SPECIAL ARTICLE

A CONSUMER-CHOICE HEALTH PLAN FOR THE 1990s

Universal Health Insurance in a System Designed to Promote Quality and Economy

(First of Two Parts)

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Abstract America's health care economy is a paradox of excess and deprivation. We spend more than 11 percent of the gross national product on health care, yet roughly 35 million Americans have no financial protection from medical expenses. To an increasing degree, the present financing system is inflationary, unfair, and wasteful. In its place we need a strategy that addresses the whole system, offers financial protection from health care expenses to all, and promotes the development of economical financing and delivery arrangements. Such a strategy must be designed to be broadly acceptable in our society.

To remedy the deprivation, we propose that everyone not covered by Medicare, Medicaid, or some other public program be enabled to buy affordable coverage, either through their employers or through a "public sponsor." To attack the excess, we propose a strategy of managed competition in which collective agents, called sponsors, such as the Health Care Financing Administration and large employers, contract with competing health plans and manage a process of informed cost-conscious consumer choice that rewards providers who deliver high-quality care economically. (N Engl J Med 1989; 320:29-37.)

WHY UNIVERSAL HEALTH INSURANCE?

The Paradox of Excess and Deprivation

The health care economy of the United States is a paradox of excess and deprivation. We spend about 11.5 percent of the gross national product (GNP) on health care, much more than any other country.[1,2] And whereas other countries have stabilized the share of their GNP that is spent on health, ours has accelerated in recent years. Inflation-adjusted per capita spending for health care grew by 4 percent per year from 1970 to 1980, and by 4.6 percent per year from 1980 to 1986.[1] The Health Care Financing Administration (HCFA) recently projected that according to present trends, health care spending would reach 15 percent of the GNP by 2000.[1] These growing expenditures are adding greatly to deficits in the public sector, threatening the solvency of some industrial companies, and creating heavy burdens for many people.

At the same time, roughly 35 million Americans have no financial protection from the expenses of medical care — no insurance or other coverage, public or private.[3-6] This number is substantially higher than it was 10 years ago, as increasing numbers of employers find ways to avoid supplying coverage for employees and their dependents. Millions more have inadequate coverage that leaves them vulnerable to large financial risks.[7] And uncounted millions have coverage that excludes preexisting medical conditions. Our present system of financing health care systematically denies coverage to many who need it most. Health insurers want to insure those who are the least likely to need medical care and to protect themselves and their policy holders from the costs associated with the care of the very sick.

The U.S. health care economy is inflationary. It is still dominated by fee-for-service payment of doctors and hospitals by third-party intermediaries with open-ended sources of finance. There is no total budget set in advance within which providers must manage the care of their patients. For the most part, there is no incentive to find and use medical practices that produce the same health outcome at less cost. And this method of payment leaves insured consumers largely unaware of the costs of the services they receive.

Health maintenance organizations (HMOs) and preferred-provider insurance (PPI), called "managed care plans," now cover more than 60 million Americans.[8,9] Such plans have the potential to create serious cost consciousness among consumers and providers. But they will not achieve it as long as potential subscribers do not have to pay the full extra cost themselves when they choose a more costly plan. (PPI contracts selectively with providers about price and use controls, and it reimburses patients at a higher rate when they see contracting providers, as a way of motivating patients to use such providers. In turn, access to patients is the incentive for providers to accept negotiated fees and controls.)

The employers of most insured people offer their employees a traditional insurance scheme by which all or most of their medical expenses are reimbursed after the payment of a deductible. If employers offer a less costly managed care plan, they often offer to pay its premium in full, as long as it does not exceed that of the traditional plan. Thus, the managed care plan has little or no incentive to reduce its price or improve its efficiency, because the employee making the choice sees little or no financial reward for choosing it. Some employers offer a fixed-dollar contribution and a cost-conscious choice of plan. In such cases, the managed care plan is motivated to

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Supported by the Robert Wood Johnson Foundation and the Henry J. Kaiser Family Foundation. The opinions expressed are those of the authors, not necessarily those of Stanford University or the foundations.

reduce its price to attract subscribers. But even then, the Internal Revenue Code permits employees to characterize their premium contributions as nontaxable employer contributions and thus make the payment with pretax dollars. The effect is that if an employee chooses a health plan that is more rather than less costly, the government is likely to be paying about one third of the difference in cost in the form of tax relief.[10,11] As a result, the employee's cost consciousness is attenuated, and the health plan has less need to cut its price to attract subscribers. In any case, health plans have little or no incentive to improve their efficiency in order to serve a few cost-conscious customers if most of their customers are not cost conscious; such plans need only shift costs from the former to the latter.

