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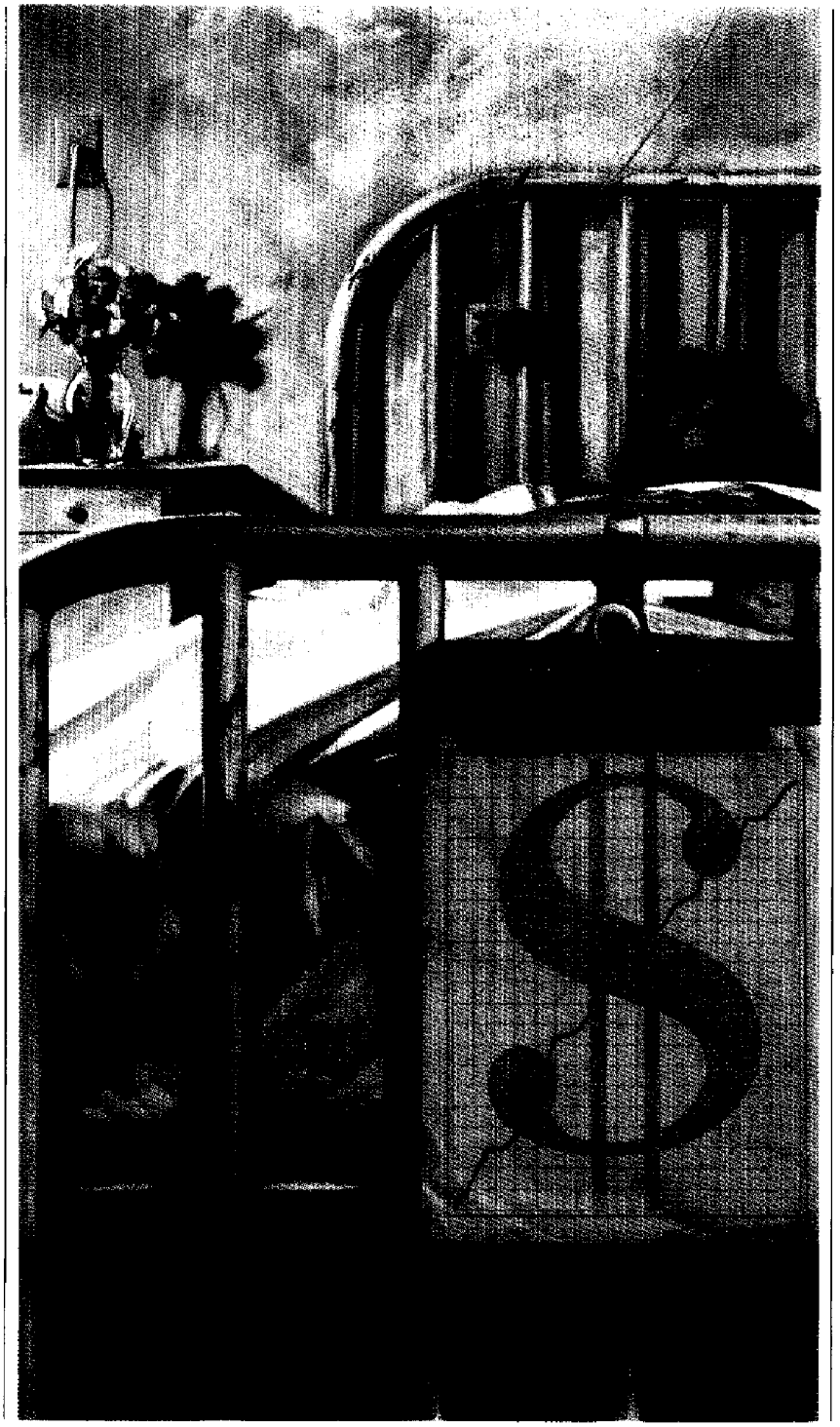

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The soaring cost of health care

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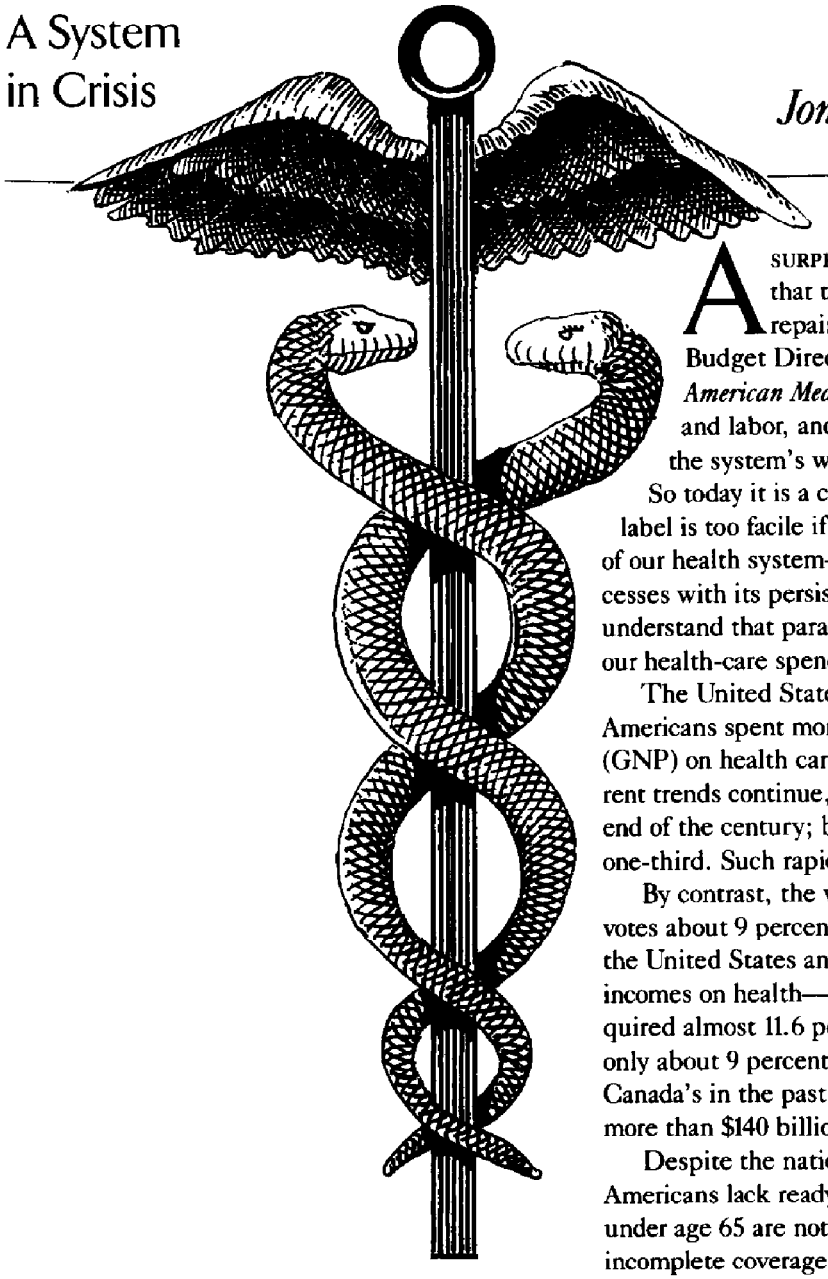
THE HIGH COST OF HEALTH

A System in Crisis



Jonathan Ratner

A SURPRISINGLY BROAD consensus has emerged in Washington that the nation's health-care system is in sore need of repair. Such diverse voices as Office of Management and Budget Director Richard Darman, the editors of the *Journal of the American Medical Association*, Members of Congress, leaders in business and labor, and health-policy analysts have joined in acknowledging the system's widespread troubles.

So today it is a commonplace that our health system is in crisis. But this label is too facile if it suggests imminent collapse. Rather, the painful paradox of our health system—the coexistence of American medicine's continued successes with its persistent gaps and inefficiencies—is becoming more acute. To understand that paradox better, we must explore the high, and rising, level of our health-care spending.

The United States leads the world in health-care expenditures. In 1990, Americans spent more than 12 percent of their nation's Gross National Product (GNP) on health care—$671 billion in all, or $2,660 per person. Should current trends continue, health care will consume about 15 percent of GNP by the end of the century; by 2030, according to Darman, its share will be more than one-third. Such rapid growth is probably unsustainable and surely undesirable.

By contrast, the world's second-biggest health-care spender, Canada, devotes about 9 percent of its national income to health care. As recently as 1970, the United States and Canada spent roughly equal proportions of their national incomes on health—about 7.4 percent. By 1989, however, U.S. health care required almost 11.6 percent of GNP, whereas Canadian health care absorbed only about 9 percent. If U.S. health-care spending had increased only as fast as Canada's in the past two decades, then the United States could have allocated more than $140 billion this year to other uses.

Despite the nation's burgeoning health-care expenditures, millions of Americans lack ready access to regular care. More than 31 million Americans under age 65 are not covered by private or public insurance. Millions more have incomplete coverage, lacking insurance for particular services or protection in case of catastrophic illness. Lack of insurance does not prevent a person from

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JONATHAN RATNER is Assistant Director for Medicare and Medicaid Issues in GAO's Human Resources Division.

obtaining medical services altogether, but studies suggest that, on average, an uninsured person forgoes about 40 percent of the care received by the typical insured person.

Incomplete access is not the only shortcoming. A growing body of evidence suggests that we are not getting good value for our health-care dollars. Other industrialized democracies seem to do better: France, Germany, Australia, and Canada, for example, all spend much less per capita on health, yet manage to ensure access for all citizens and maintain adequate quality of care. In fact, these countries' records on two standard measures of public health, life expectancy and the rate of infant mortality, match or surpass the U.S. record. Of course, by spending more, Americans have available to them more private hospital rooms and more computerized tomography (CT) scanners. Nonetheless, judged by broad indicators of health, the United States seems to spend more and get less.

What makes the system sick

This situation has arisen partly because of financial incentives that encourage unnecessary spending. Insured patients, insulated from much of the cost of procedures, readily allow their doctors to perform tests and treatments regardless of the costs. Physicians have little incentive to economize because reimbursement is often automatic. Some physicians may order tests or perform procedures that offer little or no benefit—because the extra work brings in more income, because they fear costly lawsuits if they fail to order every possible test or treatment, or simply because the results might prove helpful, however infrequently.

In any case, there is substantial evidence that much care is excessive. For example, recent studies have reported that a sizable proportion of surgical procedures—such as 14 percent of coronary bypasses and 20 percent of pacemaker implants—are unnecessary.[1]

Overtreatment is only one cause of the escalation in spending. Incomes have been rising, enabling people to buy more health care. Also, the population is aging, and older people incur higher health costs than younger people.

Another cause is the rapid advance in medical technology. While new technology often means more effective care, it may also require equipment that carries a big price tag. The very availability of new procedures and services tends to create demand, adding to overall health-care spending. And new technology sometimes leads hospitals to engage in a medical "arms race," as they add equipment and services in order to retain patients and doctors. Such arms races, and the wide diffusion of new equipment, are fueled by payers, who often routinely reimburse providers for these services—offering, in essence, a blank check.

Rising health-care spending has hit both business and government particularly hard. Over the last two decades, health insurance has been the fastest-growing component of wages and benefits. In 1989, U.S. corporations spent as much on employee health care as they received in after-tax corporate profits. Large employers have responded by passing costs along to their employees through higher deductibles or reduced coverage. Some small firms have eliminated employee insurance entirely. Many companies are also cutting retirees' health benefits, which have become far more expensive than businesses anticipated when they promised these benefits to employees 15 or 20 years ago.

Governments at all levels are being squeezed as well. Since 1980, health spending has been the second-fastest-growing component of the federal budget, outpaced only by interest on the public debt. For state governments, Medicaid is the fastest-growing budget component: In the 1980s, Medicaid's share of state budgets grew by roughly 50 percent.

Failed treatments

Not surprisingly, all major payers—private insurance companies, businesses, and governments at all levels—have tried to contain health-care spending. But their various cost-containment initiatives have failed to stem the tide. This is partly because reforms have been piecemeal rather than comprehensive. While some new policies have been more effective than others, they all have been applied only to one or another corner of the health-care market. Their partial and uncoordinated implementation has meant that no private effort, no state initiative, and no federal measure—nor the cumulative effect of them all—has substantially slowed the growth of national health spending.

Some efforts have succeeded in cutting spending for a specific payer or category of services, but only by shifting costs to another payer or into another category. For instance, Medicare's Prospective Payment System (PPS)—a cost-containment initiative instituted in 1983—has helped dampen increases in Medicare spending for hospital care. But PPS's impact on the nation's health spending overall has been more modest, because it applies only to Medicare patients and only to inpatient hospital care. The narrow scope of PPS has encouraged a shift to physicians' services delivered outside the hospital, which has spurred the growth in spending beyond the reach of PPS.

Some initiatives may achieve one-time savings but fail to flatten the trend in overall health spending. For example, utilization review—a gatekeeping practice intended to prevent unnecessary medical treatment—may reduce the number of less-than-essential hospital admissions and medical procedures and thereby produce significant savings at the outset. The impact levels off, however, once the initial cut has taken effect.

Similarly, managed-care approaches, such as health maintenance organizations, reduce—at least in theory— unnecessary services by regulating all the care a patient receives. But managed-care programs seem unlikely ever to cover a large enough proportion of Americans to moderate overall spending, and managed care does not seem to greatly restrain those forces, such as the rapid spread of new technologies, that promote spending but originate outside the individual managed-care program.

