CHAPTER 4

Promoting Health Care Quality and Access

Health care is one of the largest sectors of the American economy, and one of the most vibrant. Biomedical research has led to dramatic advances in our understanding of the human genome, basic biology, and mechanisms of disease, and in our ability to diagnose and treat illness. More researchers from the United States have been awarded Nobel prizes in medicine in the past 40 years than from all other countries combined. Innovative diagnostic and imaging tools have improved our understanding of diseases and our ability to identify illnesses quickly, accurately, and painlessly. Novel drugs, devices, and techniques have dramatically improved the treatment of a wide range of illnesses. New information systems, including those relying on the Internet, allow health care providers to work more effectively with their patients to manage illnesses and avoid complications. These advances testify to the success of our health care system in encouraging discovery and innovation. Coupled with a strong tradition of dedicated, professional care, they hold great potential for further improvements in the health of Americans.

Evidence from biomedical, epidemiological, and economic studies confirms that these technological advances have made Americans far better off. An American born in 1990 can expect to live 7 years longer than an American born in 1950. The mortality rate from coronary heart disease, the Nation's leading killer, has declined by 40 percent since 1980, both because of reductions in the incidence of serious heart events like heart attacks and because of better outcomes when those events occur. Among seniors, rates of disability have declined by more than 20 percent in the past two decades. Many complex factors have undoubtedly contributed to these improvements. For example, better scientific understanding of diseases has enabled Americans to make lifestyle changes, such as quitting smoking, to reduce their risk, and improvements in economic conditions and public health have enabled more people to avoid environmental health risks. But a growing body of research indicates that medical technology played a starring role in these dramatic improvements.

Thanks to these innovations, the number, scope, and quality of available medical treatments have risen dramatically. These improvements in medical treatment, rather than rising prices or other causes, have been the single most important contributor to growth in medical expenditure. In large part as a result of the expanding capabilities of medical care, the United States now spends 13.4 percent of its GDP on health care, and this figure is predicted to

rise to 15.9 percent by 2010. There is growing evidence that, on average, the health improvements resulting from newer, better, and more intensive treatments have been well worth the added cost. But there is also growing evidence that substantial opportunities remain both to reduce costs and to achieve greater health improvements through more effective use of medical services—that is, to improve the value, or output per dollar spent, of our health care system. Even though the American health care system provides high-quality care overall, too often Americans receive neither the best care nor the best care for the money. Whether lower value care results from the underuse of basic preventive services, the overuse of medical procedures in patients unlikely to benefit from them, or the misuse of treatments resulting in preventable complications, there is tremendous potential to improve the value of health care in the United States.

With rising health care costs have come rising concerns about the affordability of health care. Many health care expenses are unpredictable, and serious illnesses have the potential to place households in financial peril. Insurance is a standard solution: in a well-functioning insurance market, individuals pool their risks, trading unpredictable and potentially large expenses for much smaller, more certain expenses in the form of insurance premiums and copayments. Yet about one in six Americans lacks any kind of health insurance, and many more Americans are concerned about the value of available health insurance plans. Providing high-value health insurance is not easy. Generous, first-dollar insurance does provide protection against the high costs of medical treatment, but by eliminating incentives to weigh the costs of medical care against its expected benefits, it also contributes to the overuse and the misuse of medical care.

Health care also differs from many other goods and services in that Americans generally believe that basic health care should be available to all members of society, even those with little or no ability to pay. Public support in the form of assistance with health insurance and health care costs helps achieve this goal and accounts for well over $400 billion annually in Federal expenditure and forgone tax revenue. In the past, advocates for expanding government health insurance programs such as Medicare and Medicaid to address the problem of uninsurance have maintained that "guarantees" of coverage, plus government regulation of prices for covered services, could provide high-value health care services. But government health care plans have faced enormous difficulties in keeping up with innovations in medical practice and in providing high-quality, innovative care. Medicare still does not cover prescription drugs, and Medicare beneficiaries must increasingly rely on supplemental private insurance to provide acceptable coverage. Many Medicaid plans, facing rapid cost increases and very low provider participation rates under the traditional approach of regulated fee-for-service insurance,

are adopting alternative strategies to provide coverage. Other major industrialized nations with larger public health insurance programs, such as France, Germany, Japan, Switzerland, and the United Kingdom, are also experiencing rapid growth in expenditure and problems with the provision of high-quality care.

Private health insurance also has faced difficulties in supporting high-value health care. In the early 1990s, advocates of managed care believed that plans combining insurance with new financial and other incentives for health care providers to control costs could result in higher value care. But although managed care did contribute to a slowdown in medical cost growth in the mid-1990s, public uncertainty about the quality of care in managed care plans has increased, and this uncertainty has been accompanied by a return of rapid cost increases in private insurance. Many Americans are not satisfied with the cost and quality of the public and private health care coverage options now available to them.

Another important obstacle to high-value care is the quality of information available in markets for medical care. In most market settings, consumers' purchase decisions are based on good information on the value of the products they buy. But in health care the lack of good information on the success of different treatments—in terms of the best outcome per dollar—means that individuals and families have difficulty making informed decisions, and insurance companies are not rewarded for altering their coverage to encourage high-value care. Thus strategies to improve the value of care include supporting the development of better information for patients and providers on high-quality, high-value treatments.

In the face of these various problems, many have concluded that American health care policy is again at a crossroads, with fresh policy approaches needed to support innovative health care in the future. New policy directions are being proposed, a consistent theme of which is the encouragement of patient-centered care—care that puts the needs and values of the patient foremost and makes the patient the primary clinical and economic decision-maker, in partnership with dedicated health care professionals. Patient-centered care requires more flexibility and innovation in health care coverage; it also places more responsibility on the patient—and less reliance on third-party payers and government regulators—to avoid wasteful costs. To encourage the development and use of such innovative coverage options, competitive choices among health insurance plans and among health care providers are more important than ever. In turn, effective competition to help all Americans get the care that best meets their needs requires innovative, market-oriented health care policies.

To achieve more patient-centered health care by encouraging innovations in the financing and delivery of services in this dynamic sector of the economy, the Administration is pursuing three broad objectives:

- *Develop flexible, market-based approaches to providing health care coverage for all Americans.* Markets respond more rapidly than bureaucracies to the changing technology and new innovations in products and services that characterize the American health care system. Market flexibility and competition are essential if medical treatment decisions are to reflect patients' individual needs and personal preferences and are to be based on the best available evidence on benefits and costs. Important obstacles to innovation in health care coverage must be addressed, such as the potential for competing plans to reduce costs by designing benefits to attract healthier enrollees rather than by providing more efficient care for all persons regardless of their health risks. But these obstacles must be addressed through health care policies that increase rather than reduce insurance coverage rates. Competition need not threaten the quality of care received by those with the least ability to pay; rather, government support and oversight can be better directed to ensure that all Americans are able to participate effectively in a competitive health care system.
- *Support efforts by health care providers and patients to improve the quality and efficiency of care.* The incentives provided by a truly competitive system of health insurance coverage choices are an essential foundation for a high-quality, efficient health care system for the 21st century. But other policy changes are also needed to create an environment for medical practice that encourages high-quality, efficient care. Government and private health care purchasers can also help patients and providers develop and use better information on the quality of care, improving the ability of patients to identify high-quality providers and plans and helping providers deliver better care. Improving the environment for medical practice also includes reforming the litigation systems dealing with medical liability and reducing regulatory barriers to innovations in health care delivery.
- *Provide better support for biomedical research.* Outstanding basic research and path-breaking biomedical innovations have already had enormous payoffs, generating long-term public benefits. Because of the high returns on these investments, Federal support for biomedical and other scientific research should be enhanced. At the same time, the Federal Government can expand and improve the knowledge base for medical practice, by supporting projects that analyze which treatments work best for whom, how they can be delivered safely, and which health care providers are doing the best job for their patients.

The remainder of this chapter explores each of these critical issues for improving the quality and value of health care in more detail. As treatment options continue to multiply and costs continue to increase, improvements in the value of health care would make Americans more willing to purchase coverage for themselves and to pay the taxes required to subsidize it for those who need additional assistance.

Encouraging Flexible, Innovative, and Broadly Available Health Care Coverage

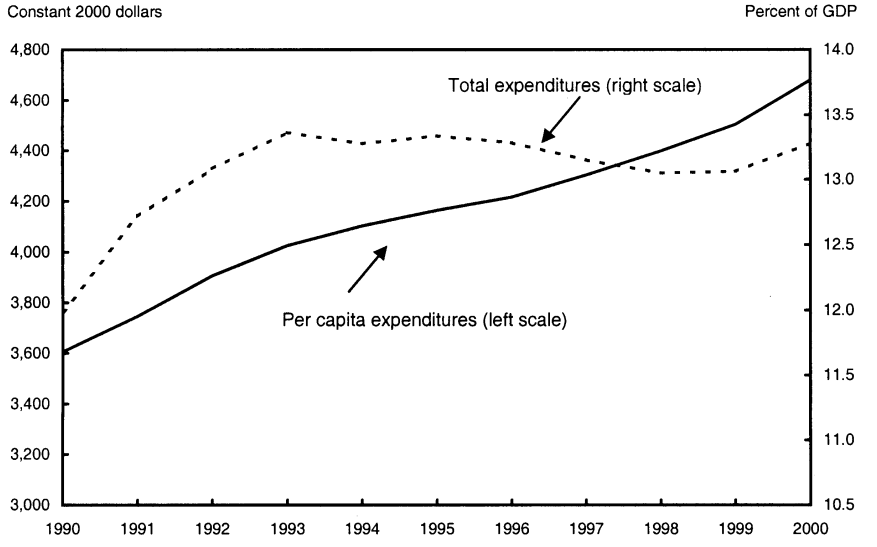
Recent Trends in Health Care Costs and Coverage

Health care spending grew rapidly during the past decade, from $916.5 billion in 1990 to $1,311.1 billion in 2000, or more than 3.6 percent a year on average (2.6 percent a year in per capita terms; Chart 4-1). Home health care expenses and drugs were the fastest growing categories of this expenditure (Chart 4-2). The real, constant-dollar cost of private health insurance increased by 4.9 percent a year between 1984 and 1999. Since the 1980s, health care benefits have also increased substantially as a share of total compensation for workers. Growth in health care costs is projected to accelerate, with total expenditure predicted to account for 16 percent of GDP by 2010. Over the longer term, forecasts predict that health care spending will become even more predominant in the economy, continuing a 60-year economic trend and reaching as much as 38 percent of GDP under conservative assumptions.

Rising costs of private health insurance in the 1980s and early 1990s led to the emergence of managed care in private health insurance plans. Managed care seemed to offer a solution to a fundamental health care dilemma. Its small copayments and low out-of-pocket limits protected individuals from substantial out-of-pocket health care costs. At the same time, its cost control mechanisms—including capitated payments, preferred provider networks, preapproval and utilization review requirements, and restricted formularies discouraged the use of some discretionary medical services whose benefits were likely to be low relative to their cost. In traditional fee-for-service health insurance, in contrast, third-party insurance made patients and providers less sensitive to the value of medical services per dollar spent.