Moreover, most such "managed care" plans are really little more than traditional insurance arrangements that deal with physicians on an arms-length basis. It is unlikely that they will be able to achieve economical organization and delivery of care without obtaining the support of physicians and their commitment to that goal.

This inflationary financial environment reinforces other powerful cost-increasing factors: a growing supply of doctors looking for ways to make themselves useful; a professional culture that esteems the aggressive use of the most advanced technology without recognizing cost effectiveness as a virtue; the explosive growth of costly new forms of technology; the rising expectations of patients and malpractice litigation when expectations are not met; and an aging population. Little in this system promotes the cost-conscious use of resources or the efficient organization of the delivery system.

In addition, the present system of financing health care in the United States is unfair. It provides most people — those who are regularly employed by a medium-sized or large employer — with coverage either at no cost or at prices subsidized by the employer and the tax system. But the system denies the opportunity of coverage to millions of others for no good reason — to seasonal and part-time employees, self-employed persons, widows, divorcees, early retirees, the unemployed, and others whose employers choose not to provide health care coverage. Not all uninsured people are poor or unemployed. In fact, nearly two thirds of them are members of families with incomes above the poverty level; more than two thirds of uninsured adults belong to the labor force.[3] Viewed another way, when the uninsured are seriously ill (and most expenses are for seriously ill patients), taxpayers, insured persons, or both end up paying for most of their care. Voluntarily or involuntarily, some people are taking a free ride. Those who can do so ought to contribute their fair share to their coverage and be insured.

In the past, our open-ended financing system provided a ready source of financing for those who could not pay, even if it did not ensure equitable access to care. Hospitals simply raised their charges to those who could pay in order to cover the costs of those who could not. In recent years, efforts by employers and the government to contain costs have attacked this means of support for "uncompensated care." Hospitals have come under increased financial pressure to develop strategies to avoid caring for those who cannot pay — even to the point of closing their emergency rooms. Many who cannot pay turn to public providers of last resort, such as county hospitals. But these institutions are also under increasing financial pressure as public finances are strained and the numbers of the uninsured increase.

The present system is wasteful in many respects. We have spent little on evaluating medical technology, and there is much uncertainty about its efficacy.[12,13] Much care appears to be of unproved value.[14,15] There is considerable duplication and excess capacity in our medical facilities. The association between jobs and health insurance complicates and interferes with job mobility, because most people must change health plans when they change jobs. The presence of large numbers of uninsured persons imposes large costs on providers when they perform determinations of eligibility and coverage. The uninsured obtain much of their primary care in the outpatient departments and emergency rooms of public hospitals, instead of in the much less costly setting of a primary care physician's office. The deferment of care for conditions such as hypertension and diabetes adds to health risks and can cause much more expensive emergencies later. The lack of prenatal care can lead to very costly premature delivery and the birth of children with handicaps. The unavailability of insurance imposes heavy penalties on the uninsured: the postponement or denial of treatment, causing avoidable sickness and suffering, and the depletion of personal savings.

For all these reasons, our present system of health care does not reflect American values. We cherish efficiency and fairness, but we have a system that is neither efficient nor fair. Very few Americans believe that other Americans should be deprived of needed care or subjected to extreme financial hardship because of an inability to pay. There is widespread public outrage when a hospital turns away a delivering mother or an injured person for this reason. Congress has passed laws to punish hospitals that do this. But we have failed as a society to create institutions that assure all persons of the opportunity to obtain needed care, when they need it and without an excessive financial burden.

The Need for a Comprehensive Strategy to Promote Efficiency and Equity

To improve the health care system, we need a strategy that is comprehensive. Partial interventions can produce negative consequences or be rendered ineffective by developments elsewhere. Attempts to contain costs by the cost-conscious choice of managed care systems will be fruitless if, somewhere else, open-ended demand is bidding up the prices and standards of

care that the managed care systems must meet. Why should doctors and hospitals accept serious cost containment by HMOs if there is plenty of open-ended demand for their services elsewhere? Partial "categorical" approaches leave people out and create enormous complexities as people change categories. And they can treat unequally people who appear similar but who actually fall into different categories.

The problems of achieving equity and efficiency are intimately related. Attempting to promote efficiency by making everyone conscious of costs conflicts with providing cross-subsidies for uncompensated care. On the other hand, we cannot afford to provide coverage for those who lack it without making the system efficient for all. The accelerating spiral of growth in expenditures has necessitated cutbacks in employer-provided coverage and Medicaid eligibility, and it is one of the main arguments used against universal coverage.