A prescription for reform

Further piecemeal reforms, this record suggests, are unlikely to significantly curb the overall growth of health-care spending. GAO has suggested that the United States look beyond partial cost-containment initiatives and consider developing a comprehensive set of reforms that would encompass the entire health-care system.[2] One important step would be to examine the strategies of other industrialized countries, such as Canada, Germany, France, and Japan,

some of which have been relatively successful in designing policies to restrain health-care spending. The United States need not adopt another nation's system in order to learn from these countries. The systems differ—they may rely on a single public insurer or a mix of public and private insurers—but they share several common elements:

- *Universal coverage.* No one in these countries lacks health insurance.
- *Uniform rules.* Where more than one insurer is involved, all payers—public or private—play by essentially the same rules. The rules set uniform standards for benefits packages, claims procedures, payment rates, and eligibility for coverage. As a result, physicians and hospitals typically handle all patients the same way, regardless of who is paying the bill. The standardization thus prevents cost-shifting, as well as cutting administrative costs.
- *Caps or targets for total health-care spending and its major components.* Some countries set explicit targets for all spending in major health-care sectors. For example, in Canada, the provincial governments control hospital spending overall by negotiating a fixed budget for each hospital. The hospital has to determine how best to provide care while living within this budget.[3] Germany controls spending on physician care by establishing a schedule of fees for each type of physician service and by setting a target for overall spending on physician care. If physicians increase the number of services they provide, and spending threatens to exceed the target, the fees are reduced to keep actual spending within the target.[4]

These three elements constitute a broad strategy that merits further evaluation. Many specific features would need to be decided through debate—for example, how large a role the government should play, whether employers should be required to provide coverage, and who would pay for expanding coverage to the uninsured.

The larger debate on U.S. health-care reform is well under way. With this in mind, the *GAO Journal* asked a dozen health-care authorities this question: "What are the most promising steps America could take to bring escalating health-care costs under control?" The responses that follow illustrate the range of proposals now on the table.

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1. Studies of inappropriate procedures include C. Winslow and others, "The Appropriateness of Performing Coronary Artery Bypass Surgery," *Journal of the American Medical Association*, 260(4), July 22/29, 1988, pp. 505-509. A.C. Enthoven, "What Can Europeans Learn From Americans?" *Health Care Financing Review*, 1989 Annual Supplement, pp. 49-63, provides additional citations.

2. See *U.S. Health Care Spending: Trends, Contributing Factors, and Proposals for Reform* (GAO/HRD-91-102, June 10, 1991).

3. See *Canadian Health Insurance: Lessons for the United States* (GAO/HRD-91-90, June 4, 1991).

4. A GAO report on the policies used to control health-care spending in France, Germany, and Japan will be issued in the fall of 1991.

"The key point is that we should receive appropriate value for our money."

George D. Lundberg

A PRINCIPAL OBJECTIVE for this nation for the 1990s is to provide access to a basic level of medical care for all Americans. Indeed, surveys show access to be the second-biggest problem facing American health care. The number-one problem—as seen by leaders in industry, labor, and government, as well as by physicians and the public—is cost. Because of this perception, I do not believe that meaningful health-care reform with universal access will come about unless it is tied to a bona fide program of cost control. Successful cost containment will become the gateway to universal access.

No modern developed society has controlled health-care costs, but some do better than others. The United States has done least well of all; medical care has consumed a progressively higher percentage of our Gross National Product (GNP) since 1955. The causes of this runaway trend range from inflation in general to specific aspects of the nation's health and health-care systems. Among these are the increasing number of elderly people and tiny surviving newborns; new technology; heightened expectations; inappropriate use of diagnostic and therapeutic procedures; an increased number of health-care professionals (particularly too many specialists); wasteful spending for marketing and administration; epidemics such as substance abuse, violence, and AIDS; and defensive medicine as a response to professional liability.

Any proposed solutions to our cost problems should take all of these causes into consideration. Here are some of the options:

- Educate physicians and the public as to when various procedures for diagnosis and treatment are—and are not—appropriate. A related stronger move would be to link insurance payments to adherence by providers and patients to recognized clinical guidelines.
- Establish nationwide systems of marketplace competition with strictly managed care.
- Use high deductibles and high co-payments to encourage restraint on the part of patients demanding care while providing each patient with actual cost information before proceeding with a medical action or procedure.
- Require approval by the major payers before bringing expensive new technologies into service, and require additional professional approval for individual use of large-ticket items. Such approval should depend on whether the procedure is safe, efficacious, and cost-effective.
- Cap health-care expenditures by federal law at a certain percentage of the GNP. (Just what that percentage should be is open to debate; I suspect any such fixed percent would slide over time.) Similar approaches involve setting overall caps on medical expenses on the national or state level or setting goals for particular areas of spending—loosely speaking, a prospective expense budget.

GEORGE D. LUNDBERG, M.D., is Editor of the Journal of the American Medical Association.

- Limit the number, types, and location of health-care professionals, health-care facilities, or both, emphasizing primary care and disease prevention.
- Apply the Medicare classification system of Diagnosis Related Groups—which specifies a fixed payment for a given diagnosis—to patient admissions in all hospitals, regardless of payer.
- Apply Medicare's "resource based relative value scale"—a fee schedule for specific medical procedures—to all payments to physicians, regardless of payer.
- Stop providing futile care that merely prolongs dying.
- Enact meaningful tort reform to diminish the practice of defensive medicine.
- Ban advertising and marketing for health-care facilities and professionals as inflationary and a waste of money.
- Only as a last resort, if all else fails, establish a completely nationalized system with strict budgeting.

I do not know which of these options would work best; each has its own upsides, downsides, and trade-offs. The best answer may be some mixture of the top nine or 10 listed methods. The next logical step is to use research models based on existing scientific data to project the likely effectiveness of each of these methods or combinations. The main point, however, is that we should, in fact and in image, begin to receive appropriate value for our health-care money.

"Prevention, early treatment, and universal access must be at the heart of any cost-reduction effort."

Reed V. Tuckson

I AM HOPEFUL that the growing interest in reforming the U.S. health-care "system," fueled by the unacceptable escalation in medical-care costs, will result in significant changes. The developing consensus for reform is particularly welcome in light of the disgracefully large number of U.S. citizens who now receive either inadequate medical care or no care at all. As cost-cutting measures are considered, policymakers should keep in mind that one important way to eliminate unnecessary medical costs is to ensure the universal availability of comprehensive health care that helps individuals prevent disease—or at least assists health-care professionals in making diagnoses and delivering treatment at an early stage of illness.

REED V. TUCKSON, M.D., was Senior Vice President for Programs at the March of Dimes Birth Defects Foundation when he wrote this piece. He is now President of Drew University of Medicine and Science in Los Angeles.

The relationship between the prevention of disease and the avoidance of subsequent medical-care costs is both logical and well documented. For example, as pointed out in a recent report from the U.S. Public Health Service titled *Healthy People 2000*, each year coronary artery disease affects 7 million Americans, causes 1.5 million heart attacks and 500,000 deaths, and makes necessary 300,000 coronary bypass procedures at a cost of $30,000 each. Yet, to an extraordinary extent, this disease is preventable; with proper prevention efforts, many of these costs could be avoided.

The same is true of the costs required to care for low-birthweight babies. According to a report from the Institute of Medicine, a component of the National Academy of Sciences, every dollar the nation spends on prenatal care for pregnant women at high risk of bearing low-birthweight babies could save $3.38 in infant care later. The March of Dimes has calculated that, for 1988 alone, $317 million could have been saved if adequate medical care had been given to the 900,000 American women who went without it during the first trimester of their pregnancies.

The cost benefits of childhood immunization are also well established. The first 20 years of measles vaccine use yielded a savings of $5 billion; in 1983 alone, $60 million was saved through the administration of the combined vaccine for measles, mumps, and rubella. Unfortunately, immunization levels are now dangerously low. Increasing numbers of children are at risk for congenital rubella syndrome, which has an average lifetime care cost of $354,000.

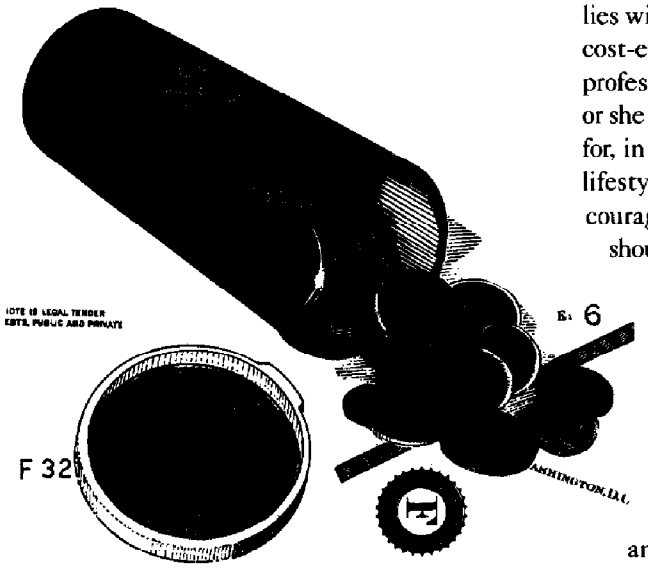
Because comprehensive and coordinated primary care is not now universally accessible, this nation incurs enormous and unnecessary hospital costs—not to mention a huge toll in human misery. A study conducted during my tenure as Commissioner of Public Health for Washington, D.C., estimated that, of the uninsured patients entering D.C. hospitals who were suffering from a chronic disease and were not being treated by a single coordinating practitioner, as many as 50 percent would not have required hospital admission if they had received appropriate ambulatory care or had followed previous medical advice. Overall, the poorer the patient, the more likely it was that hospital admission could have been avoided.

If the United States is to contain medical costs without doing further violence to the health of millions of its citizens—especially Americans of color and the poor—then at a minimum the nation should:

- use its communication skills and resources to encourage citizens to promote health and prevent disease in themselves, their families, and their communities;
- provide universal access to comprehensive, coordinated health care that emphasizes prevention, early diagnosis, and appropriate medical intervention; and
- ensure that providers and clinical facilities are available in urban and rural areas to meet the needs of those now underserved. To this end, the National Health Service Corps and the public health system should be expanded at both the national and the state levels.

Certainly, regulating the behavior of health-care providers and payers will be another important part of any strategy to hold down health-care costs. But, on its own, such regulation will not yield a sufficient reduction in spending; nor will it necessarily lead to the desired social outcomes or adequately serve the health of the American people. The agenda I have outlined here—prevention, early treatment, and universal access—must be at the heart of any cost-reduction effort.

"We must move aggressively to organize what is now a fragmented delivery system." *Philip Briggs*



THE UNITED STATES has the most advanced medical technology and the most highly trained physicians in the world. Our medical-care system performs feats that just two years ago would have been considered medical miracles. But we pay a high price for that system—12 percent of our Gross National Product and growing. If we are to sustain our advanced system of medical care while slowing the rate of health-care inflation, we must move aggressively to organize what is now a fragmented delivery system and to help bring into balance the demand for and supply of efficient, effective medical care.

First, we must deal with the problem of unnecessary and potentially harmful health-care treatment that costs the U.S. billions of dollars each year. Some of this treatment is given because physicians do not know what works and what does not. Accordingly, we should pursue research on outcomes associated with particular treatments and disseminate that information to physicians. We should also eliminate financial incentives that might encourage the provision of inappropriate care.

Many commentators have argued that the responsibility for controlling costs lies with the individual consumer, who should purchase health-care services cost-effectively. But a consumer of health-care services is not a trained medical professional and is ill-equipped—particularly when sick—to decide whether he or she is receiving the right treatment. What the individual can be responsible for, in addition to a reasonable amount of cost-sharing, is the pursuit of a healthy lifestyle. Health and Human Services Secretary Louis Sullivan has already encouraged Americans to prevent disease and promote health; the government should expand on these educational efforts.

Another promising cost-control approach is managed-care programs. These plans involve arrangements with selected providers for a comprehensive set of health-care services, explicit criteria for the selection of the providers, formal programs for ongoing quality assurance and utilization review, and significant financial incentives for those covered to use providers associated with the managed-care plan. While the success of these arrangements is not yet proven, I believe they will, over time, prove extremely effective and become the norm for both the private and public sectors.

The health-insurance industry must also do its part and move to manage costs rather than merely process claims. This effort, already under way in some companies, must be combined with others to reduce the administrative costs and hassles of our private health-insurance system. The insurance industry must continue to promote electronic claims processing and other system changes made possible by new technology. This is especially important because the American desire for diversity and choice will continue to create higher administrative expenses than those of other industrialized countries.

PHILIP BRIGGS is Vice Chairman of the Board of Metropolitan Life Insurance Co.

Even with improved health-care outcomes information, a healthier population, and a more efficient delivery system, Americans will face significant obstacles to reducing health-care inflation. We must cope with an aging population and the continued introduction of expensive technology. In addition, we must deal with horrendous social problems—primarily among the poor, who often require expensive hospital services for preventable conditions such as premature labor, substance abuse, or injuries from violence.

The American health-care system faces significant challenges over the next decade. I remain convinced that all parties, acting together to improve the current system, can build one that meets the diverse needs of Americans while moderating our health-care costs.

"We must accept the idea of multi-tiered health care, just as we accept multi-tiered education and housing." *Carolyne K. Davis*

CONTROLLING HEALTH-CARE costs in the United States will require action in at least six major areas.