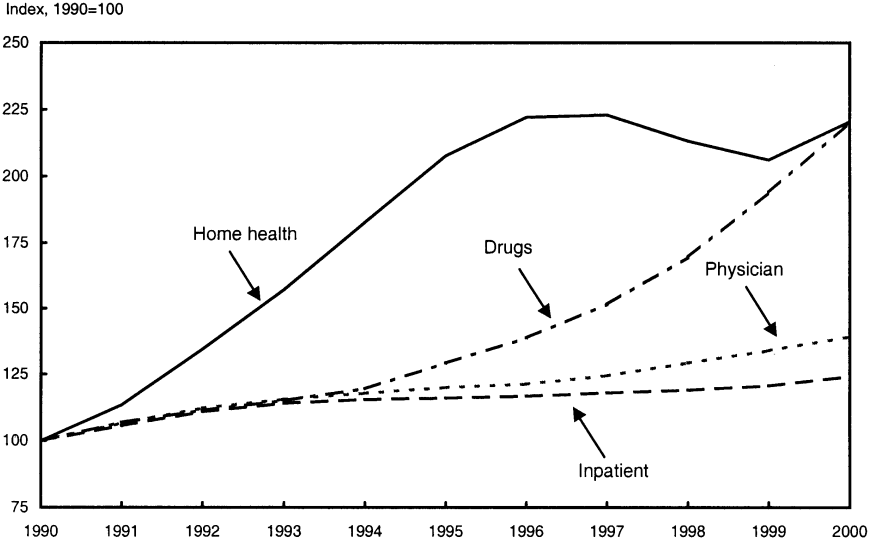
In the mid-1990s, managed care succeeded temporarily in limiting cost increases, largely by negotiating lower payments to providers for specific services, and by discouraging utilization of some medical services and avoiding some costly complications of inappropriate treatment. Thus, for a

Chart 4-1 **Health Care Expenditures**
Health care expenditures grew substantially during the 1990s, both per capita and as a share of GDP.



Source: Department of Health and Human Services (Centers for Medicare and Medicaid Services).

Chart 4-2 **Expenditures on Components of Health Care**
Home health and drugs were the fastest growing components of health care expenditures during the 1990s.



Source: Department of Health and Human Services (Centers for Medicare and Medicaid Services).

while, managed care by and large achieved its primary goal: bringing the rise in insurance premiums under control without compromising quality of care. Today, however, with the perception that managed care has often focused more on reducing costs than improving quality, many of the managed care approaches to controlling cost increases may be reaching their limits: providers are negotiating more effectively with health plans, patients are pressing for greater choice of providers, restrictions on treatment choices are being challenged in courts and legislatures, and few additional easy targets for reducing costs remain (Box 4-1). As a result, premiums for private health insurance are again rising rapidly.

Public health care spending has grown rapidly as well, so that government-sponsored health insurance plans are facing cost increases that seem difficult for taxpayers to sustain. Federal, State, and local governments have long been involved in the financing, provision, and regulation of health care services. The Federal Government directly spends over $200 billion annually for the Medicare program, which provides health insurance for nearly all elderly and disabled Americans, and over $100 billion annually for Medicaid, the joint Federal-State program that provides health insurance for low-income and medically needy populations. Federal Medicaid funds are matched by almost

Box 4-1. Managed Care: Good, Bad, or Somewhere in Between?

The managed care option is an important one for many Americans. The vast majority of nonelderly Americans with private insurance are now enrolled in some form of managed care, representing a sea change in health insurance coverage over the past decade. The reputation of managed care organizations has suffered in recent years, however, and the widespread perception, based largely on anecdotal cases, is that care is worse. To what extent does research on the performance of managed care plans bear out this perception? Not surprisingly, the picture is mixed.

A large number of studies that have looked at quality of care have found no significant differences between health maintenance organizations (HMOs) and fee-for-service plans. Along some dimensions, such as the routine management of chronic illnesses and the provision of preventive care, HMOs tend to perform better. Many managed care programs are better able to implement systematic monitoring of quality of care, particularly for chronic and preventive care. In one study, for example, only 35 percent of women in fee-for-service plans received scheduled mammograms, whereas 55 percent in managed care plans did. In addition, because they have been able to negotiate

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Box 4-1.—*continued*

lower prices from their network providers and for their formulary drugs, many HMOs have been able to offer more comprehensive benefits, such as lower copayments on prescriptions. In turn, this may contribute to better adherence to recommended drug therapies and other treatments among patients in HMOs.

However, certain studies have found better performance in fee-for-service plans in particular instances, especially those involving more costly management of patients with complex illnesses. Although they do not make a compelling general case against HMOs, these studies provide some cautionary evidence that particular attention should be directed toward ensuring that plans have good incentives to care for patients with predictably costly diseases. This can be accomplished through public policies that discourage risk selection and that provide good information on quality of care for people to use in choosing plans.

Private insurance markets have already responded to such concerns. For example, HMOs with closed networks are not the most popular or the fastest-growing form of managed care coverage today. Over the past 5 years, employee enrollment in preferred provider and point-of-service plans has increased from 42 percent to 70 percent, while enrollment in traditional HMOs has decreased from 31 percent to less than 23 percent. Overall, the vast majority of enrollees are in some form of coordinated care. The major exception to this trend is the Medicare program, which has a low rate of HMO enrollment (because of significant payment and regulatory problems) and has had considerable difficulty making preferred provider organizations, point-of-service plans, and other nonnetwork managed care plans available.

$80 billion in State and local contributions. The Federal Government also provides approximately $100 billion a year in tax exclusions to support private health insurance for workers who receive coverage through their employers.

Historically, the Medicare and Medicaid programs have been government-run, fee-for-service insurance plans. They have controlled growth in costs through tight price controls and restricted coverage. For example, Medicare's government-run plan does not cover prescription drugs or widely used disease management programs that assist beneficiaries with chronic illnesses. This is in part because the introduction of new benefits in government-run programs tends to require either extensive rulemaking or new legislation, and in part because of policy concerns about the potential costs of these benefits. Access to treatment may also be restricted when physicians refuse to

participate in a program, because of either administrative complexities or (in the case of Medicaid) low fee-for-service reimbursement rates in many States. The combination of tight price controls and restrictions on access to treatment is likely to make it even more difficult for government-run health insurance plans to keep up with treatment innovations in the future.

Despite these efforts to control costs, annual Federal Medicare expenditure (in constant 2000 dollars) increased from almost $141 billion to $215 billion between 1990 and 2000, and combined Federal and State Medicaid spending almost tripled, rising from $95 billion to $202 billion. The faster growth in Medicaid spending resulted from expansions of eligible populations, including new coverage through the State Children's Health Insurance Program (SCHIP), and from more rapid growth for certain benefits, including outpatient prescription drug coverage for some recipients and long-term care services—benefits not included in Medicare. Both Medicare and Medicaid are expected to continue to grow rapidly relative to Federal budget resources. Over just the next 10 years, Medicare spending is expected to double, as is Medicaid and SCHIP spending. Medicare has dedicated payroll tax financing for its hospital insurance (Medicare Part A) benefits, but the 2001 Medicare trustees' report projects that by 2016 the system will begin to spend more than its tax revenues bring in, and that by 2029 the program will become insolvent, unable to pay these benefits. Furthermore, these hospital insurance benefits account for only a portion of Medicare expenditure. Supplemental medical insurance (Medicare Part B) expenditure is financed primarily by general revenue. Without program changes, by 2030 Medicare is projected to account for 4.1 percent of GDP and 21.9 percent of Federal revenue, and Federal Medicaid payments are projected to equal 2.4 percent of GDP and absorb 12.8 percent of Federal revenue. Medicaid and SCHIP are also creating growing budgetary pressures for States: already the programs account for around 20 percent of aggregate State spending.

Although still high, the proportion of the population covered by health insurance has generally been falling as health care costs have been rising. This rise in the uninsured population has occurred despite the substantial eligibility expansions for Medicaid and SCHIP and despite the growing share of Americans eligible for Medicare. In the absence of new policy directions, a further decline in the number of Americans with access to health insurance is a serious risk, as a result of loss of jobs or reductions in benefits, even if further expansions of eligibility for government programs occur. These trends, considered in more detail below, provide important lessons for encouraging competitive innovations in health care coverage, whether in private insurance markets or in public programs.

Addressing Barriers to Effective Competition in Health Insurance

In most sectors of our economy, competitive private markets coupled with good information work well to improve the welfare of Americans. Tight government regulation and extensive direct government financing are not needed. The health care market has traditionally been regarded as different, however, for several reasons. Among these are potential inefficiencies resulting from adverse selection and moral hazard; an insufficiency of information available to patients, health providers, and insurers; and societal concerns about access barriers for lower income or disadvantaged Americans. Some have argued that these problems create fundamental obstacles to competitive approaches to health care delivery, requiring extensive Federal involvement in regulation and financing.

Tighter regulation and increased Federal oversight, however, are likely to lead to the same kinds of inefficiencies and stagnation seen in other highly regulated industries. Even Medicare, which has primarily consisted of government-provided fee-for-service insurance for elderly and disabled Americans, has long included some competitive private health plan options. To preserve and improve health insurance options for all Americans, the Federal Government can encourage policy reforms that improve the functioning of health care markets, building on steps already being taken by public and private payers.

A crucial obstacle to the effective functioning of competitive markets for health insurance is the problem of adverse selection. Adverse selection occurs when people who expect to incur significant health expenses sign up for more generous, less restrictive health plans in greater numbers than do healthier people. Because these more generous plans attract patients with higher medical costs, premiums for those plans are driven even higher, making the plan even less attractive to healthy individuals, in a classic "death spiral."

Careful policy design, however, can help prevent problems associated with adverse selection. Many large employers, including many States and the Federal Government, have adopted a variety of competitive systems that offer choices to the populations they cover. The following steps can reduce selection problems:

- *Introduce benefit standards.* In the absence of any benefit standards, insurance plans could attract a healthier mix of enrollees by reducing benefits and insurance premiums, potentially undermining the insurance protection offered and driving up the costs of competing plans that have less healthy enrollees. By contrast, broad, flexible standards—such as requiring catastrophic protection and some coverage for all common health problems—have encouraged stable competition among a variety of types of plans in the Federal employees'

system and other successful competitive choice systems used by large private employers. However, specific coverage mandates—such as inflexible restrictions on copayments or required coverage for particular types of medical services—may not only exacerbate adverse selection, by causing more individuals to drop coverage entirely, but also unduly inhibit innovations in coverage.