Thus, a satisfactory strategy for the health care economy in the United States must simultaneously address both sides of the paradox of excess and deprivation. We have designed our proposal with two main goals in mind. The first goal is to provide financial protection from health care expenses for all, either through enrollment in comprehensive health care financing and delivery plans or, for the irreducible minimum of people, through public providers of last resort. There will always be some — the homeless, undocumented aliens, and others whose life style does not include enrollment in a health plan, carrying a membership card, and making regular payments — whose needs will have to be addressed by public providers of last resort. But we can drastically reduce their numbers and so ease the financial burden on these institutions.

Our second goal is to promote the development of economical financing and delivery arrangements, by requiring consumers to be conscious of costs in choosing among health care organizations. There is ample evidence that efficient prepaid group practices can reduce the cost of care by 10 to 40 percent, as compared with open-ended fee-for-service practices, even without competition from other HMOs to serve cost-conscious purchasers.[16,17] There is good reason to believe that competition to serve cost-conscious purchasers could motivate cost-reducing innovation and slow the growth of health care spending. Our strategy would be to encourage the spread of HMOs and other efficient delivery arrangements by giving all consumers a choice of plans that requires a consideration of costs. Those who prefer to keep traditional "free choice of provider" arrangements and are willing to pay the extra costs associated with them would be free to do so.

The Need for a Broadly Acceptable Plan

Universal health insurance has not attracted overwhelming support in this country. Those who favor it should consider carefully the sources of opposition and seek to avoid designing a plan with features so objectionable to large numbers of American people or key interest groups that the plan would not be considered seriously in the political process. The idea of universal health insurance raises fears of socialized medicine or total dependence on the government for payment, of radical change or the disruption of satisfactory existing arrangements, of large-scale redistribution of income, or of excessive regulatory coercion. The causes of such fears can be avoided. We have designed a proposal for incremental change that is compatible with American cultural preferences and that should find broad acceptance. We will discuss these issues in the second part of this article.

A Universal Health Insurance Plan Based on Managed Competition with Mixed Public and Private Sponsorship

Under this proposal, everyone not covered by an existing public program would be enabled to buy affordable subsidized coverage, either through their employers, in the case of full-time employees, or through "public sponsors," in the case of the self-employed and all others. We illustrate the general concepts with specific examples of tax rates, employer contributions, benefit packages, and other detailed features of the proposal. These should be understood as illustrative and, within limits, as "tunable dials" that can be adjusted in the political process. A supporting document provides more detail.[18]

State-Level Public Sponsors

Under this proposal, the federal government would enact legislation giving each state powerful incentives to create a "public sponsor" agency to act as sponsor for people otherwise unsponsored. A sponsor is an institution that ensures each member of its sponsored group financial coverage of health care expenses at a moderate price. In the competitive model we recommend, the sponsor serves as the broker, selecting the coverages to be offered, contracting with health plans and beneficiaries about rules of participation, managing the enrollment process, collecting premium contributions from beneficiaries, paying premiums to health plans, and administering both cross-subsidies among beneficiaries and subsidies available to the whole group. The main sponsors in this country are employers, Taft–Hartley trusts, and the HCFA. Public sponsors would aggregate the buying power of small employers and individuals. In a manner similar to that of very large employers such as the federal government, public sponsors would contract for a wide variety of managed care plans to be offered to the participating population in a competitive annual enrollment. (Whether to offer traditional indemnity insurance would be a management decision made by public sponsors.)

Public sponsors would offer to contract with any person or family not covered through employment who wished to abide by the conditions of participation, including enrollment during the annual open-enrollment period and a "lock in" for the full year.

Such purchases of coverage would be subsidized: the public sponsor would pay 80 percent of the cost of the average qualified health plan, and the person or family covered would pay the rest.

Public sponsors would offer to act as brokers for employers who wished to obtain coverage through these agencies. Small employers and even many medium-sized employers are not large enough to manage competition among health plans effectively.[19] Moreover, small employers that buy insurance on their own are forced to pay higher rates, reflecting greater variability in small groups. A public sponsor could combine these risks and achieve economies of scale. States could achieve such economies in administration as well as greater bargaining power with the health plans by assigning this responsibility to the agencies that already buy coverage for public employees.