First, we must encourage states to enact reforms to reduce malpractice liability. Model legislation exists, but as yet most states have lacked the will to take action. The example of our Canadian neighbors shows that we can significantly reduce malpractice costs by, for example, limiting lawyers' acceptance of contingency fees, conducting trials by judge rather than by jury, and setting caps on awards for "pain and suffering."

Second, we must encourage the use of "living wills." Attempts to extend a patient's last few days and weeks of life can mean high-technology heroics that respect neither the quality of life nor the dignity of death. Honoring a living will's directives to forgo futile care not only carries out the patient's wishes, but also significantly reduces expenses incurred in the final weeks of care.

Third, we must finance and promote further research into the effectiveness of standard medical tests and treatments. If we know which procedures bring about the best medical results, we can establish specific guidelines for appropriate practice. Many studies have demonstrated that at least one-third of many procedures and tests performed today are unnecessary. The establishment of clear-cut, acceptable protocols could save billions of dollars.

The fourth step, which would expand upon the outcomes research just mentioned, would be to establish uniform standards for recording clinical data. The

CAROLYNE K. DAVIS is National Health Care Advisor for Ernst & Young, an accounting and consulting firm in Washington, D.C. Formerly, she was Administrator of the Health Care Financing Administration, which oversees Medicare and Medicaid.

standards would apply to all data collected and processed by computerized hospital record systems at each point of service. Such a standardized system would require major investments, but it would be essential for monitoring the safety and effectiveness of types of care. It would also provide ongoing data that could be used in developing and refining practice protocols. Eventually, this would lead to more cost-effective care.

Fifth, we need to test new methods of delivering care on the state level. As new models of management and delivery of services are developed, the states can serve as laboratories for demonstrating the efficiency and effectiveness of these ideas. For example, the state of Arizona, operating with federal permission, tested an innovative managed-care approach for its entire Medicaid program. We must be willing to encourage states to pursue such experiments.

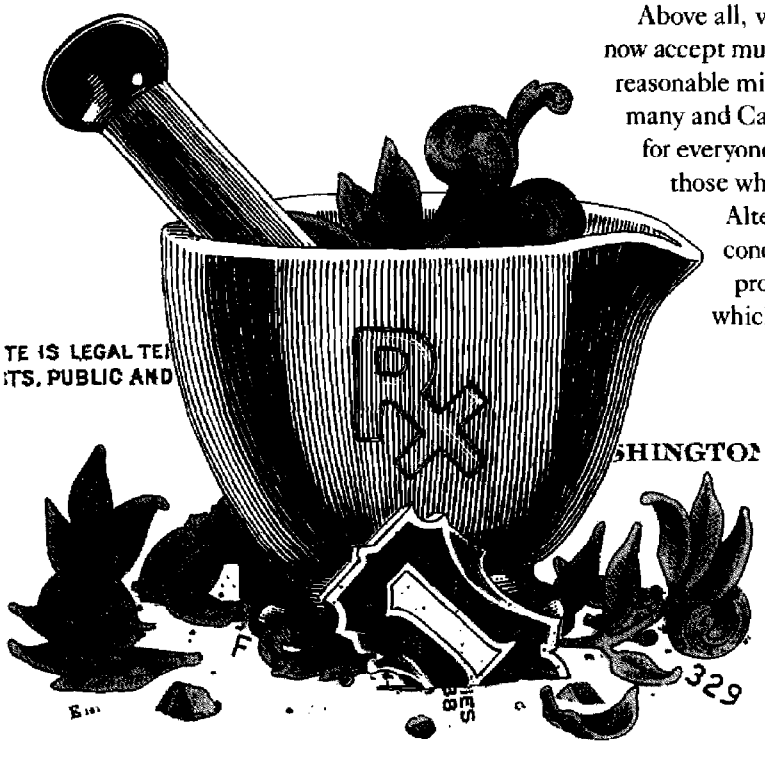
Sixth, we must increase preventive-care services. Because, at least initially, these services represent added costs, any expansion must be slow and incremental. But these programs will bring significant savings over time. For example, for every additional dollar we spend on needed prenatal care for pregnant women, we save three dollars later in reduced health-care costs for infants—clearly a worthwhile expenditure. To play on the old adage, we must "spend money to save money."

Preventive care must go hand-in-hand with efforts to teach consumers how to change their lifestyles to lessen the likelihood of major illness. Incentives, such as lower health-care insurance premiums, could be used to reward such lifestyle changes. For example, some insurance companies already offer reduced premiums for customers who do not smoke.

As useful as such changes will be, ultimately we must alter society's expectations concerning health care. Americans' desires—for more technology and more tests on the one hand and for lower costs on the other—are inevitably mutually exclusive. We must be willing to accept more management of care through regulated delivery systems such as health maintenance organizations. And we must lower our resistance to limitations on care services.

Above all, we must accept the idea of multi-tiered health care, just as we now accept multi-tiered education and housing. That idea, of course, assumes a reasonable minimum standard of basic services. Other countries, such as Germany and Canada, have shown that it is possible to ensure basic health care for everyone, with limitations on the scope and style of services. Then, those who can afford extra services may purchase them.

Altering societal expectations is a long-range goal that must proceed concurrently with the efforts listed above. All in all, this six-point approach amounts to incremental reform of our health-care system, which should eventually provide for substantial cost savings.



"The key to bringing costs under control is to change perverse incentives and artificial restrictions."

Stuart Butler

WHY DO PRICES rise much faster in one sector of the economy than in other sectors? Typically for either of two reasons: consumers don't see—or care about—the price they pay; or government regulation restricts supply.

Both reasons apply in health care. Company-provided health plans, encouraged by tax benefits for both employer and employee, subsidize consumer demand and give patients the illusion that they do not pay for their care. And state insurance mandates artificially restrict the supply of low-cost health insurance plans. The key to bringing costs under control is to change these perverse incentives and artificial restrictions, so that real competition driven by consumer choice can at last operate in health care.

To begin with, we must reform the tax treatment of health care. Congress should end the tax exclusion for company-based plans and use the revenue (about $50 billion) to finance a system of refundable tax credits for health-care spending by individuals and families. People would receive credit on all expenditures for health care, including insurance premiums as well as out-of-pocket expenses. These tax benefits would apply whether they bought insurance through their employers or from some other source.

These changes would burst the inflation bubble in several ways. First, although the credits would shield most families—especially lower-income families—from the full cost of their medical care, people would have the incentive to seek the best value for their money because they, not their employers, would pocket the savings from wise purchases of insurance.

Second, the changes would reduce demand for overly broad insurance plans. Because the current system gives a tax break only for company-provided insurance, not for out-of-pocket medical expenses (except when these reach high levels), it encourages employees to press for insurance that covers even the most minor medical services and to resist employer attempts to introduce higher deductibles or co-payments. Making the tax treatment the same for out-of-pocket spending as for insurance payments would remove this perverse incentive, prompting people to reduce their insurance coverage and to cover minor costs out-of-pocket. This would decrease insurance overhead by eliminating the paperwork for small claims. And as out-of-pocket spending became more acceptable for minor health-care services, consumers would become more conscious of the actual costs of such services and more likely to shop around for good prices.

Third, allowing consumers the same tax break whether they obtained a health plan through their employer or elsewhere would stimulate more competition among plans. With the change, consumers could get tax relief even if they

STUART BUTLER is Director of Domestic and Economic Policy Studies at the Heritage Foundation in Washington, D.C.

buy a plan through their union, their farm bureau, their alumni association, an HMO or other provider group, or any other source. The result would be more competitive pricing.

As for government regulation—the second factor in rising costs—the solution is to reduce or eliminate state insurance mandates. Americans typically must pay more than necessary for health insurance because states require insurance companies to include services that many enrollees would not buy if they had any choice. Many individuals and small businesses cannot afford insurance at all because of these mandates.

Some states have cut the cost of insurance significantly, however, by allowing "no frills" plans to be marketed. If other states wish to cut the cost of medical care and insurance, they should streamline or eliminate mandates. Not only would that force health providers to compete for the patient dollar, but it would also allow Americans to receive the range of services they want, not the services of the most politically potent provider organizations in the state.

"Organized, integrated health-care plans . . . can offer the greatest impact on costs and effectiveness."

David M. Lawrence

DESPITE AN EXPLOSION of programs and strategies aimed at cost control, health-care costs continue to soar at an unprecedented rate. The primary reason is that most so-called solutions do little more than overlay administrative controls on an unwieldy and fragmented system. While these approaches initially may be effective in reducing waste, they fail to address the underlying inefficiencies and perverse incentives that encourage ever-escalating costs. Nor can these piecemeal approaches protect and promote the quality of care that both providers and patients believe our health-care system should offer.

The key to controlling both cost and quality in the long term lies in finding ways to promote the growth of organized, integrated systems of care that incorporate appropriate financial incentives. Group-practice health maintenance organizations, or HMOs, illustrate the potential of such systems. For several decades, prepaid group practices (including Kaiser Permanente, the organization I represent) have effectively and efficiently served local communities. The concepts on which prepaid group practices are built can, and must, be applied on a broader scale.

DAVID M. LAWRENCE, M.D., is Vice Chairman and Chief Executive Officer of Kaiser Foundation Health Plan, Inc., and Kaiser Foundation Hospitals, headquartered in Oakland, California.

Prepaid group practices exemplify two key concepts. First, they are organized systems: The components of health care—physicians, hospitals, home health services, administrative support, and insurance—are integrated into a coherent whole. This provides opportunities for economy and efficiency through, for example, unifying medical records; consolidating appointment systems; and linking medical laboratories, X-ray departments, physical therapy departments, pharmacies, and other functions. Such integration can significantly lower costs and improve quality.

The other primary concept is the use of incentives to promote effective care without overspending. One such incentive is prepayment to providers: Patients pay a fixed amount in exchange for all needed treatment. Unlike the traditional fee-for-service structure, this arrangement does not link the amount of money a physician makes to the number of health services he or she performs. Because the choice of treatment does not affect the physician's own income, the physician's chief concern is to treat patients in the most clinically effective way. Similarly, the use of prepayment—as opposed to the open-ended, after-the-fact reimbursement procedures of traditional programs—provides the incentive to budget resources carefully and to seek solutions that are cost-effective as well as clinically appropriate.

Incentives such as these work best within an organized system, where physicians and nonphysician managers together can assume a broad responsibility and accountability for the health plan's overall performance. This sense of shared purpose and culture is essential to managing quality and thereby controlling costs.

Organized systems offer another unique advantage: They are the health-care setting best suited to the use of the innovative business principles of total quality management. We can benefit from the lessons learned by American and Japanese business and industry. For example, the traditional reliance on after-the-fact inspection, which measures how well delivered services conform to predetermined standards, does offer a means of quality control. Most quality assurance systems are designed to do just that. On the other hand, by constantly measuring and assessing what we do as we do it—in other words, monitoring the entire health-care process—we can influence quality immediately and begin to eliminate the costs that come from poorly designed programs and less effective clinical care.

Only in the past decade have enough alternative health-care plans become established to begin challenging the traditional fee-for-service arrangement. As yet, however, these systems have had the chance to operate only within a limited arena. Any step that encourages the growth of such systems can only be beneficial. We at Kaiser Permanente commend the experience of prepaid group practices to policymakers and hope that together we can develop strategies that promote such systems.

It is clear that tinkering alone will not repair the ailing engine driving the American health-care system. Fundamental structural changes are necessary. Putting organized, integrated health-care plans in place nationwide will hardly be easy; piecing them together from existing, disparate elements is much more difficult than building programs *de novo*. But however they are put in place, integrated systems that incorporate appropriate financial incentives can offer the greatest impact on costs and effectiveness.

"Today's economic incentives are where we should look to change the system's behavior." *Mitchell T. Rabkin*

HEALTH-CARE COSTS reflect the workings of a complex system, and the question is whether the behavior of that system can be steered in a more prudent direction. Because health care is so complex, one must not only look at each component of the system to fathom the many reasons why costs have escalated, but also consider the consequences of any cost-control effort as it reverberates from its targeted area throughout the entire system.

No single part of the system is *the* fundamental cause of the rise in costs. Rather, many components, individually and collectively, have engendered the cost escalations we now justifiably decry. There is one underlying theme, however: While economic incentives may not define the behavior of each component, such incentives surely exercise a compelling influence. And today's economic incentives are where we should look to change the system's behavior.

Cost reimbursement and fee-for-service—the predominant modes of payment in the past half-century—have not encouraged behavior that would restrain costs. Neither has the ability of employers to take tax deductions on their insurance payments, nor that of employees to receive those benefits tax-free. Nor have the many other economic opportunities that the current system provides for equipment manufacturers, pharmaceutical companies, and entrepreneurial physicians and other providers. These people and organizations are not necessarily motivated by greed, but they undoubtedly respond to the influence of economic incentives. For example, laissez-faire cost reimbursement has made it easy for the physician to order a test or procedure because it *might* do some good, and after all, "the patient isn't paying for it."

The resulting escalation of costs has led to a burgeoning of micromanagement controls on the part of those who pay for care. These controls are typically applied when care already delivered is paid for, apparently in the belief that if the payer doesn't come up with the cash, next time the use of resources will be tempered and the bill lower. In the long run, this strategy encroaches on physicians' professional autonomy and ultimately curtails their capacity to make ethical choices. And it is exacting a growing disenchantment that threatens the numbers and quality of physicians and other practitioners tomorrow.

To control costs, the way we pay for care must contain economic incentives for satisfactory quality and prudent use of resources by each participant—at a minimum, the primary physician, the specialist, the hospital, the laboratory, the patient, and the payer. The incentives must be specific and targeted to each person or organization. But they must also be interrelated to enable the system as a whole to meet the goals of both quality and economy.

