 1 on the next page depicts the time path of real (inflation-adjusted) health spending per capita in the United States during the long period from 1965 to 1999. These data were obtained from the website of the U.S. Department of Health and Human Services' Centers for Medicare and Medicaid Services (CMS), formerly known as the Health Care Financing Administration (HCFA). The heavy solid line in the graph depicts actual real health spending per capita. The thin line is an exponential, long-run trend line fitted to the time series by statistical regression. Its equation is shown in the upper left corner.

Several distinct features of this time series stand out and call for comment.

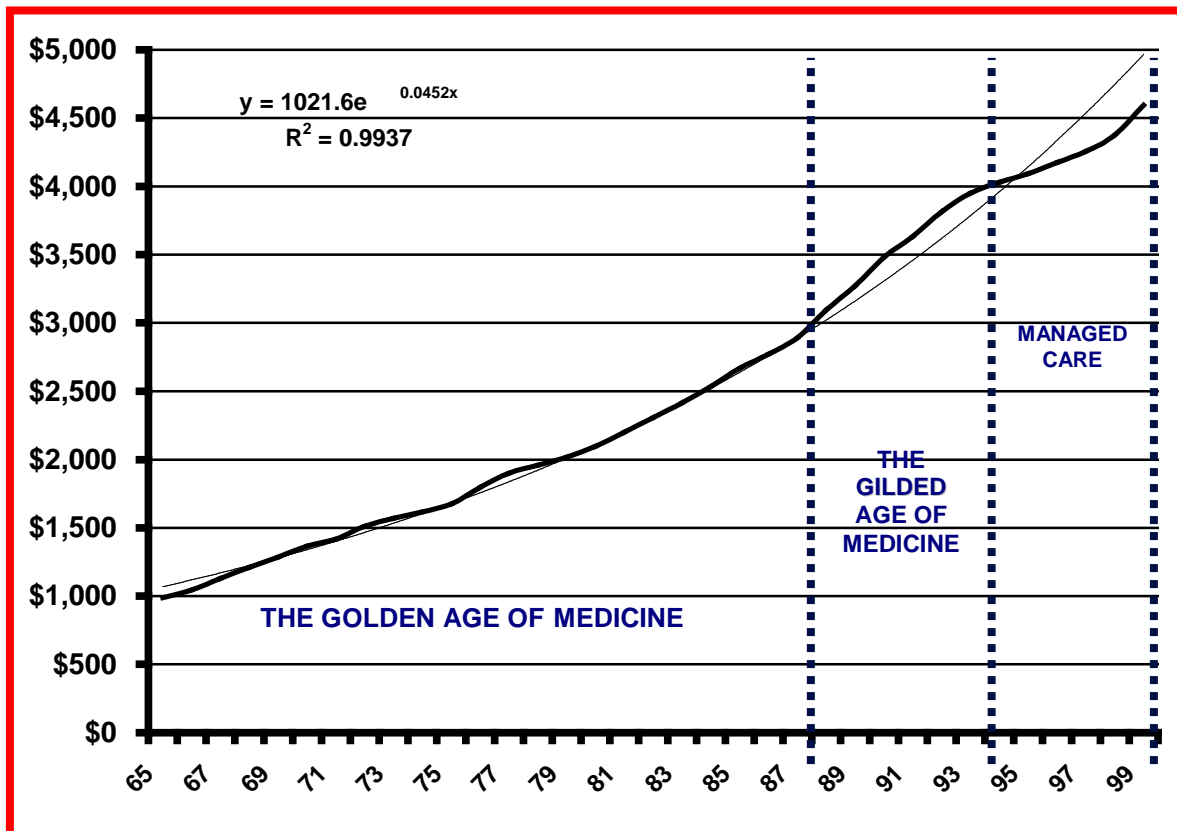
As the exponential equation in the upper left corner of Figure 1 indicates, on average, in every year since 1995, the U.S. health sector has expected to be allocated by the rest of the economy a per-capita budget that is 4.5% higher (in real, inflation adjusted dollars) than it was the year before. To put that allocation into perspective, over the same time span real gross domestic product (GDP) per capita grew at a long-run average annual compound rate of only about 1.7%.