Obligations of Employers

Under this proposal, employers would be required to cover all full-time employees (and their dependents not otherwise covered) and to pay an 8 percent payroll tax on the first $22,500 (i.e., half the Social Security wage base) of the wages and salaries of all employees not covered. In addition, employers would be required to offer all full-time employees (those working at least 25 hours per week) a choice of qualified plans, possibly including traditional insurance, and to contribute at least 80 percent of the average cost of the basic coverage, which would include the employees' dependents unless they were covered under a spouse's policy. (Some benefit plans would be more elaborate than others. For each health plan offered, the employer would obtain a quotation for the price of basic coverage, as defined below. The employer's required contribution would then be 80 percent of the weighted average of those prices.) The employees would be required to pay the difference between the employer's contribution and the cost of the health plan they chose.

Before the annual enrollment period, employers would designate each worker as full time, and thus covered automatically, or part time. (Part-time workers could also be designated as covered.) Detailed rules would be developed to specify which workers would have to be designated as full time and covered. Employers could choose to pay the 8 percent tax rather than cover seasonal or temporary workers.

Self-employed persons, early retirees, and everyone else not covered through full-time employment would be required to contribute through the income tax system. An 8 percent tax would apply to adjusted gross income up to an income ceiling related to the size of the household. The ceiling would be calculated to ensure that households with sufficient income paid for approximately the total subsidy that was available to them. The proceeds of the 8 percent tax would be used by public sponsors to subsidize the purchase of coverage by people not covered by an employer.

Why require employers to cover full-time employees and pay a tax on the earnings of workers not covered? Most health coverage in our country is based on employment, and there is no realistic prospect of changing that in the short run. We propose to spread the cost more evenly over all employment, and to fill in with publicly sponsored coverage where employment-based coverage cannot reasonably be expected to work. Publicly sponsored coverage for individuals has to be subsidized to create a strong incentive for even the healthy to subscribe. In the absence of a subsidy, consumers in apparently good health would seek to avoid paying for coverage until they got sick, or would rely on charity care or public providers because they know that our society is unwilling to let people suffer and die without care. Premiums would soar. The market would break down in a spiral of adverse risk selection, as the market for individual coverage in this country has in fact done.[20]

If publicly sponsored and subsidized coverage were available without the mandate or tax, employers would have a powerful incentive to stop providing coverage and send their employees to the public sponsor. People without coverage would demand it from the public sponsor, which would have to provide it without a source of revenue. Therefore, we propose to use the mandate to keep most coverage employment based. (An alternative model, publicly financed and sponsored, will be discussed in Part Two.) The tax on the earnings of workers not covered by employers would raise much of the funds needed for the public sponsor from those who would benefit. This approach would help avoid a large-scale redistribution of income. Also, it would minimize the otherwise strong incentives for employers to reduce the hours of workers to a level below 25 hours per week, to avoid providing health benefits. Viewed in another way, the 8 percent tax would be a means of aggregating premium contributions on behalf of the part-time, seasonal, and other workers whose attachment to a single employer is not strong enough to justify requiring the employer to provide full insurance coverage. Taft–Hartley trusts do this for unionized workers in specific industries; the proposed mechanism would generalize the Taft–Hartley trust idea to everyone who was not employed full time by a single employer.

We recognize that there are good arguments against the employer mandate and the tax. Any tax distorts economic decision making. This issue will be discussed in Part Two.

Subsidies to Premiums for the Poor

To encourage nearly universal coverage, individuals and families would be eligible for an additional federal subsidy toward the portion of the health insurance premium that they would have to pay if their adjusted gross income was below 150 percent of the poverty level for their family size. Without a subsidy, a family's share of an average premium would be approximately $500. For many families of four with an income equal to 100 percent of the poverty

level — approximately $11,000 — this would be a substantial expenditure that many would feel they could not afford.

For families with an income below 100 percent of the poverty line, the subsidy would equal the amount of the family's premium contribution (assuming the health plan chosen was no more expensive than the average cost of a basic health plan). For families whose income was between 100 and 150 percent of the poverty level, the subsidy would decrease to zero on a sliding scale as income approached 150 percent. This subsidy would be available both to full-time employees covered by their employers and to those buying coverage through the public sponsor, provided their income was low enough to qualify. The administration of the subsidies would be handled by the agency chosen by each state. We would prefer to see the public sponsors kept out of the process of income testing, because they are not meant to be welfare agencies. One possible approach would be for such testing to be carried out by public welfare agencies that would certify the eligibility of persons and families for subsidies.

Subsidies for Small Businesses

Small businesses are an important source of new jobs. We would suggest easing the burden of providing coverage for them in two ways. First, as noted earlier, they would be able to buy coverage through the public sponsor, thus realizing the benefits of the public sponsor's economies of scale. Second, small businesses (those with fewer than 25 full-time employees) that arranged coverage through the public sponsor would be required to pay no more than 8 percent of their total payroll for basic benefits for their employees. If the employer's 80 percent contribution for health insurance exceeded 8 percent of the payroll, the sponsor would subsidize the excess amount.