I would begin with a system of negotiating agreements between payer and provider. Such agreements, to be ratified directly or indirectly by the patient, would establish in advance the extent and quality of care to be delivered. The

MITCHELL T. RABKIN, M.D., is President of Beth Israel Hospital in Boston and professor of medicine at Harvard Medical School.

payer would also develop a capitation figure—a fixed sum, standardized by age and sex of the patient, to cover all ambulatory care—and put that in the hands of the primary physician, who would coordinate each patient's care and act as gatekeeper. Out of this fixed amount, the primary care physician would choreograph, deliver or order, and *purchase* all ambulatory care, including laboratory tests and specialty consultations. This arrangement would offer incentive for the primary physician to select tests and treatments carefully on the basis of both cost and quality. And because specialists and laboratories would depend on repeated referrals from the primary physician, the system would also encourage them to provide effective services at a fair price.

A second negotiated amount would apply to each episode of hospitalization. This prearranged payment—reflecting both the nature of each illness and the individual characteristics of each hospital, such as the extent and range of its services, capital costs, staffing, and teaching activities—would provide incentive for the hospital to keep costs within that amount.

The system would need to build in appropriate controls for risk and opportunities for benefit for providers. Individual patients would be involved through co-payment arrangements. And giving patients the option to seek additional care at their own expense would allow them to retain their freedom of choice while encouraging them to stay within the arrangement.

There is no *one* answer to the cost problem. But advance agreements among payer, provider, and patient, plus targeted yet coordinated economic incentives to encourage prudent behavior by each participant, should offer a logical resolution to the cost-shifting, cost-escalation, and inequity that now burden our system. This is a more clear-eyed approach than what we have taken in the past. By contrast, retaining today's economic incentives and then punishing the very behavior they engender—the approach we continue to take despite our rhetoric—is not only a prescription for ineffective cost control but also a certain way to damage American medicine's future.

"A national-level commission should be established to make the tough decisions." *Karen Ignagni*

THE MANY STRATEGIES for controlling health-care costs that have been proposed seem simply to have created a logjam in the policy-making process. Debates that focus on whether regulation or competition is *the* exclusive remedy have obscured the fact that we would do well to take the best from both approaches. Political pressures that favor either letting the states handle the issue or implementing some quick fix have hindered the development of a coordinated national strategy. And efforts that zero in on one corner of the system fail to address the urgent need for systemwide change.

KAREN IGNAGNI is Director of the Employee Benefits Department of the American Federation of Labor and Congress of Industrial Organizations.

The most effective way for Congress to address rising costs is to develop a national health-care policy that recognizes the relationship among the issues of cost, access, and quality and attempts to address all three. With such a policy in place, Congress and the nation could concentrate less on designing specific solutions for specific problems and could instead focus on the strategic question of solving the larger policy problem.

A crucial first step is to establish a mechanism whereby consumers, other purchasers of care, health-care providers, and government officials can come together to establish goals for the reform process and develop a path for achieving those goals. Given the urgency and scope of the problem, the solution is not to create yet another advisory group to study the situation. Rather, a national-level commission should be established that, like the Federal Reserve Board, has a mandate to make the tough decisions that need to be made and then see that those decisions are enforced.

Exactly what decisions would the commission face? In the cost area, this nation needs to reach a consensus on what proportion of its resources should go to health care and what changes should be made to improve efficiency. Congress should establish an overall budget for the system, which would either specify the percentage of Gross National Product to be committed to health care or set a national target for the rate of increase in expenditures. But it is the commission, *not* Congress, that should make decisions about the allocation of resources. In doing so, the commission would need to consider the problems caused by the shifting of health-care costs from one payer to another, the number of inappropriate tests and procedures being performed, the need for malpractice reform, the lack of a coordinated process for technology assessment and diffusion, and the excessively high level of administrative overhead in our system.

Attempts to contain costs must not sacrifice quality. Health-care reform efforts should encourage the development of organizations that do not simply achieve savings by selecting low-risk patients or offering short-term discounts in price but instead truly manage care and assume responsibility for quality control. Managed-care organizations and all other health-care intermediaries should be subject to a national certification process that would require all to offer the same features. The resulting standardization would ensure that providers compete for patients not on the basis of price, but rather on quality of service and performance.

The third issue to be addressed is access. Every American, including those with catastrophic or chronic illnesses, deserves access to essential medical services. Congress should spell out a set of core benefits to which all Americans are entitled. The commission should then serve as the forum for discussions about coverage of types of services, experimental procedures, and terminal care.

The national-level coordination and goal-setting that the commission would carry out would not only help move the health-care system forward but would substantially reduce the red tape and paperwork that frustrate both consumers and health-care providers. Another important role of the commission would be to give consumers the information they need to select among health plans and providers and would ensure that all payers follow the same standards in covering specific procedures.

The approach to health-care reform I have advanced here allows for change both from the top down, in goal-setting and strategic planning, and from the bottom up, with consumers and purchasers selecting from a field of competitive health-care providers and delivery systems. This approach also creates a mechanism—the commission—to help develop the public consensus needed to take

action on reducing health-care inflation, expanding access, and improving quality of care. The growing urgency of the country's health-care crisis requires new and broad-ranging initiatives. As a nation that seeks to be economically competitive in the 21st century, we cannot afford to wait much longer.

"We can fight rising health-care costs by reducing our reliance on the health-care system itself."

Barbara D. Matula

MOST OF US BELIEVE access to health care is a right; unfortunately, too many mistakenly believe it is free. Consumers expect medical services to be conveniently located, easily accessible and technologically advanced—all at little or no direct cost to them. In fact, the price of care is rarely discussed in advance of treatment, patients are given few alternatives, and outcomes are not guaranteed. Shopping for the best value in health care is not a realistic option.

Providers, suppliers, manufacturers, and retailers of medical goods and services in turn expect speedy and adequate payment for services rendered. They also demand freedom to deliver those services in the quantity, duration, and location of their choice, without interference.

Such expectations contribute significantly to the spiraling costs of health care without measurably improving Americans' health. If we are ever to develop a rational, affordable health-care delivery system for all Americans, we must move beyond unrealistic perceptions and demands.

The most obvious step we can take to control costs is to reduce our dependence on costly, high-tech medical interventions. At the same time, we should emphasize the more cost-effective approach of preventive care, which can lessen the need for elaborate tests and treatments.

For example, providing early and comprehensive prenatal care to pregnant women can lower the incidence of premature and low-birthweight babies. Not only does this approach reduce the number of infant deaths, but it also reduces the risk of many serious and disabling conditions suffered by tiny survivors. In turn, these low-cost services can minimize the need for neonatal intensive care, which is both more expensive and less effective than working to prevent the conditions in the first place.

In the same vein, we need to make significant investments in environmental health, accident prevention programs, early detection and treatment of disease, timely immunizations, vaccine development, and, especially, expanded research on the leading causes of premature death, avoidable diseases, and disabilities. We can fight rising health-care costs by reducing our reliance on the health-care system itself.

BARBARA D. MATULA is Director of the Division of Medical Assistance in the North Carolina Department of Human Resources.

Another promising step we can take is to actively foster the development throughout the country of managed-care systems—including health maintenance organizations, preferred provider programs, and similar arrangements—and ensure their accountability. Managed care can take many forms, from simple care coordination to complex risk arrangements covering hospitalization as well as primary care.

To gain wider public acceptance, managed-care arrangements must offer added value to the patient. Consumers will have to modify their expectations of open access to specialists, multiple providers, and duplicative (if not unnecessary) care. In exchange, they will be assured continuity of care in settings where their needs are quickly identified and appropriately met. For providers, managed-care systems may restrict the freedom to practice independently, but they can offer instead the freedom to practice in a supportive environment, focusing on the patient in a holistic rather than fragmented fashion.

Finally, no effort to contain costs will succeed until we reform the way we pay for health-care services. The current cost-based, fee-for-service system offers no incentives for any of the parties involved to hold the line on costs. Providers can easily manipulate the system to increase their income and profit. Consumers have enjoyed relative isolation from the direct cost of care until recently, as the erosion of traditional benefits and higher out-of-pocket payments have become the norm. And cost-shifting—charging different fees for a given service depending on the amounts different payers are willing to pay—makes it impossible to compare prices paid with value received.

It is imperative that we develop payment systems that are fair and reasonable, with incentives for both providers and consumers of care to hold down costs and with all payers participating equally. Just as American families must struggle to pay for health care through out-of-pocket expenses and insurance premiums, so must providers learn to live within a budget.

The move toward a rational, affordable health-care system will require compromise and contributions from all Americans. It will be anything but painless.

"Drastic efforts are necessary because there is little evidence that we now have the will to stop expanding the health-care system."

M. Edward Sellers

CURRENT EFFORTS TO arrest the nation's escalating health-care costs vary widely in approach. Some focus on influencing the purchase of care—for example, by forcing the increased use of "efficient" providers, by enabling uninsured patients to seek early medical intervention to prevent higher bills later, or by creating health maintenance organizations and other shared economic systems that serve as both providers and insurers. Other efforts seek to change consumer behavior—for instance, by inducing individuals to adopt

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M. EDWARD SELLERS is President and Chief Operating Officer of Blue Cross and Blue Shield of South Carolina.

healthier lifestyles or by passing more of the financial burden, and thus responsibility, on to patients. And still others focus on providers—such as by developing standard (and presumably cheaper) medical procedures for treating specific problems or simply by regulating the costs of health services.

Each of these methods can claim some success; at the same time, each can be shown to have had little impact overall. There will be no fundamental change in the inflation of health-care costs until all providers, through a combination of positive and negative incentives, are encouraged to slow down health-care spending and the resulting costly expansion of the system.

Those incentives should take place at both the *micro* level and the *macro* level. By micro level, I mean managing costs and behavior within a limited group, such as the employees of a company, the residents of a county, or the policyholders of an insurance company. By the macro level, I mean efforts that cover a broader area, such as a state.

Here are two suggestions that attempt to address the problem at both levels, but which share an integrating link.

At the micro level, we must begin by changing some basic ways of thinking. First, we must eliminate the one-year mentality—the idea that the appropriate length of a relationship between insurer and consumer, or between provider and patient, is 12 months. We must also eliminate the fee-for-service mentality—the idea that we should deliver and pay for health care on the basis of procedures performed rather than the results achieved. Finally, we must correct the mistaken impression that employers shouldn't attempt to influence their employees' lifestyle choices.

Instead, we should establish a relationship-based contract in which an employer, an insurer, and a provider agree to manage the health-determining behavior and the health costs of a pool of employees over a significant period of time, perhaps a minimum of three years. That contract would base financial risk and reward—to be shared equally by those parties—on the outcome of that shared management process. In other words, if the pool of employees is generally healthy and requires fewer services, the three financially involved parties will have more money to share at the end of the time period. Issues of turnover, inflation, and the like are technical challenges that are not insurmountable.

A key feature of this system would be a benefit structure that rewards employees for healthy lifestyles and creates financial penalties for unhealthy lifestyles. Likewise, the employer, the insurer, and the provider would benefit from early investment in activities that improve health—such as education, prevention, wellness screening, and programs for lifestyle change. Under the most common current structure, most investments of this type don't pay off within a year, and therefore participants have little motive to use them.

At the macro level, two strategies would significantly restrain costs. The first would be to use the leverage of the federal government and major payers—employers and insurers—to declare a moratorium on essentially all the health-care system's new input costs. This would include halting hospital capital expenditures as well as restricting the licensing of new physicians except in areas where they are needed; an oversupply of physicians is now a major cause of rising costs. The moratorium—basically a tool to create urgency—would last until a new state-by-state structure is established.

Specifically, the payers who direct the bulk of the nonfederal health-care spending in each state would form a price-fixing commission, operating with legal sanction and following the model of the German "sickness funds." This commission would negotiate and set fee-for-service prices for all physicians and hospitals in the state. The only exemptions to those price decisions would be

health care obtained within the micro-level contract relationships described above. This link between the two levels of cost management would encourage cost control through the negotiated arrangements and force cost control everywhere else.

Efforts this drastic are necessary because there is little evidence that we now have the will to stop expanding the health-care system. If we depend on voluntary action, it will be years before we will induce participants in the current system to slow down their spending.

"Universal coverage could provide for the millions without health insurance and also contain costs."

Philip R. Lee & Mark W. Legnini

THE EXPERIENCE OF the United States and the example of other Western industrialized countries tell us that policymakers have three choices for containing health-care costs:

- Continue the present system of market competition;
- Implement a universal, single-payer system, similar to Canada's; or
- Initiate a regulated system that retains the multiple payers we have now but covers everyone.

The first alternative is untenable because it is not controlling costs. The United States spends a higher percentage of its Gross National Product on health care than any other country in the world—some 38 percent more than Canada, the second-biggest spender. At the same time, the United States is many years behind Canada, Japan, New Zealand, Australia, and the countries of Western Europe in extending health-care coverage to all citizens. Some progress has been made toward cost control in the Medicare program, but Medicare covers only 11 percent of the population. Meanwhile, private-sector managed-care programs, such as health maintenance organizations, have succeeded in restraining costs, but only for small groups of people and in limited geographical areas. And often, savings in one area (for example, in hospital care) are achieved only in exchange for increased costs in other areas (such as outpatient care). In all, such "micromanagement"—the tendency to address isolated areas rather than the system as a whole—does nothing to control spending overall.