The Golden and Gilded Ages of American Medicine: During the long period from 1965 to 1987, the actual time path of real per-capita health spending virtually coincided with the long-run trend line, almost as

¹ In the state of New Jersey, hospitals must make a concerted effort to collect from uninsured patients before they can recover the cost of uncompensated health care from that state's “uncompensated care” fund. More generally, hospitals must absorb the cost of uncompensated care in their budgets, which means that they must recover it somehow from paying patients. It should be added, however, that the federal government makes direct payments to subsidize such care for hospitals that can demonstrate that they deliver a “disproportionate share” of charity care to uninsured Americans.

if the annual increase in real per capita health spending were a natural constant: 4.5%. The providers of health care recall this era as the *Golden Age of American Medicine*, because the health system then was so open-ended fiscally. Furthermore, it afforded the providers of health care complete clinical freedom to practice medicine as they saw fit, without any attempt at external monitoring of the medical treatments dispensed by the system, let alone their external micro-management through utilization review or clinical practice guidelines.

FIGURE 1--TOTAL HEALTH SPENDING PER CAPITA IN CONSTANT 2000 DOLLARS
(Adjusted for inflation with the GDP Deflator)



Source: HCFA.gov/Stats&Data.

During the years 1987 to about 1992, actual real health spending per capita began to rise noticeably above the long-term trend line, as real per-capita health spending rose at annual rates in excess of the long-run growth rate of 4.5%. For want of a better term, one may call this period the *Gilded Age of American Medicine*. During that period, the premiums that private employers paid on behalf of their employees rose at annual rates that reached 18% for large employers and even higher rates for smaller employers. While per capita spending under the Medicare program rose less rapidly, that program had no choice but to limp closely behind the spending pace set by the private sector. By 1993, the Congressional Budget Office predicted that, at the then manifest growth trends, the United States would spend close to 20% of its GDP

on health care by the year 2000 and 28% by the year 2010, one year *before* the first U.S. baby boomers reached age 65 (see Figure 2).

Precisely what set off this cost explosion during the late 1980s and early 1990s remains a matter of debate. Some observers attribute it to new, expensive medical technologies that came on line during that period. Others attribute it to the government's policy during the 1980s of deregulation of the supply side of the American health sector, without commensurately strengthening the countervailing power of the demand side. Probably both factors were at work.

The Attempts at “Managed Care” and “Managed Competition”: Eventually, during the period from 1992 to circa 1997, the demand side of the American health sector was strengthened through what has come to be known loosely as “managed care,” although in the vernacular that term has by now become about as descriptive of the complex phenomenon to be described as the word “animal” is to describe a *Schnauzer*.

At the core of the so-called “managed-care” movement was the ability of private employers to force upon their employees employer-sponsored health insurance products that limited the employees' choice of providers to defined networks, that often limited direct access to medical specialists, and that sometimes limited somewhat patients' access to new and expensive medical technology—e.g., to new, expensive brand-name medicines. It is worth mentioning that this development took place at a time when the U.S. economy was in a recession and employees worried more about keeping their job than about the design parameters of the health-insurance policy that came with the job.

These for American patients novel limitations of choice enabled the health insurance plans writing these policies to contract selectively with physicians, hospitals, pharmacies and other providers for the health care owed the insured. Selective contracting, in turn, converted these providers of health care into fiscally dependent subcontractors of particular health plans. The latter could impose serious fiscal hardship on individual providers, simply by canceling their contracts with the plan. That fiscal dependence, and the constant economic threat it implied, enabled the health plans to extract from the providers of health care steep price discounts. It also enabled the health plans to impose upon providers clinical practice guidelines that determined whether or not a health plan would pay for particular services rendered. Altogether, these novel relationships among insurance plans, on the one hand, and the providers of health care and their patients, on the other, constituted the phenomenon properly called “*managed care*” (see Figure 3).

The theoretical blue print for this uniquely American approach to cost- and quality control in health care had evolved over the years in the early writings of Paul Ellwood² and, subsequently, in the more extensive writings of Alain Enthoven and several of his associates³. These writers took as their ideal model for a health plan the highly acclaimed Kaiser Foundation Health Plan in California, which had been for his workers during WWII by industrialist Henry Kaiser. This health plan has been structured as a group-model Health Maintenance Organization (HMO) that integrates the financing and the delivery of health care under

² Paul M. Ellwood, “Health Maintenance Strategy,” *Medical Care*, May, 1971; pp. 250-56.

one organization and, thus, assumes the full financial risk for all of the health care needs of its enrollees. The blue print, however, also could accommodate so-called “virtual HMOs,” that is, networks of independent health care providers tied by contract to a particular health insurance plan that bore the full financial risk for the health-care needs of its enrollees.