Creating an Environment with Cost-Conscious Choice

Employers would be required to make a fixed contribution that would be independent of the health plan chosen. (As discussed below, this contribution would vary with the health-risk categories of the enrollees in each plan.) The amount of an employer's contribution that could be excluded from the employee's taxable income would be limited to 80 percent of the average cost of a qualified health plan in the employer's geographic area. The HCFA would offer employers a variety of approved risk-rating systems to translate this into individual tax-free amounts. Additional tax-free contributions under Section 125 of the Internal Revenue Code, which authorizes tax-favored "cafeteria benefit plans," would not be allowed.

The defined-contribution approach and the limitation on the amount of tax-free employer contributions are intended to promote both efficiency and equity. With these limitations, employees who chose more costly plans would have to pay the extra costs with their own net-after-tax dollars. This requirement should promote the choice of less costly plans. In addition, the limit on tax-free contributions would help make funds available to lower-income people not currently covered.

Qualified Health Plans

Qualified health plans would have to include the basic benefits package specified in the HMO Act, possibly with tighter definitions and restrictions to reduce costs. This package would be updated periodically through legislation and regulation. Deductibles could be no higher than $250 per person in 1988, adjusted for inflation; health plans would pay at least 80 percent of the fees of contracting providers. We would prefer to allow only a small copayment or deductible for inpatient hospital services, because patients have relatively little influence over decisions about the use of such services. However, if more substantial cost sharing among patients were allowed, the premiums could be reduced and, with them, the overall cost of the scheme to taxpayers. Total out-of-pocket expenditures for deductibles and coinsurance for contracting providers' services covered by the health plan could not exceed 100 percent of the annual premium. Qualified plans could not exclude coverage for preexisting conditions for members who enrolled during an annual open-enrollment period. Our intent is to encourage the development of cost-effective managed care plans. Thus, health plans would be free to limit or exclude coverage of the services of nonparticipating providers, except in emergencies when participating providers were not available.

Continuity of Coverage

One goal of the proposal is to have everyone join a health plan during the annual enrollment period and stay in that plan for the subsequent year, unless a "qualifying event" occurred (such as divorce or a move to a new home). This provision would reduce administrative costs and new beginnings on annual deductibles, and would improve the ability of health plans to manage care. Everyone would start the year either covered by his or her employer in a health plan of the employer's arranging or covered by a health plan arranged by the public sponsor. The subsidy of 80 percent of the average cost of qualified health plans contracting with a public sponsor would come either from an employer or from the public sponsor (in the case of part-time employees or other uncovered workers).

People who moved from one part-time job to another would simply keep paying the public sponsor the difference between 80 percent of the average premium and the cost of the coverage they had chosen. Similarly, people who moved between part-time jobs (or unemployment) and full-time jobs with employers that arranged coverage through the public sponsor would feel no discontinuity. When a person was hired, the employer would simply pay 80 percent of the average premium to the public sponsor (as the employer would do for each of its other full-time employees). The sub-

scribers would pay their shares either through the employer or through the sponsor.

When a person took or left a job with an employer that acted as an independent sponsor, there might be some discontinuity. In the detailed design of the program, a choice would have to be made between permitting changes in the health plan when they are caused by a job change and preventing them by complex rules.

Federal–State Cost Sharing and Administration

The federal government would collect revenues from three sources — the payroll tax paid by employers, taxes from self-employed persons and others eligible to buy subsidized insurance from the public sponsor, and additional revenues derived from a limitation on the amount of an employer's contribution that employees could exclude from their taxable income. The federal government would make these monies available to any state that created a public sponsor agency operating in accordance with federal guidelines.

Using the prices charged by health plans contracting with the public sponsors, the HCFA would determine the average cost nationally of a qualified health plan. After adjusting this cost to regional market areas (probably Metropolitan Statistical Areas) to account for regional variation in input prices (primarily wages), the HCFA would agree to pay each public sponsor half of the regionally adjusted cost for each enrollee to whom the sponsor sold a health plan. The public sponsor would be required to subsidize the enrollees to the amount of 80 percent of the average premiums of the health plans with which it had contracted. In states with high bills for medical care, relative to wages and other input prices, the average premiums would be likely to be higher than the regionally adjusted national average cost. These states would be required to contribute more than 30 percent of the cost to fund the state's share of the program. Conversely, states with relatively low medical care costs would pay less than 30 percent for their share.