- *Adjust premiums for risk.* Some purchasers implicitly or explicitly require additional contributions for the plan choices of higher cost enrollees. For example, plan payments might be adjusted based on age, sex, and certain health characteristics (Box 4-2). Medicare is currently expanding its risk adjustment factors to include a range of chronic health conditions.
- *Limit enrollment periods.* Employer plan choice systems generally allow plan changes only during a once-a-year "open enrollment" period, except in special circumstances. The limited lock-in period reduces the likelihood that people will enroll in an inexpensive plan with limited benefits and then switch to a more generous plan just when treatment is needed for a health problem.
- *Provide limited additional subsidies for higher cost plans.* In some competitive choice systems, employer contributions are set equal to a flat amount. In contrast, in the Federal employees' program and many other employer purchasing groups, employer contributions increase with the health plan's cost over some range of plan choices, reducing adverse selection pressures. Recent proposals for improving competition in Medicare and for providing assistance for purchasing private coverage in the form of refundable tax credits would provide partial subsidies for additional expenses, up to a cap.
- *Introduce health care accounts.* Dedicated accounts that provide a tax-favored "buffer" in the event of significant health expenses can make plans with nontrivial out-of-pocket payments more attractive to workers who perceive themselves as having a higher risk of significant expenses. This may reduce the extent to which high-risk individuals tend to choose more generous plans, and at the same time give individuals more control over their care.

There is now considerable evidence that the savings from efficiency gains due to the adoption of competitive systems in large purchasing groups are generally more than adequate to support even costly steps to control adverse selection. Such steps can include providing some limited or partial subsidies to help sustain the higher cost plans that some of the covered populations prefer.

For insurance markets involving small firms and individuals without access to group coverage, adverse selection problems can be more severe. To varying degrees, States permit providers in the market for individual insurance to rate

Box 4-2. The Need for Good Risk Adjustment

Price competition in insurance markets can be a powerful force for efficiency, but it must be used carefully if it is to result in better care for patients. Consider, for example, a large firm that offers its workers a menu of insurance plans. If the firm pays the insurer a flat, or "capitated," fee for each enrollee, insurers offering these plans will have an opportunity to increase their profits by enrolling only the healthiest patients, since they will tend to have the lowest medical spending. In this situation the financial incentive for the insurer is not to provide high-quality, high-value care, but simply to identify and enroll healthy patients. The same issue arises in Medicare or Medicaid, when enrollees choose a managed care plan and the plan receives a capitated payment from the government for providing care.

Public or private plan sponsors can correct this incentive through risk adjustment, that is, adjusting their payments to the insurers on the basis of risk. Insurers need to be paid more to cover enrollees with higher expected medical spending, to remove the incentive for "cream skimming." Instead, plans will have an incentive to improve the quality of care so as to attract all patients.

The best practices for risk adjustment continue to evolve. Although it is very difficult to predict an individual's future medical spending, researchers are developing more effective techniques for doing so. Moreover, there is growing evidence that many medical expenses are not predictable and that, in the vast majority of cases, very high expenditures, when they occur, do not persist for many years. Some types of predictable expenses do not reliably or uniformly influence health plan or provider choices.

Medicare and Medicaid have played an important role in the development of effective risk adjustment techniques. For example, Medicare is developing a system of risk adjustment that relies on detailed diagnostic information collected from both inpatient and outpatient sources. As risk adjustment techniques continue to improve, health plans will increasingly have to compete for enrollees on the basis of the quality of care they provide.

each individual on the basis of his or her medical risks and past medical expenditure. The practice of underwriting is not controversial for many lines of insurance, such as automobile and home coverage, where differences in claims are largely the result of voluntary individual behaviors such as driving habits. In health care, however, a significant part of an individual's disease risk is outside his or her control. To reduce the extent to which high-risk individuals face higher premiums, and to improve the availability of certain

health insurance benefits, States and the Federal Government have imposed a range of restrictions on insurance underwriting practices as well as coverage mandates on nongroup (and in many cases on group) health insurance plans. The 1996 Health Insurance Portability and Accountability Act imposes some Federal requirements on insurance offered by private insurers, so that individuals who change jobs but wish to continue their health coverage face only limited underwriting restrictions in doing so. Some States impose more significant restrictions on insurance underwriting practices, in the form of guaranteed issue and community rating requirements.

Such restrictions tend to reduce insurance premiums for high-risk individuals but increase them for lower risk individuals; they may also encourage individuals to wait until they have a significant health problem before enrolling. The result may be less insurance coverage and only limited reductions in premiums for chronically ill individuals, as healthier individuals choose to forgo coverage entirely rather than pay higher premiums. Thus it is an empirical question to what extent the benefits of making coverage more available for high-risk individuals outweigh the costs of higher average premiums and insurance rates. Stringent underwriting restrictions in individual insurance markets, such as guaranteed issue and community rating, may severely limit the availability of individual insurance and lead to very high premiums. Thus coverage mandates and underwriting restrictions should be undertaken only after careful analysis of their impact on health insurance premiums and coverage rates. Although limited restrictions on underwriting practices and coverage mandates may incrementally increase the availability of more generous coverage, even these policies are likely to increase the average cost of health insurance, and thus to have some adverse effects on health insurance coverage rates.

An alternative to tighter regulation is to take steps to lower health insurance costs and thus encourage broader participation. Voluntary purchasing groups and association health plans, which allow individuals or small groups to band together to purchase insurance, are a promising approach. Supported by standards to ensure financial solvency and group membership based on factors other than health, these purchasing groups have the potential to achieve economies of scale in negotiating lower rates with participating insurers, and may be able to set up a competitive choice system that would otherwise be very difficult for individuals and small groups to manage. In addition, they may be able to reduce the relatively high fixed costs associated with enrolling a group. (Many of the administrative costs of health plans are largely independent of group size, whereas some costs, such as underwriting, are higher for smaller groups or for individuals.) Each purchasing group can also adopt strategies used by large employers to encourage competition and manage adverse selection.

Some local regions as well as some States such as California have set up and then privatized insurance purchasing cooperatives for small businesses. Many experts have suggested that States, which have considerable experience with competitive purchasing groups for their employees and (in a growing number of cases) for their Medicaid and SCHIP plans, would also be effective sponsors of individual purchasing groups. In addition, some private companies have set up voluntary programs for small agricultural groups, and many "affinity group" insurance plans are available for individuals: for example, many professional associations and college alumni associations offer insurance programs. The early experience of such groups in generating lower premiums through competition and economies of scale, and their effect on risk segmentation in health insurance markets, have been mixed. Some purchasing groups have been unable to obtain health insurance premiums that were significantly better than those available from independent insurance brokers. However, many group purchasing arrangements and association plans have attracted large enrollments and have been able to keep premiums stable and competitive without selectively excluding high-risk participants. Steps to encourage the development of purchasing groups, such as providing them the same exemptions from complex and variable State coverage mandates available to large employers while creating clear mechanisms to ensure solvency, are likely to make these options more widely available.

The market for individual health insurance would also be improved if the same kinds of subsidies that have worked well in employer group markets were available. As described in more detail below, subsidies such as a refundable tax credit would significantly lower premiums, thereby reducing adverse selection because a larger number of healthy individuals would take up coverage. In addition, 29 States have significantly improved the functioning of their individual and small-group markets by setting up high-risk pools. These pools provide the opportunity for hard-to-insure individuals to purchase subsidized coverage in a special purchasing group. Typically, the pools are funded by broad-based fees, for example an add-on to health insurance premiums or fees. The eligibility, subsidies, and funding mechanisms vary from State to State, contributing to differences in the stability of the pools, in their effect on health insurance costs for chronically ill people, and in their ability to address adverse selection problems in the State's individual health insurance market.

Alternatively, innovative approaches by independent insurance brokers aimed at reducing the loading or transactions costs for individuals and small groups seeking insurance may also lower costs and expand participation. For example, online insurance "clearinghouses" allow small firms and individuals to obtain competitive rate quotes quickly from a large number of insurers. This improves price competition and can help reduce signup costs (for example, through a standardized online application procedure).

A further concern about competition in the health care system involves poor information. In addition to the problems of adverse selection already discussed, patients, providers, public policymakers, and taxpayers often have to make major decisions about medical treatments, regulations, and financing choices with only limited information. The obvious solution is to develop better information on treatments and on health system performance. Helping patients to understand their choices not only empowers them to choose the care they want but also leads to better decisions and, in some cases, reduced costs.

Finally, health care financing and regulation can and should reflect and reinforce the foundation of professional norms and ethics underlying the American health care system. Physicians, nurses, and other health professionals have a long tradition of caring deeply for patients and of working closely with them to provide the care that is in their best interests. Too often, however, these health professionals must work in a regulatory and economic environment that fails to encourage high-quality, efficient care. As these barriers are overcome, leading to fewer errors and more effective treatments, more Americans will find participation in health plans worthwhile. This important issue is addressed in the next section.

Increasing Health Insurance Coverage

Clearly, innovative approaches are needed now more than ever to help keep up-to-date health insurance available to workers and temporarily unemployed Americans and their families, and beyond that, to increase rates of health insurance coverage. To encourage such innovations, public policies should encourage a broad range of coverage options. Some of the most promising approaches to increasing coverage provide support for purchasing health insurance and health care services while easily adapting to changing circumstances and patient needs. Policy studies indicate that several principles are important:

- *Recognize existing support.* Tax exemptions for employer contributions to private health insurance are an important contributor to the stability of employer-sponsored health insurance plans. Although a concern is that unlimited tax exemptions may create an incentive to purchase very costly health care coverage, this form of subsidization does make health insurance more affordable for employees and contributes to very low rates of uninsurance—around 5 percent—for workers who are offered employer-sponsored coverage.
- *Focus new Federal support on those most likely to be uninsured.* Some groups currently receive little or no assistance with their health insurance costs. Most notably, workers who must purchase individual coverage because their employer does not offer health insurance

generally receive no tax subsidies for health insurance at all. Many small employers and employers of low-wage workers do not offer health insurance. This lack of subsidization is a major reason why individuals in families with incomes less than twice the poverty line have very high uninsurance rates, around 25 percent, and account for a majority of the uninsured. Researchers have found that unemployed workers are three times more likely than employed workers to be uninsured. Often these workers are eligible to continue their former employer's coverage temporarily through COBRA (or are covered under "mini-COBRA" laws in 38 States that expand COBRA to smaller employers), but usually they must pay the full cost of their insurance. (COBRA refers to provisions under the Consolidated Omnibus Budget Reconciliation Act of 1986.) Those ineligible for COBRA, and those whose former firm no longer exists or no longer offers health insurance, also receive no tax subsidies. Unemployed workers are likely to regain coverage on finding a new job and generally are not without insurance for long periods. Hence, temporary assistance for involuntarily unemployed workers would also be relatively likely to reduce uninsurance rates. In contrast, because insurance coverage rates are already high among the many workers with employer-based coverage, any new or expanded Federal assistance to them beyond existing tax subsidies would be more likely to crowd out existing private contributions. That is, such assistance might encourage workers who would otherwise have kept their private coverage to obtain coverage under the new Federal program instead, and thus save money even if the coverage is not as good. Such assistance might also decrease the incentive for employers to offer health benefits in the first place. New support would thus improve the incomes of the affected workers but would have a relatively modest effect on health insurance coverage.

- *Design any new assistance to maximize takeup by those without coverage.* Many uninsured Americans have little income tax liability and are likely to work in firms with other workers without substantial tax liability. Thus tax incentives that are valuable only to individuals and families with substantial income tax liabilities (such as income tax deductions) do little to encourage coverage. In contrast, refundable tax credits would provide valuable assistance. In addition, because many uninsured households have few liquid assets such as personal savings with which to pay health care bills, tax credits must generally be available at the time health insurance is actually purchased (that is, they should be "advanceable"). For the same reason, credits should not be subject to a significant risk of additional "reconciliation" payments at the end of the year.