In contrast, the second alternative could control overall spending by imposing a limit on total expenditures. A single-payer system might take the form of a federal program similar to Medicare but with compulsory universal coverage. Or it might be a publicly funded, publicly administered system at the state level, similar to Canada's national health-insurance system. The system could be financed by a combination of employer and employee taxes, state tax revenues, cost-sharing by patients, and sin taxes on such items as cigarettes and liquor.

This type of system works elsewhere, but it might not work in the United

PHILIP R. LEE, M.D., is Director and MARK W. LEGNINI is on the research staff of the Institute for Health Policy Studies at the University of California, San Francisco. Dr. Lee is also Chairman of the Physician Payment Review Commission.

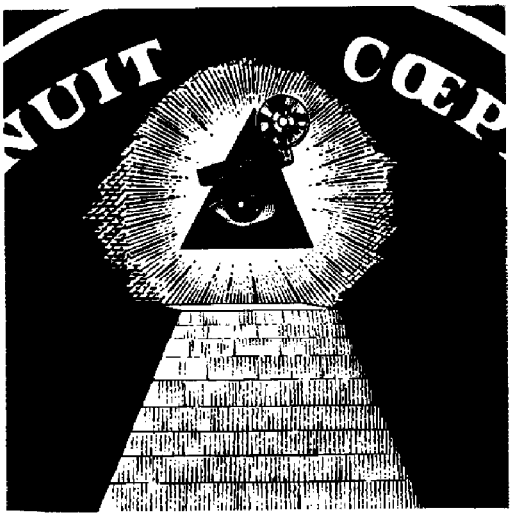
States. A publicly funded federal system would add hundreds of billions of dollars to the federal budget and would require a significant tax increase. A state-administered system would have similar effects on the state level. The fact that the total funds required would be no more (and possibly less) than current total health-care spending by all sectors would carry little weight amid rising deficits and calls for smaller government. In addition, the U.S. public, unlike Canada's, deeply distrusts many government programs and is not likely to embrace a purely public system. For these reasons, a publicly funded option probably will not soon receive the consideration it merits.

That leaves us with the third alternative as the most feasible. Universal coverage would provide for the almost 37 million Americans without health insurance, and given appropriate controls, it would also contain costs. A regulated universal system could include mandated employer-provided insurance, a federally assisted plan (expanding upon or replacing Medicaid) for low-income and high-risk populations, and an improved Medicare program.

The first element, an employer mandate, would cover much of the nearly 15 percent of the U.S. population presently uninsured, since most of these people are employed or the dependents of employed workers. Specifically, if most employers were required to offer health insurance for everyone working 25 hours per week or more, almost two-thirds of the previously uninsured would be covered. (Various proposals for employer-mandated insurance have enumerated many possible arrangements—too complex to describe here—for covering the self-employed, employees at small businesses, and other special cases.) Congress should find this approach very attractive because employers, not the government, would bear the costs.

The employer mandate would, in turn, substantially reduce the size of the second element—Medicaid or a federally funded alternative—because many low-income citizens would be eligible for insurance through their workplaces. And Medicare benefits could be expanded to cover some long-term care. Funds to extend both Medicaid and Medicare could come from taxing employer-paid health insurance, increasing excise taxes on tobacco and alcohol products, or imposing a value-added tax similar to that used widely in Europe as well as in Canada and Japan.

Because it would not set limits on total spending, the system would require other mechanisms to control overall costs; these could vary from state to state. One such mechanism is strict regulation of payers, an approach now in use in some states. States that prefer a market-based system might promote cost-effective competition through various regulations and economic incentives (an approach called "managed competition").



Any comprehensive cost-control initiative should address two other issues. One is capital investment—the expansion of facilities or equipment, which tends to increase the use of costly treatments. Various approaches already exist for controlling capital expenditures; some are in limited use now, and others have been used in the past. The second issue is the oversupply of physicians, especially specialists, that drives up both physician costs and treatment rates. National policies—supported by appropriate changes in funding—are necessary to control not only the overall number of physicians being trained but also the mix of specialties.

Intense public interest about the escalating cost of care, the significant number of Americans uninsured, and alternative systems abroad indicates a window of opportunity for changing our nation's health-care system. Let us hope that we in the United States have the wisdom, compassion, and political will to seize the moment. •

Carol R. Schuster & Charles J. Bonanno

RESERVES AND READINESS: APPRAISING THE TOTAL FORCE POLICY

Relying on the reserves makes good sense. But the Army has yet to bring practice in line with principles.

OPERATION DESERT STORM did a lot to improve the image of the American "citizen soldier." Large numbers of reserve forces from all the military services—more than 225,000 individuals in all—left their families, communities, and regular jobs to serve their country in a faraway desert. Their fellow citizens, watching by television back home, saw these reservists performing in many different capacities with obvious dedication and professionalism.

Today, members of the Army Reserve and the National Guard make up 52 percent of all Army personnel, including half of the Army's combat troops and about two-thirds of its support forces.

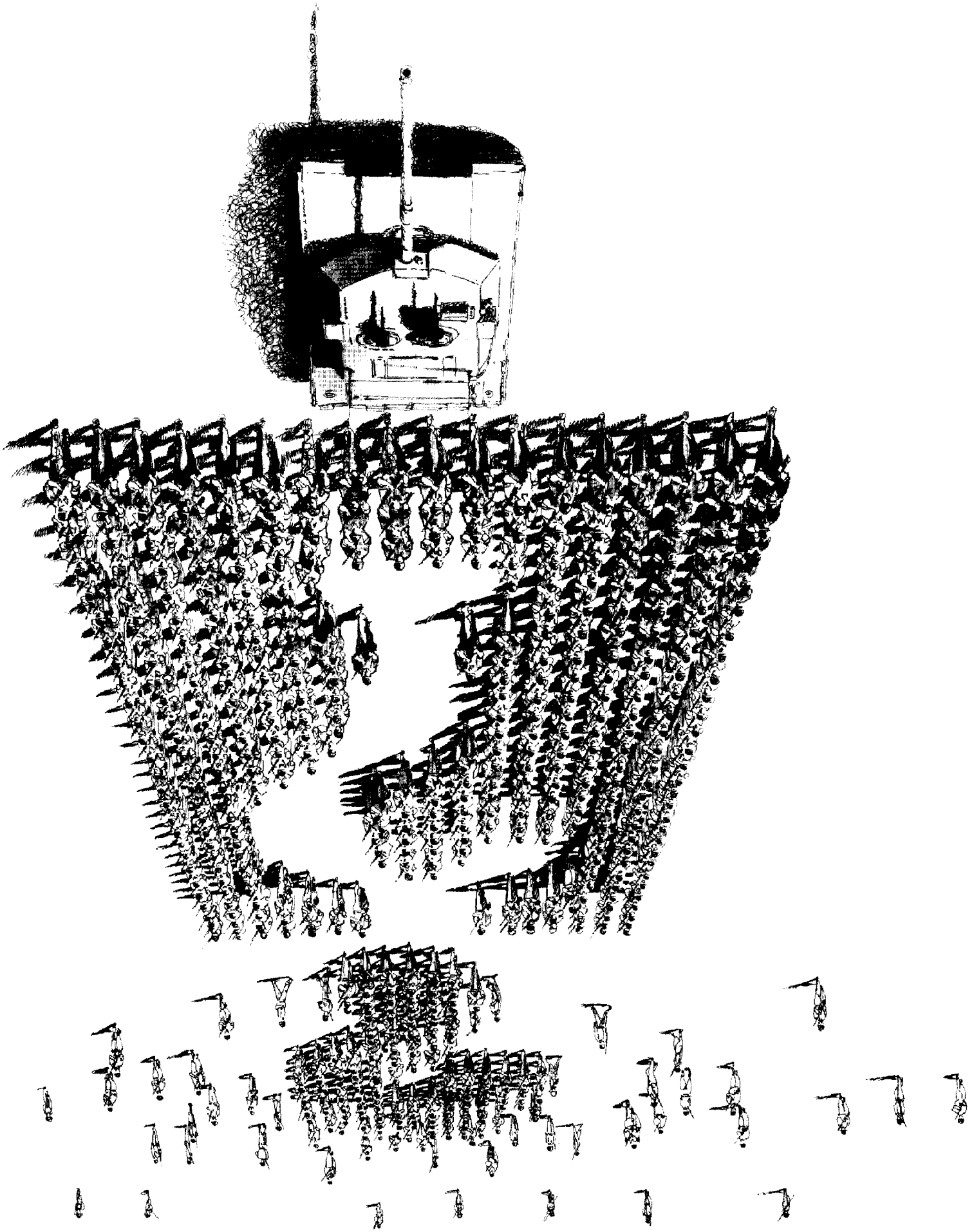
Such scenes might not have occurred but for something called the Total Force Policy. Adopted by the Department of Defense (DOD) in 1973, in the aftermath of Vietnam, this policy's primary objective has been to maintain as small an active peacetime force as possible by placing greater reliance on reserve forces. Not only are reserve forces less expensive to maintain, but the need for their participation in any major conflict was seen as a way of ensuring more widespread support among the American people once a war was under way.

CAROL R. SCHUSTER and CHARLES J. BONANNO are Assistant Directors in the Army Issues Area of GAO's National Security and International Affairs Division.

This strategy seems to have worked as intended during the recent Persian Gulf conflict: Reservists from so many walks of life were called to serve that a large number of Americans had a personal stake in the war.

At the same time, however, the Total Force Policy has recently come under vigorous debate. For one thing, separating average citizens from their everyday lives raised enough problems—care for the children of military couples; financial hardships imposed on some families accustomed to much larger incomes; the stripping of police, fire, and medical protection from small communities—that some have begun to doubt that the Total Force Policy is a wise approach. More importantly, questions about the policy have been raised by the Army's apparent reluctance to call on its combat reserves to serve in the Gulf.

While all the services have increasingly relied on reserves under the Total Force Policy, the policy's impact has been most dramatic in the Army: Today, members of the Army Reserve and the National Guard make up 52 percent of all Army personnel, including half of the Army's combat troops and about two-thirds of its support forces. Nevertheless, almost all of the 146,409 Army reservists called to active duty during the recent conflict



served in support rather than combat capacities. It was not until November 1990—and then only after some pressure from Congress—that the President called up a limited number of National Guard combat units. And these units were never deployed to the Gulf, but simply remained in training until the war was over.

Critics complained that this failure to call up and then to deploy the combat reserves was inconsistent with the Total Force Policy. These critics were right. According to the policy, combat missions should be assigned to reserve units only if they can be made ready to fight by the expected deployment date. And although the Army might argue that it never expected to have to deploy these units so quickly, the fact is that they were not deployed even after a considerable amount of postmobilization training—more than commanders had initially estimated would be needed to prepare them for combat. By its actions, then, even if not by its words, the Army was making clear that it did not consider these troops ready to deploy.

Almost all Army reservists called to active duty during the Gulf War served in support rather than combat capacities. Combat units that were called up were never deployed to the Gulf, but simply remained in training until the war was over.

Does this mean that the Total Force Policy doesn't work and should be scrapped? Not necessarily. The problem may be not so much with the policy itself but with how it has been implemented. In fact, GAO has found[1] that actions taken by the Army to equip and train its reserve forces over the past decade have not always been consistent with the Total Force Policy; moreover, weaknesses in program management and internal controls, as well as deviations from stated priorities, have prevented the Army from fully achieving the policy's objectives. The Gulf War has further underscored the contradictions between key principles of the policy and the Army's implementation of it. In particular, the risks of substituting less costly personnel, such as reserves, for their more expensive active-force counterparts have not always been fully assessed; reserves assigned to combat roles have not always been mission-ready by the expected time of deployment; and training of reservists has not always been adequate.

Substitutability

Because the Total Force Policy was intended to reduce the size of this country's active military force and the costs of maintaining it, it has been important to use active-duty personnel only for jobs that cannot be effectively performed by other individuals. Therefore, U.S. reserve forces and civilians, as well as workers ("host-nation personnel") from the countries where U.S. forces are stationed, are to be substituted for active forces whenever possible. Given DOD plans to reduce active Army personnel by about 200,000 over the next four years, this policy seems not only reasonable but probably the only way the Army can meet its wartime requirements.

But have these substitutions been effective so far? In examining Army restructurings of the 1980s, GAO found[2] that the Army may have made wholesale substitutions for active-duty forces without fully assessing the risks involved. The resulting weaknesses in the force structure were revealed during the Gulf War; if the war had lasted longer than it did, these weaknesses might have had troubling consequences.

For example, because responsibilities for supporting combat troops are concentrated in the reserve forces, and because of the three-week delay in calling up the reserves and the time required to ready them to deploy, there were some logistical shortfalls early in the deployment. Had hostilities erupted at once, sustaining combat troops would have been difficult.

Another problem had to do with the different categories of reserve forces and when they were called. The Army's reserve forces consist of the National Guard, the Army Reserve, and the Individual Ready Reserve (individuals who, rather than joining a reserve unit after their active-duty tour, simply join the IRR pool, which carries no training requirements). The Army counted on Individual Ready Reservists to bring many reserve units up to wartime strength when a partial or full mobilization was called. But the President did not call a partial mobilization providing access to the IRR until January 29, 1991—just three weeks before the ground war finally began. In the interim, some reserve units activated under the President's limited callup authority could be filled only by extensive transfers from other active and reserve units or by volunteers. In the end, many units left for the Gulf without their full complement of personnel.