According to the blueprint, the health insurance plans (also often called “managed-care plans”) were to compete for enrollees under well-established and vigorously enforced rules of transparency and proper business conduct. The rules governing this competition and their enforcement by either employers or the government (the so-called “sponsors” of insurance) were named by the designers of this concept “*managed competition*,” although “*regulated competition*” might have been more descriptive (see Figures 4).

The term “managed competition” thus is quite distinct from the term “managed care.” It refers strictly to a set of rules and management techniques governing the competition among health plans for enrollees. “Managed care,” on the other hand, refers strictly to the contractual and operating relationships among the health plans, their enrollees and the providers who render health services to these enrollees. Unfortunately, in the literature and the media, these two terms tend to be poorly understood, which is apt to confuse foreign observers of American health policy.

Under the blue print for “managed competition,” the sponsors (employers or government) would endow individuals and families covered by the arrangement with fixed, *defined annual contributions* toward the purchase health insurance through the group-policy mechanism organized by the sponsors. To facilitate the proper functioning of this market, the sponsor would select for the prospective enrollees only a limited set of qualified health plans that were to compete for the sponsored enrollees on the basis of (1) their premiums and (2) detailed and reliable information on the quality of each plan’s administration as well as on the quality of the health care rendered by the providers in that plan’s network (see Figure 5).

The role of the sponsor’s *defined contribution* was deemed crucial to this concept of managed competition. Its purpose was to steer prospective enrollees toward efficient health plans and thereby to discipline the managers of these plans. To that end, the insured were to absorb the full difference between the premium actually charged by the health plan chosen by the insured and the employer’s (or government’s) defined contribution, which would be the same regardless of the health plan actually chosen by the individual or family.

U.S. Health Care during the 1990s

The actual imprint of these novel concepts on American health care has been mixed and, it appears, short-lived in its effect.

Temporary Spending Control: As is shown in Figure 1, the attempt to control American health spending through the techniques of “managed competition” and “managed care” did bend the time path of actual real per-capita health spending during the period 1992-97 below the long-run spending trend line. During the mid 1990s, real per-capita health spending rose at rates much below the historical long-run

³ See, for example, Alain C. Enthoven and Richard Kronick, “Consumer-choice health plans for the 1990s: Universal Health Insurance in a System Designed to promote Quality and Economy,” *The New England Journal of Medicine*, vol. 320, January 5 and 12, pp. 29-37 and 94-101.

average of 4.5%. The health insurance premiums charged employers for their group policy rose at ever smaller annual rates, reaching an average of a zero increase in 1996. The percentage of GDP spent on health care was virtually constant, hovering about 13.5% (see Figures 6).

As already noted, in 1993 Congressional Budget Office (CBO) had projected that health spending in the year 2000 would be \$1.67 trillion, or close to 20% of the GDP. The actual number for 2000 turned out to be \$1.3 trillion, or only about 13.5% of GDP. Economic theory suggests that, in the tight labor markets of the 1990s, the bulk of these savings in health spending are likely to have flown through to employees in the form of higher take-home pay. That theory, however, is not widely shared among non-economists. A more popular theory in the press, and especially among the providers of health care, is that these savings reflect the denial of needed care to the insured and that they flowed mainly into the bottom line of employers and the paychecks of health insurance executives.

During the period 1992-97, per-capita spending in the private sector grew substantially less rapidly than per-capita spending under the public Medicare and Medicaid programs, which continued to grow at the rate of about 10% per year. This development kindled the thought among policymakers that cost and quality control for these two public programs should be delegated to the private health plans as well.

Renewed Cost Growth: Starting in 1997, overall average real per capita health spending in the U.S. has been rising once again, at an ever-accelerating pace. As is seen in Figure 1, it now proceeds at roughly the same high growth rate that was experienced during the late 1980s—albeit still below the long-run historical trend line.

Since 1997, the premiums charged employers in the private sector began to rise again steadily on an annual basis as well. For the 2001-2002 season, these increases are projected to be in the mid- to high double digits, even for large employers, and in excess of 20% for small employers and individuals (see Figure 7).