- *Encourage a broad range of coverage options.* Minimum standards for coverage, such as protection against catastrophic health care expenses, are important both to ensure that the policy chosen actually covers the significant financial risks and to discourage inappropriate health plan strategies for risk selection. But the fact that many new approaches to delivering care are under development and becoming more widespread now means that specific mandates and restrictions on sources of coverage are especially likely to foreclose valuable innovations in health insurance, limit the attractiveness of available coverage options, and increase uninsurance.

As important as the goal of expanded health insurance coverage is, it is also important to remember that increasing health insurance coverage is a means to an end: effective medical treatment of all Americans, where the definition of "effective" depends importantly on the preferences and unique circumstances of each patient. As the next two sections describe in more detail, both public programs and private health insurance plans have considerable room for improvement in meeting this goal. Public policies should seek not only to increase health insurance coverage rates, but also to increase the value of health insurance that is provided, by promoting opportunities for individual choice and responsibility.

Innovative Tax Incentives for Increasing Private Health Insurance Coverage

A wide range of proposals focus on refundable, advanceable, nonreconcilable tax credits to reduce uninsurance rates. Refundable credits have the same dollar value regardless of taxable income. Advanceability means that the credit is available when eligible individuals are actually purchasing insurance; they need not wait for a refund until the following year when they file their tax return. Nonreconcilability means that, when the advance credit is awarded, eligible individuals need not worry about retroactively losing benefits at the end of the year, for example if their income turns out to be higher than expected.

Under the Administration's proposed health insurance tax credit, which phases out with income, an individual's income in the previous tax year would be used to determine eligibility for the advanceable credit. Those who qualify would receive certificates that could be used like cash to purchase coverage, so that the eligible individual need only pay the difference between the plan premium and the tax credit. Because the previous year's income is already known, no eligible individual would be afraid to use the credit for fear of turning out to be ineligible because of too-high income at the end of the year. The refundability of the tax credit would augment the ability of lower and moderate-income individuals to purchase private health insurance,

giving them improved access to competing plans. The resulting broader participation in private health insurance markets would reduce pressures for adverse selection.

The Administration's tax credit would be available to people purchasing private health insurance coverage outside of plans offered by their employer or their spouse's employer. That is, working and unemployed people who do not already have tax-subsidized, employer-provided insurance would be eligible. Similar Congressional proposals would also make assistance available for purchasing COBRA coverage. These groups currently have the lowest takeup of available private coverage, because they are not currently subsidized. As a result, these proposals should achieve large net increases in coverage per dollar of program costs.

The generosity of the credit would also influence the cost-effectiveness of the expansion of coverage. A very generous credit would obviously induce more people to take up coverage but, depending on its design, might also draw more workers away from current employer coverage. The result would be a relatively expensive incentive with relatively less net effect on coverage. Recent studies of insurance markets and worker decisions about taking up coverage suggest that a capped credit of around $1,000 for individuals and $2,000 for families strikes a reasonable balance. A credit in that range would cover half or more of the cost of a reasonably comprehensive health insurance plan—one that provides preventive coverage and major-medical protection—for most of the uninsured, yet would not be so generous as to substantially crowd out employer-sponsored health insurance. Although many studies indicate that such a credit would provide enough of a subsidy to have a major impact on coverage, particularly for younger, healthier individuals, a potential problem is that it would cover a much lower percentage of the premium for individuals over 50 and those with chronic illnesses, for whom rates in the individual market are considerably higher. However, the additional policy steps described previously, such as additional subsidies through risk adjustment and high-risk pools, or expanded availability of voluntary purchasing groups, would help markets for non-employer-sponsored health insurance function better for these groups.

Some health policy experts and Members of Congress have proposed a broader based refundable tax credit—one that would also provide significant new subsidies to all workers with employer-provided coverage. Because so many workers have employer coverage already, however, a tax credit for employer coverage would have a far greater budgetary impact, and a much larger share of its costs would go toward existing rather than new health insurance coverage. To limit the additional budgetary costs, many experts have proposed a gradual transition from the current tax exemption to a system of tax subsidies for employer coverage that relies more on credits.

Although such a transition would probably encourage lower cost employer coverage and increase the takeup of employer coverage by lower income workers, it could have a significant impact on current employer plans, union negotiations, and other issues affecting worker compensation.

Clearly, the proposed tax credits would not cover the full costs of very generous, "first dollar" health insurance plans. Yet there are many reasons why such expensive coverage may not make good economic sense in any case. First, minimal copayments lead to moral hazard in health care spending: because the marginal cost to the patient of health care services is so low under such plans, a disconnect emerges between cost and value in health care decisions, contributing to rising health care costs and patient frustration. In the future, assuming that health care costs continue to rise rapidly, such policies will be even less sustainable. Second, reliance on minimal copayments in both private managed care and government health insurance plans has led to significant regulatory intrusions and price controls, which adversely affect doctor-patient decisionmaking. However well intentioned as an approach to limiting cost increases, such intrusions may make it more difficult for patients to get appropriate treatment.

On the other hand, many families do not have sufficient liquid assets to absorb even a few thousand dollars in health costs without sudden, major disruptions in their other household spending. To encourage saving for such contingencies, some innovative proposals have been developed. Some of these would help families set aside a "buffer" account to absorb such costs, for example by relaxing the carryover limitation on flexible spending accounts or the restrictions on medical savings accounts. Currently, many employers allow employees to set aside predetermined dollar amounts on a tax-free basis in such accounts to be used for health care or child care expenses. However, employees in these arrangements must spend all of their allocated dollars annually, and so cannot accumulate assets to be used in the event of a serious illness in the following year. This use-it-or-lose-it requirement contributes to unnecessary year-end medical spending. If at least some of the account balances could be rolled over to future years, workers could build up a rainy-day health account by making relatively painless, regular, tax-deferred contributions to interest-bearing accounts.

Such permanent flexible saving accounts would be similar to 401(k) retirement accounts, which have quite high rates of enrollment even among the lowest income eligible groups. The combination of flexible accounts with a tax credit or existing tax subsidies would make a reasonably priced health insurance policy very attractive—the premium would be relatively low, and the potential for some out-of-pocket spending would not be a deterrent to choosing such a plan. In fact, combinations of individual health accounts with insurance plans that provide protection against substantial expenses as

well as freedom from traditional restrictions on managed care coverage are now being offered by some employers, including the members of the Pacific Business Group on Health. But the absence of needed tax incentives may limit the attractiveness of these forms of insurance. For example, employee out-of-pocket spending in these innovative plans is not tax-deductible, and tax-favored contributions to flexible savings accounts cannot be rolled over from year to year. Expanding the availability of health accounts by addressing these concerns would reduce financial barriers to access while encouraging promising innovations in private health insurance.

Increasing Coverage in Public Health Insurance Programs: Medicaid and SCHIP

Public health insurance programs can also benefit from innovative approaches to expanding coverage. For example, even though SCHIP has encouraged most States to provide coverage for children in lower income families (those with incomes up to or approaching 200 percent of the poverty level), one-fifth of such children remain uninsured, compared with only 7 percent of children in families with incomes over 200 percent of the poverty line. Innovative expansions of public health insurance coverage for lower income households thus remain a high priority. Particularly needed are expansions that would make private health plans used by higher income families more affordable to the growing number of working families covered through these programs. In addition, employer-provided private health insurance coverage is much less widespread among lower income than among higher income households; therefore expansions of public health insurance coverage are less likely to crowd out existing coverage, leading to greater net reductions in the number of uninsured as spending in the government health insurance programs rises. (See Chapter 5 for further discussion of the crowding out of private programs.)

Many States have exercised options available under current law as well as implemented specific Medicaid and SCHIP "waivers" to cover the parents of eligible low-income children, because some evidence suggests that parents are more likely to take up coverage for their entire family than to enroll in children-only coverage. Some States have also implemented waivers to extend coverage to childless adults with low incomes, in the expectation that broader coverage for all low-income persons will strengthen the State's health care infrastructure. However, efforts to expand coverage are impeded by the complex structure of Medicaid and SCHIP, which require States to deal with multiple funding streams and administrative requirements even to provide coverage for a single low-income family. In addition, Medicaid's detailed and outdated statutory requirements mean that virtually all States must frequently go through the Federal waiver process to update their program.

Although dramatic progress has been made in clearing a backlog of plan amendments and waiver applications, resulting in eligibility being extended to 1.4 million additional individuals and coverage expanded for 4.1 million, a more promising approach would emphasize the flexibility of program design that has proved effective in SCHIP. This could be coupled with heightened but reasonable accountability requirements, to permit objective evaluations based on better evidence of whether State program changes that are intended to increase coverage and improve quality of care for program beneficiaries actually achieve their goals.

Finally, many States are now providing coverage under Medicaid and SCHIP through competing private insurance plans, suggesting that the combination of public funding and competitive private provision of health insurance coverage is an effective strategy for encouraging innovation in health care delivery for low-income populations while controlling costs. This topic is covered in more detail in Chapter 5.

A Coordinated Safety Net for the Uninsured: Funding for Community Health Centers

Even with expanded subsidies for private and public insurance, most research predicts that a substantial share of currently uninsured Americans would remain uninsured. For this reason, and because proposals to expand health insurance coverage will take some time to implement, the Administration has also developed initiatives to improve the availability and coordination of medical services for those without coverage. This has been done by increasing the flexibility of State and local governments to provide access for low-income residents through integrated community health center (CHC) programs. The mission of CHCs is to provide care to underserved populations, including populations that have proved difficult to reach through private or public insurance. To accomplish this, local CHCs have developed innovative approaches that build on unique community features and resources, and have collaborated with other public, private, and academic programs.

For example, the Centers for Medicare and Medicaid Services (the agency formerly known as the Health Care Financing Administration) have partnered with the Institute for Healthcare Improvement (a nonprofit organization) and with specific CHCs around the Nation to improve health care for low-income individuals with chronic illnesses such as diabetes, asthma, and cardiovascular disease. The Clinica Campesina Family Health Centers in Lafayette, Colorado, the Lawndale Christian Health Center in Chicago, and CareSouth Carolina have developed programs adapted to their populations and have achieved measurable improvements in diabetes care—including the patient self-management efforts so central to successful treatment of chronic illnesses.

CHCs have also developed innovative approaches through community partnerships and collaborative funding strategies. For example, Grace Hill Neighborhood Health Centers in St. Louis provide services in two public housing projects and to the homeless in 16 sites through a combination of Federal funding as a CHC, special Federal expansion funds, and contracts with the city, the county, and other CHCs. Grace Hill has also developed vital information management systems, including registries of individuals with chronic illnesses, relevant tracking reports to providers, and automatic reminders to patients of needed preventive and follow-up tests. Because of their community roots and their ability to focus on the distinctive needs of their patient population, CHCs can provide a quality of care that rises well above what might be implied by the term "safety net."