A scheme of the general type outlined here could be financed and managed by the federal government, by the states, or by the states with federal guidelines and financial support. The federal government is likely to be able to develop and apply superior competence, and its taxing power is needed to make universal health insurance a reality. Otherwise, states competing to attract jobs would be reluctant to place such burdens on their employers. But the federal government could raise the money and turn it over to the states, as it does with Medicaid.

In this model, each state would be the guarantor of coverage for its citizens. There are several reasons to prefer the plan that involves state responsibility with federal support and guidelines. First, there is considerable diversity among states' health care systems and policies. Second, a substantial part of the money required to care for the uninsured now comes from more or less broadly based state and local sources, including employers' payments to private hospitals for bad debts or free care, and direct appropriations from state and local governments to short-term hospitals and medical programs for care for the recipients of general assistance. The states now rely on various mixes of these sources. The requirement for partial state funding is intended to keep this proposal from being regressive in relation to the status quo, by ensuring that this broadly based funding would be retained in the health care system. Third, there is wide variation among market areas in the cost and use of services. The responsibility for costs should be decentralized to the state level in order to motivate states, local governments, and employers to support cost-reducing policies.

Relation to Medicare and Medicaid

We propose no initial change in Medicare and Medicaid. The public sponsors would have enough work to accomplish the objectives set out thus far. However, once this program was operating successfully, there would be opportunities to use the capabilities of the public sponsors to assist the Medicare and Medicaid programs. For example, Medicaid programs should consider contracting with the public sponsors to provide coverage for families on welfare, in order to ease the transition from welfare to work. The existence of the public sponsor would mitigate the work disincentive associated with losing eligibility for Medicaid because of an extra dollar earned, and a Medicaid–public sponsor agreement might mitigate this disincentive further. The existence of nearly universal coverage through the public sponsor should greatly reduce the number of people who "spend down" into Medicaid. As for Medicare, it might find an advantage in using the public sponsors as brokers for HMO enrollment.

Managed Competition, Technology Assessment, and Management of Outcomes

Here we address the institutional framework within which consumers and providers decide about their participation in plans for health care financing and delivery and the incentives and constraints within which physicians and managers make their decisions about care and resource allocation.

The market for health plans is not inherently competitive. Market forces do not automatically lead it to produce an efficient, much less a fair, outcome.[19-22] In a free market, health plans could pursue profits or survival by using numerous competitive strategies that would destroy efficiency and fairness and that individual consumers would be powerless to counteract: risk selection, market segmentation, product differentiation, discontinuities in coverage, refusals of insurance for some people, biased information, and anticompetitive behavior. Consumers avoid buying coverage until they get sick, and health plans protect themselves with elaborate strategies, including medical review (e.g., testing for the human immunodeficiency virus) and the exclusion of coverage for preex-

isting conditions. For 35 million Americans to lack coverage is the sort of thing that happens when people are left to a free market.

The type of market structure that we believe can produce reasonable efficiency and fairness is one of managed competition in which intelligent collective agents, called sponsors, contract with competing health plans and continuously monitor and adjust the market to overcome its tendencies to failure. Managed competition has been discussed extensively elsewhere.[19-22] The key idea is that sponsors would manage a process of informed, cost-conscious consumer choice that would offer the reward of more subscribers to health plans whose providers delivered high-quality care economically.

The sponsors could employ various tools and strategies to counteract the causes of market failure. For example, when consumers had a choice of plan, the medical costs expected per person might be distributed unevenly among the different plans in what is called biased risk selection. If all patients had to be insured for the same price, achieving a favorable selection might be very advantageous to a health plan. The techniques of attracting good risks and repelling bad ones are many and subtle. If the incentives were not structured properly, a health plan might be led to underserve sick patients in order to encourage them to switch to another plan at the next enrollment period.[23] Or if the health plans were free to vary the premiums or decide whether to renew an enrollment, they would find it advantageous to charge high premiums to high-risk enrollees, or to offer them poor coverage or none at all.

The sponsor could attenuate these incentives by "risk rating" — the process of identifying and grouping persons according to the characteristics that help predict medical expense, with a different price quoted to cover the people in each group. Then the incentive to discriminate against the sick could be reduced by allowing the health plans to charge higher prices for the care of people in high-cost groups. Unfairness to these people could be avoided by tying the sponsor's contributions to the costs in each category, thus protecting the sick from higher costs. For example, the sponsor should pay each health plan an amount equal to the expected cost of efficient care for each of its enrolled patients with the acquired immunodeficiency syndrome, in order to avoid a disincentive to the enrollment and care of such patients. Medicare uses a rudimentary risk-rating system in contracting with HMOs.[24] In addition, the sponsor might contract for standardized coverage in order to prevent the manipulation of the terms of coverage to select patients in particular risk groups. And the sponsor could manage the enrollment process, including contacts between beneficiaries and health plans that might be designed to select for risks. Finally, the sponsor could monitor performance with regard to risk selection and take corrective action as needed. In this way, sponsors could control economic incentives so that the health plans would produce efficient and fair service.