Per capita health spending under the public Medicare and Medicaid programs currently are still rising at much lower rates than those in the private sector, partly as a result of cost-control measures legislated in the late 1990s. As noted in the introduction, however, it is only a matter of time until these public programs must adapt to the prices and spending levels set by the private sector.

In short, the health-care cost crisis of the late 1980s has returned in full bloom. Furthermore, like in the late 1980s, the private insurance sector sets the spending trend for the rest of the health sector.

The Failure of Managed Competition American Style

The failure of “managed competition” with “managed care” to live up to the promises held out in the theoretical blueprints for these approaches are rooted to some extent in errors of omission and commission on the part of employers and health plans. For the most part, however, the (at least temporary) demise of these approaches rests on the financial base on which these constructs had to rest. Uniquely in the United States, the premiums for private health insurance tend to be part of the total compensation package through which employers compete for employees in the labor market. Furthermore, most employees seem unaware

that what they think of as the “company’s contribution” to their health insurance actually comes out of their own take-home pay⁴. The typical employees appears to believe that any cost savings wrung out of their health policies accrue mainly to their employers who also pays for the bulk of any cost-driving factors.

As noted, the reason why employers found it possible to drive their employees into limited-choice provider networks in the early 1990s was that the economy was in recession at that time and employees worried more about their jobs than about the particular parameters of the health-insurance contract that came with employment. In retrospect, it should have been obvious to the proponents of “managed competition” and “managed care” that this model would become unraveled in periods of tight labor markets. As the American economy boomed during the 1990s, and as labor markets tightened at historically low levels of unemployment, employees were emboldened to rebel successfully against the restrictions on their choices implied in the “managed competition—managed care” construct. It is clear by now that “managed competition” with “managed care” American style is strictly a recession model.

The Economic Boom of the 1990s: To please prospective enrollees in the increasingly tight labor markets of the mid- and late 1990s and, through them, their employers, the managed care health plans were forced to relax many of the strictures implied in managed care—e.g., gate keepers, strict formularies, and concurrent utilization review. They started to compete with ever-wider networks of providers, lest they lose dissatisfied enrollees and eventually abandoned many of the utilization controls to which patients had objected. With corporate profits rising throughout the period, and health-insurance premiums as a percentage of profits falling, employer went along with this strategy. In effect, employers felt safe to drop the ball on health-care cost containment sometime in the mid-1990s altogether, and they have not been able to pick it up since.

The Lack of an Information Infrastructure: While managed care would have been doomed by the tight labor market in any event, employers and their agents in health care, the private health plans, added fuel to the fire by their failure to develop the sophisticated information infrastructure that was considered the *sine-qua-non* of a well functioning framework of managed competition. It turns out that such an infrastructure is, for the most part, a pure public good⁵. The public sector, however, has not yet stepped up to the plate to fill its proper role in the production of this public good: the financing of its production it with public funds.

As a consequence of the failure to provide the information infrastructure for “managed competition,” employees choosing among health plans were, in effect, forced to select their own *private health-care regulator* (their “managed care” plan) virtually in the dark. Coupled with the unaccustomed restrictions that managed care had visited on patients, this lack of adequate information contributed considerably to a growing public backlash against the entire idea of managed competition and managed care.

Ham-Fisted Managed-Care Tactics: Finally, it can fairly be said that, in seeking to control both prices and the volume of health services, the health plans during the mid 1990s employed a number of ham-fisted

⁴ Economists are convinced that these so-called “employer-paid” premiums actually come out of the take-home pay of employees, certainly over the longer run.

⁵ Technically, a public good is one from which one cannot easily exclude people who want to use it and that are not diminished in quantity when people do use it. National defense and the information from basic research are classic examples, but so is much of the information infrastructure needed for health care. It can be shown that private markets always under-invest in the production of public goods, which creates the rationale for the public financing of their production.

techniques that were bound to raise the ire of physicians and, indeed, of the general population. Among the more memorable of these techniques was the guideline that hospital stays should be constricted to 24 hours after a normal delivery and to 48 hours after delivery with Caesarean section, a stricture almost tailor-made to trigger a backlash. Another such guideline widely ridiculed in the press at the time was that patients would be entitled to cataract surgery in only one eye, unless both eyes were needed for work. In retrospect, one can only marvel that serious health-plan managers ever thought such “managed-care” techniques would be a selling point of the concept in the eyes of the public.