Making Medicare Coverage More Flexible and Efficient

One of the most obvious examples of the difficulty of keeping up to date with innovations in health care delivery is the Medicare program's lack of a prescription drug benefit. More than one-quarter of Medicare beneficiaries have no prescription drug insurance at all, despite the fact that diseases are increasingly being treated with drugs rather than through hospital or clinic care. This lack of prescription drug benefits among Medicare enrollees has had adverse health consequences. In one study the use of cholesterol-lowering drugs, an essential component of care for many individuals with coronary heart disease, was 27 percent for appropriate elderly Medicare enrollees with supplemental, employer-provided plans providing drug coverage, but only 4 percent for those with no drug coverage at all. Innovative drug use for the treatment of ulcers costs $500 per patient but can save as much as $28,000 by avoiding the need for a prolonged hospitalization.

Lack of prescription drug coverage is only one element of the undesirable economic effects of Medicare's outdated coverage. As health care capabilities have risen over time, the benefits and the costs of changes in treatment have been particularly great for seniors and persons with disabilities. But because Medicare benefits have not kept pace, Medicare beneficiaries spend on average over $3,100 a year out of pocket on major medical care, and this spending is rising much faster than inflation. Medicare beneficiaries also face a significantly higher risk than other insured groups of very high out-of-pocket expenses.

Because beneficiaries have inadequate options for making this spending more predictable, they can find it very difficult to budget their often-fixed retirement income effectively. Much of the private prescription drug coverage available to seniors today includes spending caps, and many seniors do not

have the opportunity to purchase prescription drug coverage that protects them from high drug expenses at a reasonable premium. Moreover, seniors without good drug coverage are much more likely to pay full retail prices for medications, in contrast to the significantly lower prices available from manufacturer rebates and pharmacy discounts to virtually all other Americans with modern health insurance. Even for covered benefits, supplemental private "Medigap" insurance that fills in substantial copayments and coverage limits is virtually essential, because Medicare includes no stop-loss protection, and the copayments are large. For example, the copayment required for a hospital episode is over $800, and that for many major outpatient procedures is almost $100. Physician services generally have copayments of 20 percent. Fewer than half of all seniors obtain coverage through Medicaid or a supplemental insurance policy offered by a past employer as a retirement benefit. Because of these coverage gaps, one-quarter of beneficiaries purchase individual Medigap plans, which must conform to standards developed over a decade ago that require first-dollar coverage in order to get reasonably complete protection against high expenses. Consequently, premiums for individual Medigap policies are substantial, accounting for a significantly larger share of the out-of-pocket expenses of the average Medicare beneficiary than prescription drugs, and they have been increasing rapidly: premiums for the most popular standardized Medigap plans rose more than 20 percent between 1997 and 2000. In addition to being costly for seniors, such first-dollar coverage results in billions of dollars of additional utilization in the Medicare program each year.

The coverage gaps in Medicare's required benefit package, and the rising cost of the supplemental coverage that is essential to fill those gaps, are among the reasons why many Medicare beneficiaries prefer private insurance plans. Such plans, which can compete for beneficiaries through the Medicare+Choice program, typically have been able to offer more comprehensive coverage, including prescription drugs, for far less than the combined Medicare plus Medigap premiums that beneficiaries must pay in the traditional, government-run Medicare plan. (These premiums now exceed $150 a month and are often much higher.) However, after several years of rapid growth, enrollment in private plans has begun to drop significantly. An important contributing factor is the "minimum update" for private health plan payments imposed by the Balanced Budget Act beginning in 1998 for most areas in the country with high private plan enrollment. Because the payment updates are now limited to 2 percent a year at a time when private health insurance and Medicare costs are growing much more rapidly, Medicare's contributions to private plan premiums in these areas are diverging from the costs of providing coverage. Poor prospects for reimbursement, coupled with the Medicare+Choice program's substantial

regulatory burdens and the requirement that the private plans provide coverage that actuarially meets or exceeds Medicare's unique and uneven benefit structure, have led a number of private plans to pull out of the program. Those that remain have instituted substantial increases in premiums and copayments. Meanwhile the options that have proved most popular with nonelderly Americans—preferred provider plans and point-of-service plans, which provide a balance between the savings possible in tight managed care networks and the flexibility of treatment options in broader indemnity plans—are virtually nonexistent in Medicare. As a result, Medicare beneficiaries are headed toward having few options beyond a single outdated benefit package, at a time when the Medicare program desperately needs innovation in coverage to improve quality and reduce costs.

By contrast, employees of many private firms and of the Federal and State governments, as well as many Medicaid and SCHIP beneficiaries, are able to choose from a variety of health plans that offer a range of options in terms of breadth of coverage networks and out-of-pocket payments. In turn, competitive choice provides incentives for health plans to reduce costs and adopt innovations in benefits or in health care delivery that beneficiaries find worthwhile. For example, the Federal Employees Health Benefits (FEHB) program has long offered a range of reliable choices to all Federal employees in the country, a work force with diverse health needs and circumstances that has participants in virtually every urban and rural zip code nationwide (Box 4-3). FEHB has accomplished this by providing a level of support for premiums that is tied to the average cost of the plans chosen by employees. Employees can reduce their health care costs if they choose a less expensive plan, because a portion of the plan's cost savings is passed on in the form of lower premiums. Conversely, much of the additional cost of more expensive plans is also passed on, so that employees who choose a more costly plan face correspondingly higher premiums. All participating plans must meet the FEHB benefit standards and must provide information to beneficiaries about coverage networks and performance on a growing set of quality measures.

Analogous proposals have been developed in recent years for improving Medicare's coverage options, building on the proposals considered by the National Bipartisan Commission on the Future of Medicare in 1999, the criticisms of those proposals, and subsequent ideas from members of both political parties. One key concept in these recent proposals is that of preserving Medicare's promise of a defined set of benefits while encouraging competition between the traditional Medicare plan and private health plans in how those benefits are provided. As in the FEHB system, beneficiaries would pay more for plans that used a more costly approach to provide Medicare's required benefits, and would pay less for plans that adopted a less costly approach.

Box 4-3. Federal Employee Health Insurance Plans

The Federal Employees Health Benefits program covers 9 million Federal civilian employees and their dependents. The program allows employees to choose from a menu of plans, including 11 fee-for-service plans that are available to Federal employees in any part of the country. Employees in most areas also have the option of enrolling in a managed care plan such as a health maintenance organization or a point-of-service plan. For example, Federal workers in the Washington, D.C., area have a menu of 7 different managed care plans from which to choose in addition to the 11 nationally available fee-for-service plans.

Plans are required to offer a package of minimum benefits but may differ with respect to the generosity of copayments, deductibles, and other benefits. The government pays about two-thirds of the average cost of coverage, with workers contributing the rest. Since 1999 the government's share has been calculated using a "fair share" formula that maintains a consistent contribution from the government regardless of the plan chosen, so that the employee bears the marginal cost of choosing a more generous plan. Workers who prefer generous benefits are free to choose them, while workers who choose more cost-conscious plans benefit from their lower cost.

The FEHB program provides a wide variety of coverage choices to accommodate the preferences of a large work force that is diverse both geographically and in terms of its health care needs. At the same time, FEHB plans as a whole have experienced stable premium growth that ensures that the program will remain on a sound financial footing. The experience of the FEHB program shows how empowering consumers to make insurance choices can result in coverage that is both secure and flexible.

Some critics of the commission's proposal have argued that any such reforms would force seniors into private plans, because the cost of the traditional Medicare plan would be higher. But that is not necessarily true. For example, the so-called Breaux-Frist II proposal could not lead to higher premiums than under current law in the traditional Medicare plan. This is because the traditional plan premium would continue to be determined as it is now, but beneficiaries would face lower premiums if they chose a private plan with lower costs than the traditional plan, and would face higher premiums if they chose a private plan with higher costs.

Obviously, the Breaux-Frist II approach would work best in areas where the traditional plan is the dominant plan. In areas where a large share of

beneficiaries have enrolled in private plans, and where performance measures indicate that these beneficiaries are receiving at least as good care as those in traditional Medicare, using the traditional plan or any particular nonrepresentative plan as the reference point for Medicare's support for beneficiary premiums would be both inappropriate and potentially costly for the government or for beneficiaries. Instead, the FEHB approach of tying the government's support for health insurance costs to the average cost of the plans that beneficiaries actually choose is a better way of ensuring that savings from providing Medicare's defined set of benefits accrue to both beneficiaries and taxpayers.

Last year the President proposed a framework that would provide Medicare beneficiaries with better health insurance options, similar to those available to Federal employees. Under this proposal, plans would be allowed to bid to provide Medicare's required benefits at a competitive price. Beneficiaries who elect a less costly option would be able to keep most of the savings, so that some beneficiaries might pay no premium at all. Moreover, the President proposed using the savings from greater efficiency in providing Medicare's current benefits to support further benefit improvements, including better coverage for preventive care and stop-loss protection. The President proposed to implement these benefit improvements while retaining the option for current and near-retirees to stay in the current Medicare system with no changes in benefits if they prefer it.

In addition to providing reliable, modern health plan options and better benefits for Medicare beneficiaries, the Administration has proposed a subsidized prescription drug benefit in the context of Medicare modernization, to help protect seniors from high drug expenses and to give those with limited means additional assistance to pay for needed medications. Both Democrats and Republicans generally agree that any new drug benefit in the traditional plan should not adopt the traditional approach to delivering care, that is, direct fee-for-service government provision with complex coverage rules and price controls. There is broad agreement that such a bureaucratic approach would significantly reduce the availability of innovative drug therapy for seniors. Instead the drug benefit should give all seniors the opportunity to choose among plans that use some or all of the tools widely utilized in private pharmacy plans to lower drug costs and improve the quality of care—tools that include competitive formularies to generate lower manufacturer prices, pharmacy counseling, prescription monitoring, and disease management programs.

The Administration has also proposed a Medicare-endorsed prescription drug card plan that would provide immediate assistance to beneficiaries without drug coverage. The drug card plan would not be a drug benefit, nor would it be intended as a substitute for one. Instead it would provide access

to pharmacy programs that use private sector tools like those just mentioned to reduce drug costs and to improve the quality of the pharmacy services available to beneficiaries. The drug discount card would be a step toward an effective, competitive prescription drug benefit under Medicare by giving both beneficiaries and the Medicare program some much-needed direct experience with the private sector tools that are widely used in prescription drug benefit plans today. It would also provide immediate assistance to beneficiaries in obtaining lower cost prescriptions until the drug benefit is implemented.

Better Support for High-Quality, Efficient Care

Our current system of financing and regulating health care providers is not geared toward recognizing and rewarding high-quality, efficient care. For example, when poor surgical protocols result in infection, readmissions, and additional surgical work, Medicare pays more, not less, to the hospital and health care providers responsible. In contrast, some private payers have begun to pay higher quality providers more, and one can envision further reforms in this direction, while still using risk adjustment and the other tools described in the previous section to reward appropriate care for patients with more complex health problems.