For managed competition to yield efficient, high-quality care, providers, sponsors, and consumers must all be well informed about the constituents of such care. Thus, it is essential that the institutional framework include effective, broad-based programs in technology assessment, the risk-adjusted monitoring of outcomes, and outcomes management. Bunker et al. have proposed the creation of an "institute for health care evaluation" that would establish a uniform data base, identify technologies for assessment, and carry out and disseminate the results of evaluations.[25,26] Blumberg has defined "risk-adjusted monitors of outcomes" as statistical systems that measure outcomes continuously and enable comparisons to be made that take into account appropriately the differences in patient mix of the populations being compared.[27] This approach can be used, among other things, to identify specific providers whose outcomes are better or worse than expected. Ellwood has recently proposed "outcomes management . . . a common patient-understood language of health outcomes; a national data base containing information and analysis on clinical, financial, and health outcomes that estimates . . . the relation between medical interventions and health outcomes . . . and an opportunity for each decision-maker to have access to the analyses that are relevant to the choices they must make."[28]

Such information strategies are complementary to the process of managed competition; neither can have its intended effect without the other. The information enables sponsors and consumers to choose health plans wisely and to be informed about cost–quality tradeoffs. It enables physicians to avoid using their resources on treatments that do not improve outcomes and to save them for treatments that do. Managed competition rewards them for acting on such information.

In addition, such information is a public good. The profit incentive does not motivate the production of such information in socially optimal amounts. Substantial support by government is both necessary and a wise investment for taxpayers in the long run. All providers must participate in uniform systems of data reporting, because selective reporting on a voluntary basis will not produce credible data. Thus, action is required on the part of the states, the federal government, or both. Although large employers and government agencies (e.g., the HCFA) can gather, analyze, and publish much of this information, it will not have credibility with physicians until they participate actively in its development.

Coverage, Costs, and Budgets

The Congressional Budget Office, which makes such estimates for the Congress, has estimated the effects of our proposal on coverage, costs, and public-sector budgets.[29] Here we report their estimates, which are similar to our own.[18]

Of the 35 million people who are currently uninsured, according to Congressional Budget Office estimates, approximately 22 million would be covered by their employers under the proposed program, and the remaining 13 million would be eligible to purchase subsidized coverage from a public sponsor (Table 1). In addition to the 13 million currently uninsured people who would be eligible to buy coverage from the public sponsor, 6 million people currently purchasing nongroup insurance would be able to do so. Employers would purchase coverage for 43 million people in addition to those now covered by employer-sponsored insurance (this includes many self-employed people who currently purchase coverage).

Government needs money for five purposes under this proposal: (1) to subsidize 80 percent (50 percent from the federal government) of the cost of an average health plan for households in which no member is a full-time worker; (2) to subsidize small businesses arranging coverage through the public sponsor, whose unsubsidized costs exceed 8 percent of payroll; (3) to subsidize the individual's share of the premiums when family income is less than 150 percent of the poverty level; (4) to cover the increased cost to the federal employee's health benefits program; and (5) to cover the revenue lost from the reduction in taxable wages when employers contribute to the health insurance of previously uninsured employees.

This money would be raised in three ways. First, there would be an 8 percent tax on the first $22,500 of the wages of noncovered workers and a similar tax on self-employed persons and others. Second, there would be a limit on the amount of an employer's contribution to health insurance that could be excluded from an employee's taxable income. Third, the states would be required to fund part of the program, using monies saved because of the large reduction in the costs of hospital care that is publicly sponsored or uncompensated.

Table 1. Health Insurance Status of the American Population at Present and as Projected under the Proposal.*

Projected Types of Coverage	Totals (Projected)	Current Types of Coverage			
		Employment-based group†	Other private	Medicare, Medicaid, or CHAMPUS‡	None
		millions of people§			
Totals (current)	241.2	135.1	19.7	51.1	35.3
Employment-based group†	178.3	135.1	13.6	7.1	22.5
Medicare, Medicaid, or CHAMPUS‡	44.0	—	—	44.0	—
Public sponsor	18.9	—	6.1	—	12.8

*Source: Preliminary Congressional Budget Office simulations based on the March 1988 Current Population Survey.[29]

†Includes all people with employment-based coverage, regardless of other insurance, except those covered by Medicare.