The Failure of Capitation: Most disappointing to the proponents of the “managed competition--managed care” approach has been the failure of *capitation* to take root in the American health system.

During the early phases of managed care, many providers of health care had argued that, instead of being nickel-and-dimed to pieces through pre-authorization and concurrent utilization reviews by distant health plan that paid them on a piece-rate (fee-for-service) basis, they would prefer to receive one annual, risk-adjusted capitation per insured health-plan member and thereafter enjoy the clinical freedom to manage the insureds’ health care without the irritating external micro-management of the doctor-patient relationship by distant health plans. In this way the providers of health care would regain their clinical freedom, albeit at the price of assuming full risk for the total health-care cost of insured Americans. In principle that does seem to be the ideal solution to reach the twin *desiderata* in health care: cost control and clinical freedom for providers.

Unfortunately, where capitation was tried most enthusiastically (notably in California and in Massachusetts) the capitation rate was determined competitively, in markets beset by considerable excess capacity. It was to be expected that in such markets the capitation rate would be bid down enough to drive this excess capacity out through the financial bankruptcy of at least some providers. That would be the normal working of price-competitive markets. Americans accept these verdicts in many economic sectors. It turns out that, however, that in health care neither the providers of health care, nor their patients, nor even public policy makers are willing to accept these impersonal, harsh outcomes of price-competitive markets beset by excess capacity. The result has been a general disillusionment with capitation and its gradual demise.

If that basically sensible approach of managing health care is ever to be revived in the United States, the capitation rates would have to be set by an administrative, non-competitive process that would assure capitation rates sufficiently high to cover the cost of the kind of health care Americans expect. At the moment there does not exist a financial or administrative structure that could support the negotiation of adequate capitation rates.

What Next in American Health Care?

Although “managed competition” and “managed care” vintage 1990s can be said to be dead by now in the United States, it is unlikely that either government or employers will for long allow the U.S. health system to lapse back into the undisciplined habits of the late 1980s. Just what shape a new form of managed care may take in the future, however, is a matter of considerable uncertainty.

Policy analysts on the left of the political spectrum may see in the demise of managed care the hope for a simpler, administratively less costly, single-payer health system on the Canadian model. The theory seems to be that Americans will soon be so distraught over their health system that the public will call for a radical overhaul of the entire system. Policy analysts on the right of the political spectrum dream of actuarially fair health insurance markets for individual purchasers of insurance, through the mechanism of the “defined contribution.” The latter approach, however, is sufficiently ill defined at this time to warrant some comment (see Figure 8).

Defined Contributions—the Adult Model: If one were to go by the futurists who seek to excite audiences on conference circuit, we should expect employers soon to pull back completely from the provision of health insurance for their employees. These futurists predict that, disillusioned by the current demise of managed care, and frustrated by their inability to control health spending, employers will simply add to their employee’s take-home pay what they had hitherto spent per employee on employer-paid premiums. Employees will then be expected to fend for themselves in the individual health-insurance market—preferably in the much touted *e-health-insurance* markets that can facilitate what Americans are said, by these futurists, to crave: the mass customization of individual health insurance contracts tailored closely to the tastes, health status and budgets of individual customers.

It is improbable that these conference-circuit visions will soon become a reality in the United States. The main obstacle to the approach is not, as is sometimes thought, the current tax code, which might treat such add-ons to the employees take-home pay taxable employee compensation. It would not be hard to amend the tax code to shield these earnings from taxation, as long as they are spent on health insurance.

The chief obstacle to this form of defined contribution is three-fold.

First, the approach would inevitably lead to a complete segmentation of the health insurance market by risk class. If employers refused henceforth to perform the risk-pooling function, government would undoubtedly be asked by the public to step into the breach.

Alternatively, instead of turning to government for help, employees might insist that employers fully risk-adjust the contribution to be added to the employees’ paychecks, so that older and sicker employees would receive more added compensation than younger and healthier ones. Adequate risk adjusters for this purpose do not exist at this time. Whatever pragmatic adjusters employers might adopt would probably trigger endless rounds of litigation on the part of employees who cannot obtain adequate coverage for the defined contribution that they received. There is the added question whether, employers might use, that adjuster would also compensate the individual employee for risk factors that can be attributed to the employee’s own life style. It is a Pandora’s box most employers probably would be loath to open.