This section highlights some of the clear opportunities to improve the quality of health care, as well as the promising public and private initiatives that have begun to do so. Recent private sector initiatives have encouraged hospitals to improve patient safety through the use of computerized record-keeping and other measures, efforts that should be reinforced at the Federal level. Government support for research and provision of information to health care providers about the quality of their care, and about pathways to improving care, is another element in improving the health care system. Reforming the legal system so that it encourages rather than discourages collaboration and sharing of information among health providers is also a key building block in improving the quality of clinical care.

Shortfalls in the Quality of Care

Two influential reports from the Institute of Medicine have called attention to the serious problem of medical errors. The Institute estimated that as many as 50,000 to 100,000 deaths each year may be attributable to medical errors; even if these estimates are too high, as some analysts have suggested, many avoidable deaths do occur. However, improving quality is more than

the reduction of errors, or *misuse* of treatments. In the terminology of the Institute of Medicine reports, the sources of poor quality include both the *underuse* of procedures or treatments whose effectiveness has been demonstrated, and the *overuse* of treatments with unclear or harmful effects.

Many procedures or diagnoses are widely understood to provide benefits to nearly every person who receives them, yet are underused in practice. Examples include screening for breast and colorectal cancer in high-risk populations, annual blood tests for people with diabetes, and the use of aspirin and, when appropriate, beta blocker drugs for patients with recent heart attacks. One study of Medicare recipients, in 1997, found that fewer than two-thirds of patients who had experienced a heart attack and had no contraindications to beta blockers were taking them on discharge from the hospital. In some States that rate of use was as low as 30 percent. A similar study indicated that many Americans who could benefit from the newly developed cholesterol-lowering drugs do not receive them. Indeed, failure to use effective treatments has been estimated to result in 18,000 avoidable early deaths among heart attack patients in a year.

Whereas some procedures are underused, others are overused. One-fifth of all antibiotics prescribed in 1992 (12 million prescriptions) were used to treat common colds and other viral respiratory tract infections, despite the ineffectiveness (and potential long-run harm) of antibiotics for such illnesses. A study of coronary angioplasty concluded that the procedure was clearly medically appropriate in fewer than one-third of cases; the remainder were either of uncertain benefit (54 percent) or inappropriate (14 percent). Despite important technological advances in imaging methods for the detection of appendicitis (such as computerized tomography and ultrasonography), one recent study showed no improvement in rates of unnecessary surgery.

Reducing overuse of procedures is clearly beneficial for taxpayers, who save money, and for patients, who avoid unnecessary interventions and their resulting side effects. The potential savings from this reform are substantial. One estimate suggests that as much as 20 percent of the Medicare budget could be saved by reducing the overuse of care, particularly among patients with long-term chronic illnesses. Although such savings might be offset by increased use of valuable, underutilized interventions, the net effect of these improvements in care would be much better value for the health care dollar.

Health care costs are also increased by the misuse of treatments. For example, a patient undergoing surgery may receive the wrong medication, and as a result experience complications that result in longer illness, permanent disability, or death. One study estimated that as many as 27,000 avoidable deaths each year are due to the misuse of medications. Such errors are probably most common among seniors, who take many more prescription drugs than other insured Americans but are less likely to have

prescription drug coverage that assists them with medication management. Even technological advances can be undone by low-technology failures related to poorly coordinated care, inadequate follow-up, and resulting incomplete recovery. Investing in methods to reduce medical errors would reduce suffering, disability, and death—and the associated costs.

Disparities in the Health Care System

Not everyone with a given disease receives the same level of care. The quality problems discussed above may be greater for low-income and minority populations. For example, among women covered by Medicare, 74 percent of white women living in high-income areas received influenza immunizations, whereas only 51 percent of African American women living in low-income areas did. Rates of surgery for heart attacks are lower among African Americans than among whites, although there is substantial controversy about the causes of such differences. Indeed, one recent study showed that overuse of this surgery—that is, its inappropriate use in cases where the risks outweigh the potential benefits—was actually higher among whites than African Americans.

These differences in utilization and quality across large geographic areas have been documented in other cases as well. A recent study showed a remarkable degree of variation across States—from 44 to 80 percent—in the appropriate use of an effective pharmaceutical treatment (beta blockers) for patients who have had heart attacks. There are also wide differences across regions with regard to overall spending and utilization (Box 4-4). It is intriguing that areas with the highest levels of health care expenditure per capita are not necessarily those with the best measured quality of care. In other words, improving quality does not necessarily result in higher Medicare expenditure. Many cities in the United States experience relatively high quality and low costs.

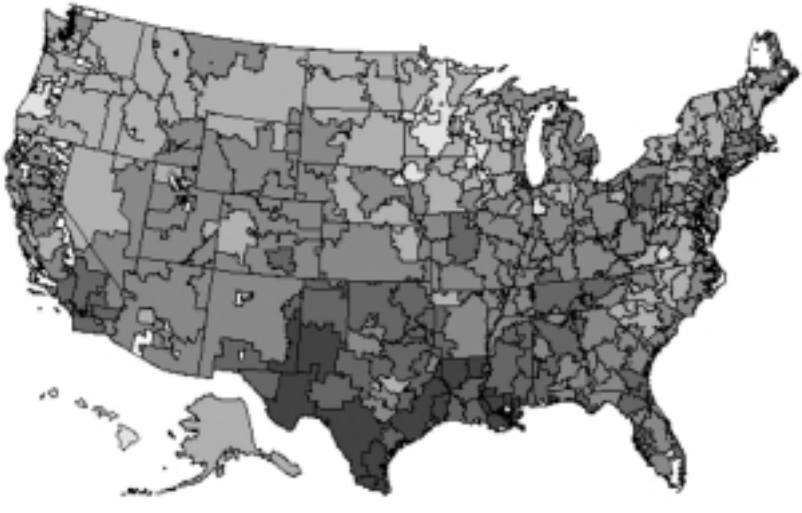
The prescription for reducing disparities is clear in the case of overuse and underuse of health care. Better quality care means encouraging much more utilization of services that are often not used in patients for whom they are clearly beneficial—and this holds true for all races, both sexes, and all regions. Better quality care also means moving toward zero utilization rates for inappropriate, procedures that have no documented benefits for any race or either sex. Where there are a range of reasonable treatment options, patient preferences are particularly important; for example, in the treatment of prostate cancer in men or breast cancer in women, the “right” level of care should depend heavily on those preferences. The reforms in health care coverage described in the previous section would help create an environment that rewards valuable innovations in communicating the benefits, risks, and costs of treatment options to patients to help guide their decisions.

Box 4-4. The Puzzle of Geographic Variations in Medicare Expenditure

Despite the Federal nature of the Medicare program, there are remarkable geographic differences in the level of Medicare expenditure per capita. The *Dartmouth Atlas of Healthcare*, using Medicare claims data under an agreement with the Centers for Medicare and Medicaid Services, has documented net spending per capita in 1996 among Medicare enrollees in 306 separate areas of the United States. Even after correcting for differences in age, sex, and racial composition, spending per capita differs widely, ranging from $7,800 in Miami to only $3,700 in Minneapolis. Only a small part of these differences can be explained by variations in underlying illness levels.

The map below, reprinted from the atlas, shows the corrected patterns of geographical variation in spending. The darkest areas are those where spending per capita ranges from $5,698 to $8,862, and the lightest areas those where the range is from $3,117 to $4,178. (Some areas are inhabited by too few seniors to allow spending to be measured accurately.)

The disparities in health care utilization highlighted here translate into large disparities in Medicare benefits across regions and States. One study showed that average lifetime Medicare expenditure for a typical 65-year-old may differ by as much as $50,000 depending on the State of residence. At the same time, quality of care appears to be similar in low- and high-utilization regions. These differences suggest that better information on the effectiveness of different styles of medical practice, possibly coupled with better incentives to encourage efficient care, could result in substantial cost savings for Medicare without any adverse consequences for patient health.



Source: *Dartmouth Atlas of Healthcare*© 1999. Reproduced with permission.

Empowering Providers to Improve Quality of Care

Improving quality saves lives and can save money. No one disagrees with the objective of improved quality; the problem is creating an environment for medical practice that gets results. A variety of new and innovative approaches developed at both the local and the Federal level hold the promise of improving how care is delivered. (Many of these are described in the recent Institute of Medicine reports on quality of care.)

A number of private sector quality initiatives have involved aspects of health care where success can be measured objectively. For example, a collaborative quality improvement program for the intensive care unit at LDS Hospital in Salt Lake City, Utah, improved outcomes for its patients while also lowering costs by almost 30 percent. Similarly, the Northern New England Cardiovascular Disease Study Group developed a working group that enabled cardiac surgeons to reduce the complications of surgery at each stage of the procedure and to reduce postoperative mortality by 24 percent. Each of these successful programs set the goal of studying well-defined interventions in specific populations, using clear, objective measures of success. Initiatives are currently under way to develop evidence on the overall benefits of implementing quality improvement measures across an entire hospital system.

All of these efforts, and many others around the country, have gotten off the ground as a result of provider initiatives in the face of many institutional, regulatory, and financial obstacles. An enormous amount of research, including the series of studies by the Institute of Medicine, has concluded that high-quality care can best be achieved in an environment that emphasizes and rewards continuous quality improvement. The complexity of health care delivery means that there are generally tremendous opportunities to improve the coordination of care, reduce communication problems, and eliminate many avoidable mistakes and complications that occur despite the best of provider and patient intentions. Most of these quality improvement opportunities are "low-tech": problems that are not so hard to solve technically, if health care providers can openly discuss and work together to respond to the root causes of errors, near-misses, and concerns expressed by patients and colleagues. Applying the lessons learned from many other highly complex technical systems, such as nuclear reactors, is a promising direction for reducing health care errors.

The growing evidence on quality improvements indicates that hospitals and doctors would undoubtedly benefit from such local, collaborative efforts to improve quality. But there are many obstacles to success today. Under the current system of medical liability, this type of open discussion is widely viewed as carrying substantial financial risks of malpractice exposure. Leading analysts of quality improvement have called for modifications in

medical liability laws so that the collection and sharing of information to avoid errors and improve quality are not impeded. Another obstacle is financial: under fee-for-service systems like those used in Medicare and many State Medicaid programs, providers that improve quality receive less reimbursement, because follow-up visits and admissions for complications are fewer.

As noted previously, research on how medical treatments can be used more safely and effectively in a wide variety of actual medical practice settings is an important element of the Federal Government's biomedical research portfolio. In addition, many Federal programs, activities, and laws can support providers who want to work together to improve care. Today the Medicare quality improvement organizations (QIOs, formerly known as peer review organizations) provide some important but limited support for efforts by local groups of hospitals, physicians, and some other providers to identify, assess, and improve certain aspects of health care quality. QIOs provide some protection from malpractice liability for their quality improvement activities. But liability protections should be broadened to include new information generated beyond the standard medical and administrative records, through quality and safety improvement activities, whether or not they are actively sponsored by QIOs.