‡CHAMPUS denotes the Civilian Health and Medical Program of the Uniformed Services. Figures include veterans covered by the Department of Veterans' Affairs.

§People are classified according to their own insurance and work status or that of the family member whose plan covers them.

Table 2. Probable Effects of Full Implementation of the Proposal on the Federal Budget.*

	Cost or Savings (Billions of 1988 Dollars)
Outlays	
Matching contributions to public sponsors	8.7
Subsidies to small businesses	3.9
Subsidies to low-income individuals and families	3.9
Cost added to health-benefit plan for federal employees	0.2
Savings to Medicare, Medicaid, and CHAMPUS†	−3.9
Total	12.8
Revenues	
Payroll tax on part-time workers‡	4.4
Income tax on others eligible to buy from public sponsors	2.5
Cap on exclusion of employer contributions from individual income-tax and payroll-tax bases	11.2
Savings from elimination of all health care benefits from Section 125 of Internal Revenue Code	§
Revenue loss from mandated employer contributions — individual income and payroll taxes	−5.7
Total	12.4
Net effect on federal budget deficit	0.3¶

*Source: Preliminary Congressional Budget Office estimates based on 1988 Current Population Survey and August 1988 base line.[29]

†CHAMPUS denotes the Civilian Health and Medical Program of the Uniformed Services.

‡Net of income-tax and payroll-tax offsets due to lower wages.

§Not yet estimated, but expected to be small.

¶Value shown is approximate because of rounding off.

We think that the cost of the benefit package we have described would be approximately $2,400 per family per year.[18] The Congressional Budget Office estimates that with a $2,400 annual family premium our proposal would not have a significant effect on the federal deficit (Table 2). New federal expenditures (after accounting for offsets) would be approximately $12.8 billion; this would be balanced by approximately $12.4 billion in additional tax revenue. There is some uncertainty associated with all such estimates, but we believe that these are accurate enough to demonstrate that a proposal such as ours can be crafted that has no effect on the deficit. As we have shown, the proposal has been designed with a number of "tunable dials." Some marginal adjustments may be necessary to achieve deficit neutrality (or may be desirable for other reasons), but the proposal as currently formulated is close to "budget neutral."

State-government expenditures required to provide the 30 percent subsidy for people who would buy health insurance directly from the public sponsor are estimated at $5.2 billion. Some states would be able to fund these expenditures in large part by redirecting current state and local government expenditures in support of care for the uninsured poor. In 1983, state and local governments spent more than $2 billion for general-assistance medical programs,[30] and in 1986 they spent $1.4 billion in direct appropriations to short-term care hospitals (Fraser I, American Hospital Association: personal communication). The need for such expenditures would diminish greatly

when almost everyone had insurance, and most such funds could be used to support the states' 30 percent subsidy of the regionally adjusted national cost of a health plan.

In some states, care for the uninsured poor is delivered largely by private hospitals and paid for through cost shifting to private payers. In such states new revenues would be required to provide the state's share of the subsidy to be used by the public sponsor. However, raising these new revenues would not harm the productive capacity of the states' economies. They would not be diverting funds from other sectors to the health care sector but simply shifting the source of the subsidy from a private-sector cross-subsidy to a direct public subsidy. Nationally, the private-sector cross-subsidy was approximately $7 billion in 1986 (Fraser I, American Hospital Association: personal communication). We expect the subsidy to increase to $8.3 billion in 1988.

In its first full year of implementation, we expect that our proposal would increase total health care expenditures by approximately $15 billion—3 percent of current health care expenditures and 0.3 percent of the gross national product. This would be a one-time increase. As Medicare and Medicaid have taught us, the important effects of a new health care program are not seen in the static, first-year effects, but rather in the long-term effects. It is ambitious but reasonable to set it as a goal for a program such as the one we propose — given cost-conscious demand and managed competition among health plans — to restrain health care costs to a rate of growth close to that of the GNP. If this favorable result were to occur, we would reduce health care costs by $15 billion per year (that is, $15 billion in the first year, $30 billion in the second year, $45 billion in the third year, and so forth), as compared with the current path of expenditures. These savings, which would be shared by the government and private employers (and ultimately by wage earners), would soon dwarf the one-time cost increase that our proposal would create.

In the second part of this article, we will discuss the general characteristics and expected effects of our proposal and compare it with alternative systems. We pay particular attention to effects on the organization of medical practice and the delivery of medical care.

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