Finally, even in the more sluggish labor markets of today, employees probably would resist being dumped from the parental caring of their firms’ benevolent employee-benefit managers into the harsh, impersonal market for individual health insurance. Continued competition in the labor market for skilled workers probably would dissuade employers from even trying the approach.

Defined Contributions—The Teenage Model: A more probable development during the coming decade would be a more widespread adoption of the strictly defined contribution approach originally recommended by the proponents of managed competition.

As already noted, for most of the 1990s, most employers continued the practice of paying X% (usually 80% or so) of the premium for whatever insurance product an employee had selected. The more expensive the health plan chosen by the employee, that larger was the employer's absolute-dollar contribution to that employee's choice. Under the original blueprint for managed competition, it will be recalled, the employer's absolute-dollar contribution to the employee's health-insurance premium was supposed to be the same, regardless of the premium for the health insurance product actually chosen by the employee.

Under this defined contribution approach, employers would continue to select for their employees menus of qualified health plans, and they would continue to pool risks over all of their employees—at least for risk not attributable to personal life style. Employees, however, would be required to bear the full difference between the employer's fixed, defined contribution and the premium actually charge for a particular insurance product (see Figure 9).

Building on a concept developed by *the Bipartisan Commission on the Future of Medicare* during the late 1990s, and subsequently introduced formally in the U.S., Senate by Senators John Breaux (D-Louisiana) and Bill Frist (R-Tennessee), President Bush now proposes to convert the current Medicare program into the parental version of the defined-contribution plan as well. Under that plan, the traditional, fee-for-service program of Medicare would have to compete on premium and perceived quality as just one health plan, along with other private health-insurance products vying for the premiums of the elderly, which is something of an oddity even at the conceptual level⁶. The elderly would be endowed by the federal government with a risk-adjusted, defined contribution toward the full insurance premium charged by a health plan and pay the full difference between that contribution and the premium actually charged by their chosen plan.

To what degree the defined-contribution concept under employer-provided health insurance and under Medicare would tier the health care experience of Americans by income class would depend, of course, on the relationship between the size of the defined contribution and the actual premiums charged by the health plans.

Employers, for example, might be tempted over time to link the annual increases in their defined contribution not to the cost of health care, but to their own revenues or profits. The feasibility of such a cost shift, of course, depends on the tightness of the labor market in which employers must compete for human resources. Where the cost shift is feasible, low-skilled workers with low incomes would be likely to select mainly low-cost, tightly managed HMOs, perhaps with gate-keeper restrictions on access to specialists and with sundry restrictions on the use of new technology. By contrast, higher income Americans probably could

⁶ Precisely how such a model could work is an interesting political and philosophical question. A private health plan presumably could leave a state if it preferred not to do business there with the elderly. Government's Medicare program, on the other hand, would surely not have that option. It would have to stay. How can such an arrangement be called "fair competition"? Furthermore, what would it mean for the government-owned and -operated Medicare to "bear risk," as is foreseen in the Breaux-Frist proposal? Practically, what does it mean for a government agency to bear risk, apart from the taxpayer?

afford more loosely managed *Preferred Provider Plans* (PPOs), or even traditional indemnity insurance with few if any restrictions on the delivery of health care.

Similarly, a fiscally hard-pressed federal government might be tempted to let the gap between its defined contribution aid the elderly and the premiums actually faced by the elderly grow over time, with appeal to depleted Medicare trust funds and the argument that the payroll tax on the working generations cannot exceed a certain ceiling. There would then emerge among the elderly a similar tiering of the health-insurance and health-care experience by income class.

A Note on Controlling Spending on Prescription Drugs

As elsewhere in the industrialized world, in the U.S. the annual increases in per-capita spending on prescription drugs have far outpaced increases in other components of health spending (see Figure 12). In 1990, prescription drugs accounted for only 5.4% of total U.S. health spending. By 2000, that percentage had reached 8.9% or 1.4% of GDP. It is projected to reach close to 14% by 2010, or over 2% of GDP (see Figure 13).