The Gulf War also demonstrated that the shifting geopolitical situation in the world requires shifts in the Army's plans to rely on host-nation personnel. Because Army forces used to be geared toward the prospect of a major conflict in Europe,

the Army planned to rely heavily on German personnel to carry out many support functions, such as transportation. But there were almost no similar arrangements to employ Middle Eastern personnel. If the United States had not had extraordinary cooperation from its allies, serious logistical shortfalls would have occurred.

One questionable substitution the Army has made is to employ civilians to maintain the National Guard's equipment during peacetime. As a result of this policy, according to an ongoing GAO study, at least one Guard brigade training for the Gulf War was unprepared to keep its own equipment running effectively.

These examples are not intended to show that the Army's reliance on reserves, civilians, and host-nation personnel is misplaced. Rather, the lesson is this: If the Army decides to substitute other personnel for its active forces, then it should fully assess the risks involved and take steps to compensate for those risks. Furthermore, it must make sure that current laws allow for quick access to those reserves needed to fill out Army units. Otherwise, a war that rapidly escalated might find U.S. forces falling short.

Readiness

Another principle underlying the Total Force Policy is that key roles should be assigned to reserve units only if they *will* be called up by the President and *can* be mission-ready by the time they are expected to deploy. This principle appears reasonable and sound—even overly obvious, perhaps. Unfortunately, the Army has deviated from it in major ways.

The Army must make sure that current laws allow for quick access to those reserves needed to fill out Army units. Otherwise, a war that rapidly escalated might find U.S. forces falling short.

Probably the clearest example is the Army's callup of three National Guard "roundout" brigades. Divisions within the Army are divided into brigades (each of which contains 4,000 troops); brigades are divided into battalions; battalions are divided into companies. Two of the divisions that were deployed to the Persian Gulf are composed of two active-duty brigades and one National Guard brigade to be called up when needed to round out the division. But during the Gulf War, the Army was clearly reluctant to call up its National Guard roundout brigades. One of these—the 48th National Guard brigade from Georgia—was attached to the 24th Infantry Division, one of the first divisions to deploy to the Gulf. The 48th had trained with the 24th at the National Training Center; it possessed the most modern equipment, including Abrams tanks and Bradley Fighting Vehicles; and it reported that it would be ready to deploy after 28 days of post-mobilization training. Yet even after it had trained for 70 days, the Army still had not declared it combat-ready.

Actually, the Army's assessment was probably accurate. What violated the principles of the Total Force Policy was not the Army's reluctance to deploy these brigades but rather their lack of readiness. GAO observed the roundout brigades in training at the National Training Center and at Fort Hood and noted numerous deficiencies. For example, the 48th was short roughly 600 personnel, including 176 equipment maintainers whose participation was crucial. The brigades lacked certain individual and crew skills, which decreased their ability to perform collectively; for instance, additional gunnery training had to be provided to the brigades before they could meet the Army's standards. Leadership in the brigades was inadequate, since many of the noncommissioned officers had not received the necessary leadership training.

Similar problems cropped up on the support side, GAO found. At one mobilization site, units arrived without the required deployment plans for their equipment. Some equipment had to be shipped before logistics evaluations were made and equipment deficiencies were corrected. And certain units had to deploy using equipment on which they had never trained. At this site, Army personnel concluded that the majority of the reserve soldiers were unable to meet the Army's minimum physical fitness standards; lacked confidence in their ability to deal with nuclear, biological, or chemical warfare; and may have been unprepared to cope with the stress of combat. As a result, mobilization personnel questioned whether these reserve units would be able to accomplish their missions once deployed.

Another problem cropped up because of the Army's "first-to-fight" policy, which states that priority for manning, training, and equipping units should be established on the basis of which units are expected to see action first, regardless of whether they are reserve or active forces. Again, in principle this policy makes sense, and because of it the Army has placed a high priority on manning and equipping both active and reserve combat

units. It has not, however, placed as high a priority on preparing its support units. Ironically, the reserve combat units, which were given priority in equipment fielding, were not deployed to the Gulf, while reserve support units, shortchanged in peacetime, were among the first to be called up. Because these reserve support units had been authorized only about 90 percent of their required wartime personnel—and because many of them had been unable to recruit enough personnel to reach even this standard—extensive transfers of personnel and equipment were required for many units to deploy. In the end, these units had to deploy at lower readiness levels than their combat counterparts.

In addition to the question of whether reserve units can be ready, there is the more fundamental question of whether they will even be called. President Bush was the first president to call up the reserves in 40 years.

Finally, in addition to the question of whether reserve units can be ready, there is the more fundamental question of whether they will even be called. Although the policy states that units can be assigned combat roles "only if the units can *and will* be called up," such callups have been rare. In fact, President Bush was the first president to call up the reserves in 40 years. The Gulf War may mark a reversal of this trend; still, many observers question whether the President would have called up the reserves if the scope of the anticipated conflict had not virtually forced him to do so.

Training

Related to the entire question of readiness, of course, is the issue of training. A third key principle of the Total Force Policy is that reservists should be adequately trained for their missions by the time they are expected to deploy. But GAO's work has shown that reserve training strategies have not met this objective.

In particular, reserve combat organizations suffer from a number of problems that make it difficult to get adequate training done during the 39 days that are allotted for it each year. This comes to less than one-sixth of the time available to active units. Furthermore, administrative matters can consume as much as half of the training time on weekends.

Another problem is that most Army schools provide training in only some of the tasks considered crucial to proper job performance. For nearly one-third of the Army's 350 occupational specialties, Army schools provide less than 80 percent of the needed training. Large numbers of reservists occupy positions for which they have been taught less than 60 percent of the critical job tasks. Accordingly, a considerable responsibility rests with Army Reserve and Guard units to provide training in tasks not covered by Army schools. Although this same strategy is used to train active Army soldiers, it poses a much greater problem for the reserves because of their more limited training time.

An individual's transition from active to reserve status can also create gaps in training. Because some former active-duty soldiers join reserve units that do not need the skills they gained on active duty, about half of the National Guardsmen who enlist need retraining. But many of them never get it because they cannot afford to be absent from their jobs for the several weeks that retraining would require.

Training for reserves may also fail to prepare units for realistic battle conditions. For example, training in crew skills such as gunnery is not always adequate because soldiers get the opportunity to practice with live ammunition only once every two years; even then, the same firing ranges are used repeatedly, which allows soldiers to become so familiar with the courses that any assessments of their proficiency become unrealistic. Furthermore, reserve crews are not held to the same firing-time standards as the active Army. Other training problems crop up because of shortages of authorized equipment, lack of realistic training missions, failure to require units to demonstrate battlefield survival skills, and inadequate opportunities to train as a combined arms team.

These problems are all the more troubling in

light of the Army's lack of an accurate means of assessing the readiness of its units, whether active or reserve.[3] Once a critical early deployment role is assigned to a reserve unit, the Army should maintain an accurate, up-to-date evaluation of that unit's readiness. But GAO has found that, during the recent war, the Army could not depend on the accuracy of its own readiness reports. According to personnel at Army headquarters and major commands, inaccurate readiness reporting led the Army to wrong conclusions about the amount of training that units would need before they could deploy. At one mobilization site, *none* of the units that arrived for processing were at the readiness status indicated by the Army's official records.

Making the system work

The fact that the Total Force Policy has not been implemented effectively should not be taken as a reason to drop it. In fact, continuing pressures to reduce defense spending make increased reliance on reserve forces all the more necessary. Therefore, the Army should attempt to better achieve the policy's aims, either by lowering its expectations of what reserve soldiers can be capable of or by improving its implementation of the policy.

The fact that the Total Force Policy has not been implemented well is no reason to drop it. The Army should try to better achieve the policy's aims, either by lowering its expectations for reserves or by improving its implementation of the policy.

If it chooses the first option, the Army will need to reexamine the advisability of assigning early-deployment combat roles to the reserves. Thirty-nine days of training a year, especially used as they are now, may simply not be enough to get reserve soldiers ready to face combat. Similarly, a single training course, or participation in exercises conducted under unrealistic conditions, may not adequately prepare reserve leaders for the challenges of commanding combined arms teams. The Army may need to limit early-deployment missions to its active forces, with reserves carrying out later-deploying missions. Another wise step might be to avoid having entire 4,000-soldier roundout brigades composed of reserve personnel and instead to employ the roundout concept at a lower level, in battalions or companies, since smaller groups could better focus their peacetime training efforts.

If the Army selects the second option—improving its implementation of the Total Force Policy—it will need to take a hard look at how it can best overcome past shortcomings in preparing its reserves to carry out their missions. A first step should be to effectively implement the Army's Reserve Component Training Strategy, which was developed in 1989 to emphasize the training and development of reserve leaders and to focus the training of companies and battalions on selected critical missions.

Whichever of these two routes the Army takes, persistent budgetary pressures will require other changes in the Army's current strategies for staffing, equipping, and training its units. Some innovative approaches may be possible. For example, the further downsizing of the Army's active forces that is now planned should free up equipment and training funds for reserves. It may make sense to require different amounts of training for different types of reserve units: Combat units might receive more than they do now, support units less. Priorities for allocating resources may also have to be more clearly defined, with support units most likely to be deployed early in future conflicts being given a higher priority than at present. Above all, as it makes these and other changes, the Army will need to ensure that its actions further the integration of active and reserve forces, removing the barriers that unfortunately have not yet been broken down by the Total Force Policy. •

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1. *Army Reserve Components: Minimum Essential Equipment for Training Has Not Been Effectively Managed* (GAO/NSIAD-90-136, May 25, 1990). *Army Training: Management Initiatives Needed to Enhance Reservists' Training* (GAO/NSIAD-89-140, June 30, 1989).

2. *Army Force Structure: Lessons to Apply in Structuring Tomorrow's Army* (GAO/NSIAD-91-3, November 29, 1990).

3. *Army Training: Evaluations of Units' Proficiency Are Not Always Reliable* (GAO/NSIAD-91-72, February 15, 1991).

Chester E. Finn, Jr.

THE CASE FOR NATIONAL TESTING

Measuring what children learn will introduce a necessary principle to American education—accountability.

There are greater, more certain, and more immediate penalties in this country for serving up a single rotten hamburger in a restaurant than for repeatedly furnishing a thousand schoolchildren with a rotten education.

—U.S. Education Secretary William J. Bennett, 1987

IF WE HANDLED academics as we do athletics, our children would learn more. On the playing field, we find clear goals and high expectations, uniform standards, explicit rules, and referees to enforce them. We savor the keen sense of competitiveness and we applaud the resolute drive toward success and victory (so long as they operate within set limits of acceptable behavior and fair play). We employ coaches who understand that they must balance multiple objectives but that their top priority is to build a winning team. And when it comes to that team's actual performance, we receive prompt, ample, and precise information, data we can easily analyze a hundred ways—in relation to the immediate event, in the context of past performance, and in comparison with the performance of other teams.

In sports we also acknowledge the link between effort and results. Though luck intrudes now and again, players and coaches seldom attribute the final score to forces beyond their control or claim that they are hapless victims of broader social trends. Nor do we expect the score to go unnoticed. We know it matters.

CHESTER E. FINN, JR., is professor of education and public policy at Vanderbilt University and Director of the Educational Excellence Network in Washington, D.C.

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In the "real world," as on the athletic field, everyone understands that predictable consequences follow from success and also from failure. The entertainment industry is highly accountable to its audiences, whose reactions (duly influenced by reviews, ads, and hype) determine box office sales. Though we prefer to avoid wars, the military services are ultimately held to account for winning—or losing—them. Physicians and hospitals are judged mainly by their success in curing people, as trial lawyers are evaluated according to their courtroom results. Businesses of every sort are answerable to shareholders for profit and loss. Only in education do we downplay results.

Accountability means responsibility, not just for following set procedures, putting in time or going through the motions, not even for making a valiant effort, but for actually producing the desired results.

The idea of accountability

Accountability in any endeavor today means that specified goals or outcomes are supposed to be achieved, and that people throughout the organization are responsible for achieving them. Not just for following set procedures, putting in time or going through the motions, not even for making a valiant effort, but for actually producing the desired results.[1]

To be responsible for outcomes includes knowing that consequences will follow from one's success or failure. These may be pleasant or not, but without predictable and sure consequences there can be no true accountability.

Some consequences are internal, such as the pride or shame that one feels in a task deftly completed or egregiously bungled. As professionals, we like to think that this alone will motivate us. That is why we thrill to the exchange between Sir Thomas More and young Richard Rich in *A Man for all Seasons*:

> MORE: Why not be a teacher? You'd be a fine teacher. Perhaps even a great one.
>
> RICH: If I was, who would know it?
>
> MORE: You, your pupils, your friends, and God. Not a bad public, that.[2]

An accountability system, however, cannot rely exclusively on the incentives cited in Robert Bolt's memorable play to shape the behavior of adults, any more than we can count on love of learning alone to motivate youngsters to do their utmost in school. What transpires between one's conscience and one's Creator is irreplaceable, but it is never systematic and it isn't always sufficient. Most grown-ups pay the taxes they owe, but how scrupulous would we be if only God were watching and there were no earthly consequences one way or the other? The more important the outcomes for society, the more imperative it is to intertwine their accomplishment with sure rewards and punishments. Good things should happen to those who meet stated goals. But when targets are not reached or necessary results produced, interventions must occur. Something has to change, else the failure will repeat itself.

Back on the playing field, this is well understood. The champion athlete is applauded, hugged, slapped on the shoulder, lionized. She may receive a medal, see her name inscribed in the record books, be offered a college scholarship or a lucrative professional contract. But the student who may garner high marks and praise from her science teacher even though she hasn't learned much science is far less apt to be applauded by her basketball coach or teammates if she consistently fails to sink the ball. Instead she will probably be advised to work at her game, practice a lot, and try out again next year. Nobody calls this an accountability system. But that's exactly what it is.