The Administration is also developing regulatory standards for health care information systems, to implement legislation on administrative, clinical, and privacy standards enacted by Congress in the Health Insurance Portability and Accountability Act. These standards have the potential to improve health care quality, because consistent and up-to-date information standards, coupled with privacy rules that inspire patient confidence, will lead to more effective use of health care information. Health care providers will incur significant costs to come into compliance with the regulations. However, well-designed and timely standards can provide the lead time and guidance required to minimize compliance costs. Indeed, many health care providers have for years faced disincentives to upgrade their information systems until the content of the regulations becomes clear.

Empowering Patients to Make Informed Health Care Choices

As noted above, encouraging high-quality, efficient care requires meaningful and reliable choices of health plans and providers for well-informed patients. Within health plans, information about alternatives is increasingly important for helping patients work with their providers to make the best possible choices about specific illnesses such as heart disease, breast cancer, back pain, and prostate cancer. Researchers are beginning to understand the central role that patient preferences and choices can play in improved and cost-effective care of chronic illnesses, including late life care

decisions. Research is also leading to better and more reliable measures of the quality of health plans and providers, in terms of both clinical processes and outcomes of care as well as overall satisfaction.

Informed Decisionmaking: Better Choices, Higher Value Care

Many diseases have no single "best" cure or treatment. Instead there are a variety of ways to treat the disease, each with associated risks, benefits, and costs. For example, women with breast cancer often face the choice of mastectomy or a combination of breast-sparing surgery followed by radiation therapy. Both options carry similar implications for survival for many patients. But each has quite different implications for the patient in terms of physical impact and the duration of treatment required, and many patients have strong preferences about how they want to be treated.

Prostate cancer provides another example. There are tradeoffs regarding screening for prostate cancer using the current prostate-specific antigen (PSA) tests. Because the cancer grows so slowly, with as much as a 10-year lag between detection and clinical importance, the use of PSA tests among older men, who are likely to die of a different cause, should depend on the patient's preferences, weighing his concern about the unpredictable course of the cancer against the unfortunate side effects of treatment, such as incontinence and impotence. These are decisions that the physician cannot make alone.

Many health care providers are implementing changes to enhance the ability of patients to participate in clinical decisions. At the Spine Center of the Dartmouth Hitchcock Medical Center in Lebanon, New Hampshire, patients with lower back pain fill out computerized evaluation forms regarding their goals and preferences when they arrive, so that the staff is prepared to address their concerns regarding treatment for their spine-related illness. The risks and benefits of treatment options, including surgery, are explained using a video featuring summaries of the clinical evidence as well as balanced discussions by patients who have experienced each of the different options. Following the implementation of this informed decisionmaking approach, surgical rates for herniated discs fell by 30 percent, whereas those for spinal stenosis (the squeezing of nerves emanating from the spinal cord) rose by 10 percent. These changes in surgical rates move in the direction indicated in the medical literature, which suggests that the former procedure is overused and the latter underused. Thus the program appears to have provided patients with quality information to assist them in making educated decisions, thereby improving their well-being while reducing overall costs.

This patient-centered approach to evaluating health care outcomes also provides a valuable framework for judging differences in treatment rates by race or sex for specific "preference sensitive" diseases. The important message is not that treatment choices should be the same across all subgroups of the

population. Rather, when several alternative treatments are available, patient preferences (rather than race or geography) should govern choices. For example, preferences for elective hip and knee surgery vary by sex, even among patients for whom the treatment is deemed medically appropriate. Less is known about differences in preferences by racial identity, although differences in preferences between whites and African Americans regarding end-of-life care have been noted.

Better Public Information on the Performance of Health Care Providers

A growing number of private health care purchasers are supporting informed decisionmaking by their employees by making measures of quality available on their health plan choices and, in some cases, on particular health care providers. These include clinical measures of plan performance such as those now widely used by the National Commission on Quality Assurance (for example, rates of appropriate treatment for diabetes and immunization rates) as well as patient-focused measures such as those developed by the Foundation for Accountability (FACCT). The Federal Government also has a particularly important role to play through supporting the development of appropriate information to help patients and providers identify and reward high-quality care. The Medicare, Medicaid, and Federal employee insurance systems hold information on literally millions of health care subscribers who are among the heaviest users of the health care system. With appropriate privacy protections, clinical studies using the data systems of these very large health insurance programs could augment data from private payers, allowing the construction of more comprehensive and accurate measures of plan quality, and potentially of provider quality as well. Indeed, the Federal Government has collaborated with private organizations in the development and use of patient satisfaction measures (Consumer Assessment of Health Plans, or CAHPS, measures). It is also a key player in the National Quality Forum, a public-private approach to endorsing reportable quality measures that are supported by experts, consumers, and other major stakeholders.

The process of identifying appropriate measures for public reporting is a difficult yet important one, because the measures endorsed must be valid indicators of quality if they are to encourage better health care decisions. Because patients are not allocated randomly to health plans or providers, measures are potentially biased by differences in case mix and may thus require adjustment for risk, so that they truly reflect differences in performance rather than differences in the health of the patient groups treated. In addition, medical information systems are imperfect, and some quality measures may not be captured adequately. Finally, because many important medical outcomes (including death following surgery) are relatively rare

events, some measures may incorrectly attribute bad luck to poor quality care. (For a more detailed discussion of performance measurement issues, see Chapter 5.) Quality measures that are themselves of poor quality may be worse than no measures, if they discourage providers from taking difficult cases or if they can be manipulated to improve measured performance. Thus, many quality and safety measures are better used on a confidential basis, as part of the internal quality improvement programs described in the previous section. As measurement methods and data systems have improved, however, a growing number of quality measures have been developed and are becoming widely used for public reporting by employers, States, and the Federal Government.

In addition, as mentioned above, some private purchasers now reward better measured performance with higher reimbursement, at least to a limited extent. Some insurers and purchasers include an incentive payment for achieving high scores on certain validated quality measures. Others have begun to use quality measures to influence their selective contracting with providers. For example, the Leapfrog Group, a consortium of more than 80 Fortune 500 corporations and other large institutions, has developed guidelines for contracting with hospitals by establishing a growing set of specific performance standards. The initial recommended measures for contracting include high numbers of certain surgical procedures (because hospitals that perform a higher volume of many complex procedures achieve better results), the use of computerized recordkeeping (because computerization helps reduce medical errors and misuse of care), and the direction of intensive care units by physicians specializing in intensive care.

Fulfilling the Promise of Medical Research

Developing an economic and institutional environment that encourages continued technological advances is a critical goal for the coming decades. As part of this environment, direct Federal support for an increasingly broad range of biomedical and related research is essential. The value of this research is evident in the medical progress witnessed over the past several decades. In large part because of active support by the National Institutes of Health and other Federal agencies, biomedical knowledge has grown rapidly, encompassing dramatic advances in understanding basic biological processes, identifying the pathology of specific diseases, and developing effective treatments. The decoding of human genome through public and private support is but one recent example of pioneering research that will lead to innovative prevention and treatment approaches.

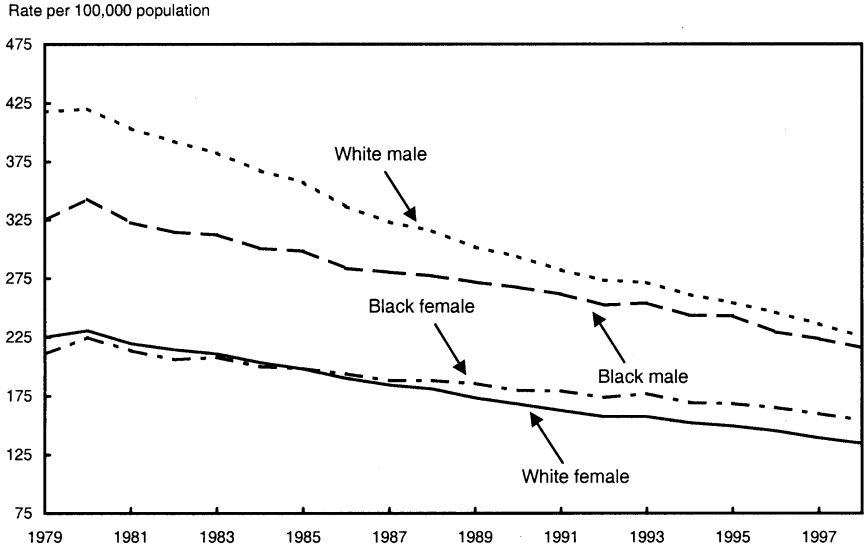
The Benefits of Biomedical Research

The past several decades have seen remarkable gains in longevity and reductions in disability. One of the most striking examples of technological progress in the treatment of illness is that for coronary heart disease (CHD). Since 1970, mortality from CHD has been declining between 2 and 4 percentage points a year on average, with overall rates falling by about 40 percent since 1980 (Chart 4-3). Although primary prevention has been an important contributor, most advances in cardiovascular health care are due either to innovations in mechanical treatments to improve blood flow to the heart (such as bypass surgery, newer and less invasive angioplasty procedures, and special wire stents to help hold diseased vessels open) or to pharmacological treatments (such as beta blockers and antihypertensive drugs to reduce the heart's work load, and thrombolytic "clot busters" to open up blocked vessels during a heart attack).

These improvements have not come without cost, which raises the critical question, in light of generally rising expenditure on medical care, of whether the increased costs are worth it. The answer, at least in the case of heart attacks, appears to be yes. One recent study concluded that the improvements in survival after a heart attack more than compensated for the increased financial costs. In this case, the money was well spent. Even though annual expenditure on cholesterol-lowering drugs is well into the billions of dollars, they have been proved to be highly cost-effective for many patients and have contributed to the improved life expectancy and better functioning of Americans today.

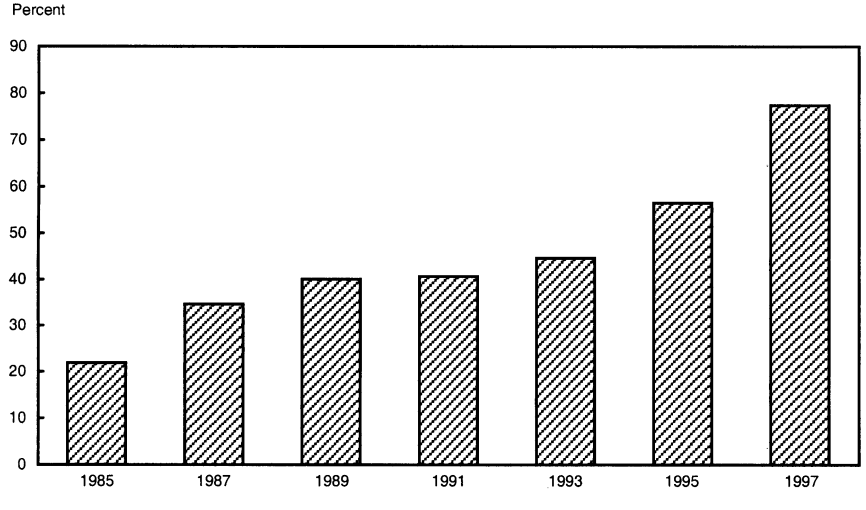
Such examples are not limited to heart disease. Chart 4-4 displays the rapid improvement in 3-year survival rates following the onset of an opportunistic infection signaling AIDS infection. Even though the new treatments developed to prevent AIDS complications are quite costly and have many side effects, these survival improvements suggest they are well worth the cost. As another example, new medications for depression have similar efficacy with fewer side effects, resulting in better adherence to treatment, better real-world effectiveness, and a reduction in the net cost of a remission. In addition, the availability and ease of use of these medications have contributed to a doubling in the rate of treatment of depression, increasing the economic benefits. Medical advances are doing more than just keeping increasingly frail elderly people alive: a recent study suggests that rates of disability among the elderly population have actually declined in recent years, probably because of avoided complications and better supportive care for chronic illnesses. We should remain aware of the distinction between long life and long, healthy life, but for the present, advances in medical technology seem to be accomplishing both.