It is generally agreed among the experts that these spending increases are not driven by price increases on existing drugs, which have hovered around general price increases in the economy. Rather, these spending increases are driven by increases in the number of prescriptions (see Figure 14) and the switching by physicians from older, relatively cheaper drugs to newer replacements that cost an average of two to three times as much per daily dosage as the older drugs they replace. The volume increases, in turn, have undoubtedly been driven by the much gradual extension of insurance coverage for prescription drugs 1990s. In 1990, roughly two thirds of all spending on prescription drugs was still paid for out of pocket by patients in the pharmacy. By the year 2000, that fraction had shrunk to less than a third. Private insurers provided virtually all of that extended coverage.

Control over Prices: Unlike most other industrialized nations, the United States has so far shied away from outright price controls in the pharmaceutical markets, relying instead on a complex system of market mechanisms and linkages of the prices paid by public programs (e.g., by the Medicaid program for the poor) to market-determined rates in the private sector.

In the private sector, each large health plan negotiates separately with pharmacies over the retail prices to be paid by the insurer, and with drug manufacturers over rebates on the health plan's total purchase of drugs from particular manufacturers. Depending on the size of that rebate, an insurer may or may not include a manufacturer's brand-name drug in that insurer's approved formulary. Alternatively, smaller health plans often subcontract with a so-called "pharmaceutical benefit manager" (PBM) that negotiates with pharmacies over prices and with manufacturers over rebates on behalf of their clients, the insurers. The PBMs, too, maintain their own formularies to which physicians and their patients must adhere.

As consequences of this market structure, the net prices health plans or PBMs pay for identical drugs can vary considerably among health plans and among PBMs, in inverse proportion to their market power. Furthermore, uninsured Americans who lack any market power and pay out of pocket at the pharmacy naturally pay the highest prices for prescription drugs. Overall, Americans tend to pay much higher prices

for brand-name drugs than do their counterparts elsewhere in the industrialized world, although the prices of generic substitutes often appear to be cheaper in the United States than elsewhere⁷.

Control of Spending through Cost Sharing by Patients: Aside from the pressure on drug prices that insurers try to exert on pharmacies or drug manufacturers, insurers also seek to control their total outlays on prescription drugs by forcing patients to share in the cost of those drugs.

At the moment, the most popular form of this cost sharing among insurers is the system of **three-tier co-payments**. For a generic product patients may be asked to pay \$8 per prescription and the insurer pays the rest. For a competing, more expensive brand-name drug that is on the insurer's (or PBMs) formulary, patients may be asked to pay a co-payment of \$15 per prescription. Finally, for a competing brand-name drug that is not on the insurer's (or PBMs) formulary, patients may be asked to make a co-payment of \$25 or more per prescription.

While three-tier co-payments do steer patients towards lower-cost drugs, the system hides from patients the total net price that the insurer pays for drugs. A radical alternative to this approach, one that would expose patients to the full price of drugs, is **reference pricing** (see Figure 15). Under that approach, the insurer establishes groups of therapeutically equivalent drugs and reimburses the patient only the price of a low-cost, benchmark product in the group, regardless of the drug actually chosen by physicians for their patients. If the prescription is for a higher priced brand-name drug in the group, the patient must pay out of pocket the full difference between the low, benchmark reference price and the full retail price at the pharmacy of the chosen brand-name drug. Germany has used this approach for a decade now.

Properly viewed, *reference pricing* for drugs is merely the analogue of *defined contributions* for health insurance; it seems a natural complement of the defined contribution approach. American drug manufacturers, however, are deeply alarmed by the idea of reference pricing. One argument is that it will be impossible to establish scientifically sound therapeutically equivalent groupings of drugs, so that patients might be endangered by the approach. The manufacturers' main fear, however, is that reference pricing will drive prices for all products within therapeutically equivalent groupings toward the group's benchmark reference price, which has been the tendency under Germany's system of reference pricing.

It must be noted, however, that in Germany the therapeutically equivalent groupings are established centrally for all sickness funds in Germany, that is, it is a national system with central control. By contrast, in the United States these groupings probably would be established independently by each health plan or PBM, for their own use. That circumstance would weaken considerably the economic power of reference pricing. In any event, at this time reference pricing is not yet being used in the United States, although desperate health plans may try to move in that direction before too long.