Lodged between goals and consequences in any functional accountability scheme must be solid information about how well the goals of the enterprise are being achieved. In sports, this is as simple as the scoreboard and as complex as the lifetime batting averages and other intricate statistics kept by fans, journalists, and league officials. Without such information, goals are wishful thinking, not prods to action. I see accountability systems as tripods. To stand upright, all three legs must be in place: clearly stated goals, prompt and accurate information about progress toward them, and positive and negative consequences that follow from the information.

In the public sector

Government agencies and public services are generally less accountable than private organizations for the effectiveness of their performance and the quality of their results. We often explain this by noting that they enjoy near monopolies and have no need to break even, much less turn a profit. That combination can devastate efficiency and quality control, especially if the agency is staffed by people keener on job security than entrepreneurship or advancement.

These familiar explanations for public sector mediocrity are true to my own experience. During my years at the Education Department, for example, it appeared to me that little was done quickly, much was done sloppily, and when

Government agencies are accountable to the public, but for the wrong things. They "get attention," Steven Kelman writes, "when they do something scandalous rather than when they perform well."

rapid, careful work was done, perhaps 10 percent of the employees did 90 percent of it. There were virtually no consequences, there was no competition, and the taxpayer paid the bills regardless. When the money ran out, people took fewer trips and made do with older computers. When the duplicating machines went on the blink, no copies got made. When, occasionally, the agency ran out of envelopes, it simply stopped mailing things.

Par for the course, I surmised. There is only one federal Department of Education, after all, and its clients had neither recourse nor redress save to complain to Congress. Harvard Professor Steven Kelman offers a different analysis, however—namely that government agencies are plenty accountable to the public, but for the wrong things. They "get attention," Kelman writes, "when they do something scandalous rather than when they perform well." Therefore they

develop organizational rules and norms that reward caution, regularity, and impartiality rather than courage, creativity, or zeal. Kelman calls this the "bureaucratic paradigm," and suggests that if we want *efficient* government instead, we must "insist on good service with the same persistence [with which] we currently pursue corruption."[3]

This is a shrewd insight that also corresponds to my experience. One reason so little gets done with flair or zeal in public agencies is that so many people are checking to make certain that all rules and precedents are slavishly adhered to. At the Education Department, we never got into serious hot water with clients, constituents, or congressional committees (or with the department's umpteen internal watchdogs) for being sluggish, unimaginative, and repetitive. Trouble could be counted upon to descend in minutes, however, whenever we attempted to change an ancient routine, alter a priority, or decide something in a fresh way.[4]

Holding government agencies accountable for results grows even trickier when the services they provide are the kinds we need in reserve but would rather not have to use. Indeed, the longer some service providers are idle, the better off we are. Think of lifeguards, nuclear submarines, fire departments, or airplane crash investigators.

When services such as these are necessary, however, much as we prefer to minimize their use, we also want efficiency and good results on demand. A submarine that sends its missiles in the wrong direction is as useless as a police department that never solves a crime or a municipal hospital whose staff cannot suture a wound without infecting it. We generally insist that public as well as private endeavors be able to display outcomes as well as activity, that they yield value for money, and that they generate results that bear a palpable relationship to their goals. We are also inclined to reward and punish elected officials at the ballot box for the efficiency and the quality of the public services over which they preside.

Yet we're still so far from successfully implanting the ethic of accountability in most government services. That is why many people remain disgusted with public-sector waste and ineptitude, why it is possible to gain public office by running as an outsider or "against the government." Few agencies have internalized an obsession with results. The bureaucratic paradigm is so well entrenched that where it endures, the public employee feels responsible mainly for staying out of trouble, impartially delivering services, obtaining and deploying the necessary resources with regularity and evenhandedness, and not rocking boats.

School accountability

American education is slowly evolving into an outcomes-oriented enterprise whose institutions, employees, and policymakers will be held responsible for their results by the public they serve. That is the only kind of accountability worth having in 1991, certainly the only kind that bears any relationship to the premier education problem we seek to solve—namely, the weak academic achievement of our children. And in 20 years or so, I expect that the education system will have taken this to heart.[5]

But what a misery we are enduring in the meantime! It is no easier in public education than in any other government activity to replace the bureaucratic paradigm with a passion for excellence. We've been unwilling to trust the marketplace to do this for us. And we haven't often summoned the courage either to

"throw the rascals out" or to provide large incentives for superior performance.

For a very long time, schools and their employees were judged in terms of efforts, intentions, resources, and service delivery. They were accountable, to be sure, but for compliance with rules, orderly procedures, and resource allocations. Their own staffs and governing boards believed these were proper criteria by which to gauge their work. Besides, education is one of those public services with multiple missions. Who is to proclaim any of them supreme?

Few government agencies have internalized an obsession with results. Most follow the "bureaucratic paradigm," rewarding caution, regularity, and impartiality rather than courage, creativity, or zeal.

The result is a system unaccustomed to organizing itself around the efficacy of its efforts or the quality of its results.[6] Worse, our efforts to reconstruct it along different lines are occurring at the least propitious time imaginable—while our "no-fault" culture is insulating people from a sense of responsibility for the consequences of their own actions by encouraging everyone to believe they are the innocent prey of broad social trends and ineluctable forces. In the name of accountability, we are asking education to swim against its traditional paradigms and internal organizational norms while also battling the shifting currents of the zeitgeist.

My 20-year forecast may therefore be too rosy. If an accountability system resembles a tripod, it must be said that in American public education today, none of the three legs is sturdy. Achievement goals are vague, inconstant, and suspect. Reliable information feedback is extremely hard to obtain, and the profession resists most ideas for augmenting its flow. As for consequences: From the student's perspective, academic achievement is not a prerequisite for much, few tangible rewards come to those who study hard and learn a lot, and little suffering or ignominy befalls those who slide by with minimum effort.

Even deadlier for the quality of American education, the schools are not accountable for their institutional results, nor do those who lead and teach in them face large consequences for success or failure. "Teaching," noted Lamar Alexander, "is the only profession in which you are not paid one extra cent for being good at your job." "If you do a good job educating a group of students," Education Secretary William J. Bennett wrote in 1987, "nothing happens to you or for you. Similarly, if you do a bad job educating a group of students, nothing happens to you or for you."[7]

At the extremes something may happen these days, especially at the top end. An outstanding public school may get "recognized" by the Department of Education, win a grant from Coca-Cola or RJR Nabisco or the Joyce Foundation. A great classroom instructor may be designated "teacher of the year," honored by the National Science Foundation, or feted by Burger King. A dizzying array of recognition and accolade programs has sprung up in the past decade. Though these are welcome additions to an enterprise that paid scant attention to success over the years and that showed little respect for quality, they hover on the outside of that enterprise and are not part of its basic structure, its routine management, or its internal reward system. Most of them employ as criteria a generalized notion of "excellence," retrospectively applied, rather than concrete

targets toward which one can aim. There are not enough of these programs for 100,000 schools, in any case, nor are they big and intrusive enough to influence the actions of most U.S. educators.

If such honors and rewards are not felt in advance, they cannot serve as strong inducements to alter one's behavior toward particular goals. Receiving one is akin to winning the lottery or a MacArthur "genius award." It's a marvelous windfall when it happens, but there's practically nothing you can do ahead of time materially to improve the odds that this will happen to you. When tangible rewards are not winnable through the successful attainment of predetermined goals, they do not exert much incentive effect. Hence they will not make a great difference in people's actual behavior and performance and are not apt to boost the effectiveness of the enterprise as a whole. By my lights, therefore, they do not qualify as an accountability system for American education.

If we have not made satisfactory provision for fostering success through incentives and rewards, we're light-years further behind when it comes to predictable interventions in cases of failure. Negative consequences are few and far between in public education. If a teacher commits a felony or is chronically drunk, he may be disciplined or dismissed. But when did you last hear of a teacher being fired, fined, or even reprimanded because her students did not learn enough geology or German?

In a few jurisdictions, a chronically bad school or local system may be "intervened in" by higher authority. New Jersey's management takeover of the Jersey City system is the most famous instance of this rare occurrence. South Carolina has engaged in less drastic (but more frequent) interventions, Indiana runs a performance-based accreditation system that functions similarly at the building level, and Kentucky has built a version of this idea into its statewide reform scheme. As the 1990-91 year opened, the Massachusetts commissioner of education threatened to take over the Boston schools. "I would argue that the time is upon us," he said, "to question whether Boston has the capability of running its public schools."[8] Yet despite these and similar moves (or threats) in other places, we have no generally accepted doctrine of educational malpractice in the United States. We have constructed innumerable job security protections for school employees, but we have not made systematic arrangements for safeguarding students and taxpayers from pedagogical nonfeasance.

When a pilot takes off with a load of passengers after a late-night binge at the local saloon, we don't settle for being outraged; we bring him to trial, fine or jail him, strip him of his license, and dismiss him from his job—all this even though no mishap occurred. When Joseph Hazelwood ran the *Exxon Valdez* onto the reef in Prince William Sound, loosing an immense oil spill, he lost his job and, after a trial, was sentenced to 1,000 hours of community service and fined $50,000. When schools are operated in an unsafe manner, however, we do far less. Grinding onto an educational reef and spilling children's futures into the sea doesn't lead to much trouble for those in charge of the errant craft. In some systems the principal may be transferred to another building or demoted back to classroom teaching (in which role he or she almost surely possesses tenure protected by state law). But this cannot be taken for granted. Until new Education Chancellor Joseph Fernandez prevailed in the state legislature in 1990, for example, New York City's school principals had long enjoyed "building tenure." Try to imagine a law giving pilots "airplane tenure" or one giving doctors "operating-room tenure."

A somewhat different situation obtains in private education. Though school

goals may still be vague and information feedback sketchy, education's nongovernment sector functions amid palpable consequences. By whatever criteria parents and students appraise the performance of a private school, if they judge it to be educationally unwholesome they can take their business elsewhere. The marketplace thus creates demand-side consequences for private schools (and their employees) as tangible as those for restaurants, florists, automobile manufacturers, and magazine publishers. Those institutions that satisfy their customers flourish and—if they wish—grow. Those that deliver unsatisfactory products, poor service, or weak value for the money must either change their ways or shrivel and die. Marketplace forces, coupled with the flexibility of private schools to respond to them, create a partial accountability system for private education. This is the core of the closely reasoned and generally persuasive arguments of John Chubb and Terry Moe for revitalizing public education by building kindred features into *its* structure.[9]

Accountability in education does not consist entirely of pleasing the consumers, any more than it consists of cosseting the providers. Sating millions of individual appetites may not add up to a society that is prepared for the 21st century.

But student achievement can remain mediocre in "successful" private schools if their objectives are modest, standards low, information feedback incomplete or misleading, or the customers too readily satisfied. This is my main quarrel with those who view school choice as a silver bullet, a sufficient precondition for excellence. Fast-food outlets come and go as consumers choose among them, and nobody doubts that their marketplace is lively and responsive. But we can still wind up with an obese and malnourished populace if most of their customers are happy with a diet of burgers and fries.

Accountability in education does not consist entirely of pleasing the consumers, any more than it consists of cosseting the providers. The real stakes are higher. Sating millions of individual appetites may not add up to a society that is well prepared for the 21st century. I do not mean this as an elitist or undemocratic argument. Rather, it recognizes that education serves both private and public purposes and that it is possible to satisfy the former, at least in the short run, without doing justice to the latter, especially when so many people are content with the present performance of their children and schools. An accountable education system that also meets the larger society's quality needs has to have goals that are worth achieving, consequences that affect individuals and institutions at every stage and level of the system, and accurate information feedback that connects consequences to goals.

The information vacuum

American education is drowning in certain kinds of data about itself. The 1990 edition of the principal federal compilation of education statistics has 462 large pages displaying 31 figures and 360 tables. That's more information than we

know what to do with. Yet nearly all of it harks back to the bureaucratic paradigm of government in general and the traditional input-orientation of our education system in particular. Practically all of this flood of information has to do with resources and services. Where outcomes are tabulated, the measures mainly involve time spent, courses taken, diplomas and degrees received. These are worth knowing, to be sure, as they relate to some of the schools' multiple purposes. But they do not fill the bill in an era when our top priority is boosting cognitive achievement. It is learning outcomes, however, about which information is hardest to come by. And where we have relevant data, the data nearly always suffer from two basic weaknesses. Either they report results only for the country as a whole—data that are good to have but that do not lend themselves to accountability in a government structure where most management decisions are made below the national level. Or they report the achievement of youngsters in individual states and localities in ways that make it impossible to compare them with those in other jurisdictions, with national standards, or with international competitors.

Nowhere can American parents get their hands on information by which to assess the particular schools their children attend. Often, they can't get clear guidance on how their school system is doing.

Most exasperating of all, in few jurisdictions can parents obtain trustworthy information about their children's educational achievements in terms they can understand. Nor can they determine how well their children's school is doing in relation to other schools in town, or compared with state and national goals, or even in relation to its own past performance. When it comes to consumer information, the American education system has been engaged in a massive cover-up. If the Securities and Exchange Commission allowed publicly traded corporations to conceal this much data about their profits and losses, we'd have a crisis of investor confidence—and a lot of ruinous investments.