Chart 4-3 **Mortality Rates for Coronary Heart Disease**
Age-adjusted mortality from coronary heart disease declined steadily for all segments of the population during the past two decades.



Source: Department of Health and Human Services (National Center for Health Statistics).

Chart 4-4 **Survival Rate After AIDS-Defining Infection**
Two-year survival rates after an AIDS-defining infection improved markedly over the 1985-97 period, especially in the 1990s.



Source: Lisa M. Lee, et al, "Survival After AIDS Diagnosis in Adolescents and Adults During the Treatment Era, United States, 1984-1997," *Journal of the American Medical Association,* 2001. Reproduced with permission of the author.

These studies are part of a growing body of evidence that, for a wide range of diseases, the additional money spent on treatment is more than offset by savings in direct and indirect costs of the illnesses themselves. Indirect costs include lost productivity and, especially, poor health, which people are clearly willing to pay to avoid. Stated differently, because the quality-adjusted cost of treating many diseases has fallen, health care has become more productive over time, even as absolute costs are rising with greater use of more intensive treatments.

Many Unanswered Questions About Existing Medical Treatments

Although these gains are impressive, there is still much to learn. Cardiovascular disease is the success story of modern medicine: a plethora of articles have demonstrated the value of different treatments compared either in isolation (drug treatment versus invasive cardiac surgery, for example) or in combination. Thus conclusions about rising productivity for cardiovascular care are the best documented, with literally thousands of clinical trials and epidemiological studies. Yet even in this area, substantial opportunities for further productivity improvements appear to exist. For example, in one recent study a large share of the treatments for coronary artery disease performed were judged to be of uncertain value based on medical expert reviews. Other examples of opportunities to improve the quality of cardiovascular care were discussed in the previous section. The situation is even cloudier in the treatment of other chronic diseases, where the evidence-based science is much sparser; here physicians have a less extensive knowledge base to draw upon. For example, on chronic lower back pain—an extremely common condition—no evidence is yet available from large randomized trials on the benefits of surgery versus medical management and supportive care, although one trial is currently under way. It is also more difficult to determine the effectiveness of many screening and preventive treatments. Better diagnostic methods often result in the identification of earlier or less severe illness that would have been overlooked before. Thus when previously "subclinical" cases with relatively good outcomes are added to the population diagnosed with the illness, survival rates may appear to improve, even if treatment methods have not (Box 4-5). In addition, clinical trials of preventive treatments are often prohibitively expensive, because they require very large enrolled populations and take many years for effects to be detected with confidence.

Furthermore, the effectiveness of specific treatments often varies substantially across population subgroups. For example, it is just now being understood that the effectiveness of cholesterol-lowering drugs depends significantly on the characteristics of the patient. As we develop a clearer

Box 4-5. Survival Rates and Mortality Rates

Survival rates for breast cancer have risen dramatically. Whereas in 1950-54 the 5-year survival rate was only 60 percent, by 1989-95 it had risen to 86 percent. This improvement is in part the result of important technological innovations in the treatment of breast cancer; nonetheless, these 5-year survival rates probably overstate the actual gains. The reason is that the detection of breast cancer has also improved dramatically: current technology is able to detect much smaller nodes than could be identified before, which may or may not develop into cancerous sites. Thus, improved 5-year survival rates reflect several phenomena. First, more women are being diagnosed, some of whom might not have developed clinically significant cancer during their lifetime. Second, more diagnoses are occurring at an earlier stage of the disease; this means a higher likelihood of surviving 5 years after the initial diagnosis, independent of improved treatment. Third, treatment is actually producing better outcomes. Unfortunately, most of the measured gain in survival has occurred because more women have been diagnosed at an earlier stage of the disease.

The story for prostate cancer is similar. Older men are increasingly aware of the risk of prostate cancer, and the use of PSA tests to detect the disease has expanded rapidly. This has led to a 190 percent increase in the rate (per thousand men in the population) diagnosed with prostate disease, and survival rates have improved from 43 percent in 1950-54 to 93 percent in 1989-95. Unfortunately, the number of deaths due to prostate cancer per 100,000 men in the population (that is, the mortality rate) during this same period actually rose. Again, the improvement in survival rates primarily reflects earlier diagnosis rather than significant improvements in treatment.

Because of this discrepancy between 5-year survival rates and mortality rates, there is controversy among clinicians and medical researchers about the benefits of universal screening for prostate cancer, particularly for older men. The reason is that prostate cancer typically grows quite slowly; the median time between detection of prostate cancer through the PSA test and the ability to detect it clinically is about 10 years. Men may have prostate cancer, be entirely unaware of it, and die of something entirely different. Both prostate cancer and breast cancer hold promise for substantial technological breakthroughs that would reduce mortality rates, just as they have for coronary heart disease. Until that time, management of the disease can benefit from a better understanding of the treatment options available to patients.

understanding of the genetic and molecular mechanisms of diseases, treatments are likely to become even more tailored to individual circumstances. All of these examples suggest that better scientific knowledge, including more information from both randomized clinical trials and large-population studies of actual practices, can lead to substantial productivity improvements through more efficient use of the many medical treatments available today. These improvements in productivity can be facilitated by developing systems to disseminate information about the value of different interventions—their benefits, risks, and costs—and by developing better electronic health records with effective privacy protections. Providing patients with better information about the true value of different treatments, coupled with stronger incentives for patients and providers to use approaches of demonstrated value, will help ensure value and productivity in health care in future years.

The Role of the Federal Government in Supporting Research

The impressive improvements in the health of Americans over the past several decades have not occurred in a vacuum, but arose because of work—much of it collaborative—by government, private, and charitable organizations in support of basic research, clinical testing, and product development. The health care system of the future will need to preserve and encourage this product development, through direct support for research with potentially broad applications, and through the protection of patent rights, to help turn promising new research insights into treatments approved for clinical use. The government can also provide critical support for improving our knowledge of how to use existing medical treatments even more effectively. Follow-up clinical trials often find that medical treatments that are beneficial for the average patient in a population may have no beneficial effects for some subgroups and may even cause them harm. There may be insufficient private incentives to explore which of the many types of patients—younger, older, sicker, healthier—with a given clinical problem actually benefit from a treatment, yet this understanding may have important implications for the best treatment decisions for individual patients and for the costs of public and private health insurance programs.

In addition, research on the underuse, overuse, and misuse of treatments has benefits that extend across all who pay for health care, and as a result, individual payers may underinvest in research to improve health care quality and safety. Thus the Federal Government should provide support for research using population data on health system performance and public health. This should include support for medical information and privacy standards that allow clinical data to be pooled for research and public health purposes.

Conclusion: Fulfilling the Potential of 21st-Century Health Care

The American health care system stands at a critical juncture. The gains in medical productivity of the last 40 years have been tremendous; the next 40 years have the potential to bring even more valuable advances. Promoting flexible, market-oriented care that responds to the diverse needs of patients is increasingly crucial to improving the well-being of all Americans. But health care costs are also rising rapidly, and enormous opportunities exist to increase the value of health care and improve health insurance coverage. Addressing these fundamental problems and fulfilling the potential of our health care system will require innovative Federal policies to help Americans get the care that best meets their needs, and to create an environment that rewards high-quality, efficient care. To meet this challenge, Federal policy must rely on market mechanisms to encourage our health care system to identify and reward high-value treatments, while reducing wasteful spending on treatments of little value. It must harness the benefits of competition for the well-being of all Americans.

Flexibility to respond to rapid changes in medical treatments and the changing needs of patients is crucial. A bureaucratic system that fails to respond to patient needs or that is slow to embrace new technological developments is not the appropriate foundation for the future of American health care. Nor is a health care system that creates perverse incentives, rewarding the underuse of effective treatments and the overuse of ineffective ones while penalizing providers who seek to practice cost-effective care. Instead the Federal Government should improve coverage options in public programs like Medicaid and Medicare. It should ensure that Americans with limited means or high health care needs have the opportunity to participate in mainstream health plans, through refundable tax credits and strategies to increase participation in health insurance markets. It should support both biomedical research and health services research, to improve our understanding of disease, develop new treatments, and improve the quality and value of health services. It should encourage the development of better information on the quality and outcomes of care. And it should support an environment for medical practice that encourages high-quality, efficient care that meets patient needs. The need to empower patient choice and enhance market-oriented incentives calls for government policies that move away from detailed top-down regulation and one-size-fits-all government-run programs, and toward ensuring that all Americans have innovative health care options.

These changes in our current system are likely to affect both patients and providers. As the health care sector continues to grow, it becomes increasingly important to encourage new medical options that are worth the cost to consumers. Economic theory suggests that those critical decisions should generally be made by those with the best information and the most direct stake in using that information appropriately: the patient and his or her medical providers, not government or insurance plan bureaucrats. But economic theory also suggests that the ability to make these decisions should be paired with responsibility for their consequences, both for health and for medical costs.

Decisions about health care and health care systems, for both providers and consumers, require not only good information but also financial responsibility. Medical providers have a responsibility, as well, to assist patients by examining their own practices through the unflinching analysis of errors when they occur, and by reexamining long-held beliefs about the standard of care in light of new evidence about treatment effectiveness and costs. Already, case studies of both private payers and public plans around the country indicate what these efforts can achieve. Public policy should encourage these promising trends.

Finally, the Administration's overall economic policy is a critical factor in improving our ability to provide high-quality care. Rapid economic growth in the mid- to late 1990s helped keep the rise in health care costs roughly in line with growth in Americans' earnings. Uninsurance rates declined in 1999 and 2000, in large part because of the increased takeup of private, employer-provided health insurance, which, thanks to productivity increases, was becoming relatively less expensive as a share of compensation. Encouraging rapid economic growth not only will help keep private health insurance more affordable; it will also provide a growing revenue base for Medicare and other Federal programs.

Economic growth is not enough, however. A growing body of research, confirmed by many examples from the public and the private sectors, suggests that we can do a much better job of allocating medical care resources both efficiently and equitably. Providing competitive choices for all Americans, and meaningful individual participation in those choices, is the best way to encourage needed innovations in health care coverage and health care delivery. Improving the information available to guide choices, taking steps to help individual patients and providers use that information effectively to provide patient-centered care, and making a range of additional policy changes that create an environment of medical practice that encourages innovation and high-quality care will help ensure that health care remains one of the most dynamic and productive sectors of our economy.