A compromise between three-tiered co-payments and strict reference pricing might be **three-tiered coinsurance**. Under that system, each insurer or PBM would establish groupings of therapeutically equivalent drugs and then make patients pay, say, 10% of the retail price of a low-cost benchmark drug,

⁷ See, for example, John R. Graham and Beverly A. Robson, "Prescription Drug Prices in Canada and the United States—Parts 1 and 2," Fraser Institute Occasional Paper No. 42 and No. 43, 2000. See also Patricia M. Danzon and Li-Wei Chao, *Prices, Competition and Regulation in Pharmaceuticals: A Cross-National Comparison*, London, UK: Office of Health Economics, June, 2000.

15% of the cost of a brand-name drug on the formulary and, say, 35% of the retail price of a brand-name drug not on the formulary. To this author's knowledge that approach has not yet been used widely either in the United States, although it is being tried by some health plans on the West Coast.

SUMMARY AND CONCLUSION

Modern health care contributes very directly and noticeably to the welfare of human beings and often performs what is called "medical miracles." One should think that citizens in every nation would take great satisfaction from such an economic sector and treat it with affection. Alas, the health care sector the world over is a source of never-ending rancor and suspicion. Therefore it is the target of never-ending health reforms that always are declared, *ex post*, to have failed.

It is so because the health care is a product whose intrinsic quality is poorly understood, not only by the usually ignorant recipients who lack the technical knowledge to judge it, but even among its producers, who often cannot agree on what works and does not work in health care and what constitutes best clinical practice. Since, in addition, the bulk of health care in all modern nations is now collectively financed by distant third-party payers, it is only natural that those payers view the enterprise with permanent suspicion which, in turn, rankles the providers of health care.

For most of the previous century, all modern nations have sought to discover and develop the "ideal health system" that would bring tranquility to the sector satisfaction to all of its parties. It has been, and will continue to be, a search for the Holy Grail. A perfectly safe prediction is that the future in health care will be marked by mutual rancor all around, and that the system will be moved ever so slightly hither and thither, in the direction of the dominant fashion of the day, and that attempts at "health reform" will be a chronic activity within the body politic.

During the 1980s, in the United States, salvation was sought in what President Reagan called the "pro-competitive" strategy. Practically the strategy meant the deregulation of the supply side of the health system without, however, the development of adequate countervailing power on the demand side. The create that countervailing power Americans turned, in the 1990s, to a highly paternalistic approach, under which the individual household was to choose its own private health-care regulator, from a menu of competing regulators otherwise known as "managed-care plans." Once chosen, that regulator would then help "manage" the health care needed in case a member of the household fell ill. This paternalistic system was much celebrated at the blueprint stage and much loathed in practice, which is why it met its demise.

At the moment, the fashion in the United States is to move aside paternalism in health care altogether and to delegate cost- and quality control to the ultimate authority in such matters: the legendary, savvy American consumer. At the blueprint state, that savvy consumer will be empowered with defined contributions from employers and government, therewith to take on an otherwise open-ended and free-wheeling supply side of the market. In this foray, the consumer will be assisted by an high-tech information-infrastructure that has been talked about for decades now and, this time, will really appear.

Recently, that new vision for American health care was succinctly expressed by Karl L. Singer, M.D., an internist at Exeter Family Medicine Associates in Exeter, New Hampshire and editor of Patient Care, a clinical journal for primary-care physicians:

Having the patient in the driver's seat has radically changed my role as a physician. Last week, I saw a woman who had fallen down and broken her hip. We did a bone scan—she's osteoporitic—and she asked: "What should I do? I don't have prescription drug coverage." I told her to check with the pharmacy on the cost of hormone-replacement therapy vs. another class of drugs, and she made the choice on the basis of the cost of medication. This is where managed care went wrong—disconnecting people from their individual cost of care by giving them first-dollar coverage. We've got to get back to a system that restores that connection.⁸

A presumably worried and elderly lady, without insurance coverage, standing in the local pharmacy, shopping around for cheap health care: it is the vision for our health system that a leading American physician finds superior to the arrangement that managed care had offered patients. The question is what the typical, hitherto well-insured and well-coddled American consumer actually will think of this brave new world, as he or she will be thrust into it during the coming decade. Chances are that, a half a decade hence, the experience will bring forth primeval from that consumer cries for yet another round of health-reforms. Political entrepreneurs will undoubtedly oblige.

⁸ "Is Anybody Happy?" (Roundtable discussion on health care). *Across the Board* (July/August, 2001); p.45.