There are honorable exceptions, sometimes at the insistence of education officials, sometimes because state legislatures have demanded greater disclosure. Half a dozen states now issue or are developing "building report cards," by which parents (and the press and general public) can obtain important data concerning the performance of individual schools. California and Illinois pioneered this, and they've been joined by Connecticut, Louisiana, South Carolina, Alabama, and for a time, New Jersey. Kentucky's ambitious reform agenda also includes this feature. Properly done, such report cards are rich sources of school-specific information, including attendance and graduation patterns, honors and advanced-placement course-taking rates, the incidence of discipline problems, the placement of graduates, and, of course, the school's results on various tests and assessments.

Building-level reports remain the exception, however, and even when available they can only present such data as are gathered. Nowhere do they show employers how the performance of a job applicant relates to standards, such as those set by the Governors and the President in early 1990 as part of their National Education Goals (which grew out of the September 1989 "Education Summit" in Charlottesville, Virginia). Despite California's generally exemplary

work in student assessment, the head of the education task force of the state business roundtable advised a key legislator later in 1990 that "we have no state test results that are meaningful to us in assessing prospective employees."[10] Nor do school-level report cards make comparisons to neighboring states or foreign countries. Nowhere can American parents get their hands on such information regarding the particular schools their children attend. Often, they can't get clear guidance on how their school *system* is really doing, perhaps because some of the people providing the explanations don't know which end is up. "I'm not sure what is reasonable to expect," said the assistant superintendent for research and evaluation in Dallas, after test scores in that city declined in 1990. "It's a complicated issue that I don't pretend to understand, and I know more about it than most people in the country because I work with it every day."[11]

As for parents' desire to know how their children are faring vis-a-vis such gauges of success and adequacy, don't even bother asking. Unless, of course, you want the commercial standardized test results on which we can practically guarantee that your children will be above the national average. Or possibly you would care to move to England, where the Thatcher-era reforms include individualized annual written reports to parents that evaluate their children's performance in each subject of the new national curriculum—measured in relation to the new nationwide "attainment targets" for various age levels.

That we do nothing of the sort for American parents means that our school reform efforts are unlikely to improve student achievement, because they will not alter the behavior of all those complacent children and parents who today do not believe they have a problem that warrants change. They don't believe it because nobody has given them—and they generally cannot obtain even when they ask—the kinds of performance information that are most likely to get their adrenaline flowing. It's grand for the country to have goals expressed in terms of outcomes. But until those have some clear link to children's individual performances, the education reform rubber is not going to be in contact with the road.

I have observed and struggled against this unconscionable situation long enough to have grown a bit paranoid. I no longer believe that the data gaps and information flaws in American education are inadvertent or coincidental. Yet the reader new to this topic may think I exaggerate. After all, do we not see in the news every few weeks yet another account of yet another alarming study of educational outcomes? How could there possibly be a dearth of data?

Let me enlist as witnesses some of the policymakers who are living with the situation—a goodly distance from any given family, to be sure, but illustrative of how the problem looks on the big screen:

"Indicators of the quality and effectiveness of American education have consistently been lacking, especially at the state and local levels," reported the National Governors' Association in 1989. "Only at the national level have data been regularly collected on American students' knowledge and skills in various subject areas."[12]

In the words of the Council of Chief State School Officers in its 1989 compilation of education indicators: "Missing entirely from this report are state-level measures of student outcomes, the ultimate accomplishment of the educational system. Even the most rudimentary accomplishment—succeeding in getting students to school—is plagued by inconsistencies. . . . Most states have comprehensive programs in place for testing student achievement, but each state uses a virtually unique combination of tests and testing procedures."[13]

The Southern Regional Education Board (SREB) has identified 60 different gauges of educational progress that its member states are urged to use to track

their own performance. "Pursuing educational goals without indicators of progress," the SREB astutely notes, "is like traveling a highway without mileposts. We do not know where we are or how far we have to go." Yet in appraising the extant data base in its region in 1990, the board ascertained that "for many of the indicators, information is not collected or analyzed by states. The lack of common definitions . . . is a major obstacle for obtaining reliable comparative information. . . . [The] wide variety of tests used by states to measure student achievement makes state-by-state comparisons impossible."[14]

The acute shortage of outcomes information has devastating implications for any serious attempt to move American education toward specific goals. Goals fast turn to mush if we have no practical way of tracking progress toward them.

"No state," concludes Dr. Susan Fuhrman of the Center for Policy Research in Education, "has a fully developed system of indicators that relate educational inputs, process and outcomes. Hence, we are hindered in our efforts to describe the educational system (to assess the quality of teachers, for example), to measure progress toward policy objectives (to tell how much and what kind of math students are taking in response to graduation requirements, for example), and to examine interrelationships between policy and outcomes (to tell if increased coursetaking is associated with student achievement, for example)."[15]

This acute shortage of outcomes information has devastating implications for any serious attempt to move American education toward specific goals, including the brash effort by President Bush and the Governors. Goals fast turn to mush if we have no practical way of tracking progress toward them. Yet that is the present situation. When federal officials set out in early 1990 to identify indicators by which movement might be monitored toward the goals and objectives specified after Charlottesville, they came up with 90 candidates. For the great majority of these, some data are flowing for the nation as a whole. But even by the most generous interpretation of current activities and plans, there were only 16 for which *any* state-by-state information was visible in 1990; for most of these it is incomplete; and for some it only a gleam on the horizon. Yet the states bear primary policy responsibility for *achieving* the national goals. Without relevant data, their prospects for success are greatly reduced. As for wanting trustworthy information about where one's own child or the school down the road stands vis-a-vis these national goals, one must be ingesting something illicit even to conjure such a fantasy.

At the other end of the data continuum, we're in no better shape. Though international comparisons of student performance are probably the most revealing and motivating of all to policy makers and education officials, the world has no mechanism by which to assure that any more of these will produced in the future. A quasi-private organization called the International Association for the Evaluation of Educational Achievement and the wholly private Princeton-based Educational Testing Service have been the sources of most such data in the past, but each depends for successive assessments on uncertain grants from government agencies and private foundations. No established international organization generates information on student learning. And nobody in Washington is

responsible for changing this situation, even though one of the education goals set by the Governors and President cannot be monitored at all without comparative international data and another loses most of its oomph in the absence of such data.

A war on testing

These information vacuums, I suggest, are no accident. They result from omissions, hesitation, and avoidance over many years at every level of the U.S. education system. Much of the education profession, in fact, has been—and is today—waging war on testing and on the emphasis on outcomes that is associated with it.

This is not an all-out assault so much as a series of persistent and damaging guerrilla attacks. Rarely does anyone declare himself opposed to all imaginable forms of measurement and assessment. What we often encounter, however, are complex criticisms, whose gist is that "testing may be fine in its proper place, but I've never met a test I liked, or one that satisfies all the criteria that I believe are necessary."[16] This is akin to condoning just wars while never having seen one that deserved to be fought. To be unable to identify any test as worth giving is to suggest that no more tests *be given*, at least not now; not to test is not to know how much the children have learned or how good a job the system is doing with respect to cognitive outcomes; and for people not to know this is greatly to reduce the chances that one will be criticized, blamed, or suffer unpleasant consequences in light of those outcomes. Although those waging it protest otherwise, the war on testing is in considerable part a sustained battle against enforceable standards and an informed public.

Most of that public voices scant confidence in the capacity of the education system to solve its own problems and welcomes thoroughgoing changes in its traditional assumptions. In 1989, the annual Gallup education poll asked whether people favor requiring schools "to conform to national achievement standards

For outcomes to improve, changes must be made on the basis of what the information shows. But the opportunity, the understanding, and the obligation to make those changes is what accountability is all about.

and goals," "to use a standardized national curriculum," and to use "standardized national testing programs to measure the academic achievement of students." To these, the responses were overwhelmingly positive: 70, 69, and 77 percent, respectively, for the public at large, with parents indicating themselves to be even more favorably disposed.

As an education reform strategy, testing comes under the heading of "accountability" mechanisms—ways of furnishing parents, policymakers, and educators with accurate information about the efficacy of their efforts. Such information affords a way of tracking progress over time. It is also a powerful tool since what is measured is what gets attention. What is tested usually turns out

to be what is taught, what is studied, and what is learned. But testing is not a trouble-free solution to our educational ills. No single test is perfectly suited to all needs. High-stakes testing—when palpable consequences are linked to results—boosts the temptation to cheat. Nor does better information per se lead to better products; for outcomes to improve, other changes must be made on the basis of what the information shows. But the opportunity, the understanding, and the obligation to make those changes is what accountability is all about. •

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1. Obviously it's possible to define accountability in terms *other* than outcomes and results; building on the work of Henry Levin, Michael Kirst has laid out six approaches to accountability in education. Michael W. Kirst, *Accountability: Implications for State and Local Policymakers* (Washington, D.C.: U.S. Government Printing Office, 1990) and Henry Levin, "A Conceptual Framework for Accountability," *School Review*, Vol. 82, No. 3 (May 1974), pp. 363-391.

2. Robert Bolt, *A Man for All Seasons* (New York: Samuel French, 1960), p. 12.

3. Steven Kelman, "The Renewal of the Public Sector," *The American Prospect*, No. 2 (Summer 1990), pp. 51-57.

4. See also Chester E. Finn, Jr., "Policy, Interest Groups, and the Gang of 237," *Education Week*, May 10, 1990, p. 32.

5. Cognitive learning is not, however, the only domain in which schools are doing poorly and should be held to account for doing better. Karl Zinsmeister powerfully and correctly argues, for example, that guaranteeing physical safety in the school is a precondition for any real learning, and one that today is not being met in far too many situations. Karl Zinsmeister, "Growing Up Scared," *Atlantic*, June 1990, p. 49.

6. Outcomes accountability in education actually has a long history and has come in several waves, including a mid-19th-century British school-incentive scheme called "payment by results." Kirst tracks the modern revival of this idea to Leon Lessinger's 1970 book, *Every Kid a Winner*. I'm more inclined to trace it to the "old fashioned horse-trading" that the National Governors' Association proposed in 1986. Leon Lessinger, *Every Kid a Winner* (Palo Alto, CA: Science Research Associates, 1970). National Governors' Association, *Time for Results: The Governors' 1990 Report on Education* (Washington, D.C.: National Governors' Association, 1986).

7. Quoted in Thomas H. Kean, *The Politics of Inclusion* (New York: Free Press, 1988), p. 225. William J. Bennett, *Our Children and Our Country* (New York: Simon & Schuster, 1988), p. 224.

8. Diego Ribadeneria, "State Warns Boston of a School Takeover," *Boston Globe*, August 29, 1990, p. A1.

9. John E. Chubb and Terry M. Moe, *Politics, Markets and America's Schools* (Washington, D.C.: The Brookings Institution, 1990).

10. Sam Ginn, letter to California State Senator Gary Hart, June 4, 1990.

11. Joseph Garcia, "Iowa Test Results Meaning is Debatable, Educators Say," *The Dallas Morning News*, July 24, 1990, section A.

12. *The Governors' 1991 Report on Education: Results in Education 1989* (Washington, D.C.: National Governors' Association, 1989), p. 80.

13. Council of Chief State School Officers, prepared by Todd Landfried, *State Education Indicators, 1989* (Washington, D.C: Council of Chief State School Officers, 1990), p. 67.

14. Joseph D. Creech, *Educational Benchmarks, 1990* (Atlanta, GA: Southern Regional Education Board, 1990), p. 2.

15. Susan T. Fuhrman, "Legislatures and Educational Policy." Paper presented at the Eagleton Institute of Politics Symposium on the Legislature in the Twenty-First Century, Williamsburg, VA, April 27-29, 1990, p. 26.

16. See, for example, National Commission on Testing and Public Policy, *From Gatekeeper to Gateway: Transforming Testing in America* (Chestnut Hill, MA: National Commission on Testing and Public Policy, 1990); D. Monty Neill and Noe J. Medina, "Standardized Testing: Harmful to Educational Health," *Phi Delta Kappan*, Vol. 70, No. 9 (May 1989), pp. 688-697; Grant Wiggins, "A True Test: Toward More Authentic and Equitable Assessment," *Phi Delta Kappan*, Vol. 70, No. 9 (May 1989), pp. 703-713; James Fallows, "What's Wrong With Testing," *Washington Monthly*, May 1989, pp. 12-24; Lorrie Shepard, "Why We Need Better Assessments," *Educational Leadership*, Vol. 46, No. 7 (April 1989), pp. 4-9.

J. Dexter Peach

THE INTERNATIONAL DIMENSIONS OF DOMESTIC PROGRAMS

In College Park, Maryland: The GAO Annual Technical Conference, April 25, 1991

THERE WAS A time when we could draw clear lines between our domestic and our international policies. That time, however, has gone—perhaps forever. Major portions of our domestic policies in the areas of environment, agriculture, energy, and transportation are increasingly intertwined with the programs and policies of other countries. The result is that we can no longer evaluate the effectiveness of our domestic policies in a vacuum, but must take into account the interplay between our policy decisions and those of our international competitors and customers.

WE CAN NO LONGER EVALUATE OUR DOMESTIC POLICIES IN A VACUUM, BUT MUST CONSIDER THE INTERPLAY BETWEEN OUR POLICY DECISIONS AND THOSE OF OUR INTERNATIONAL COMPETITORS AND CUSTOMERS.

When did it all happen? Was it when we began to depend on other countries for more than one-half of our crude oil? Was it when the supersonic airliner allowed us to travel overseas in hours and satellites began to relay to us world events even as they occurred? Was it when other countries began to match our agricultural methods and our exports dropped and farm program support costs increased?

J. DEXTER PEACH is Assistant Comptroller General for Resources, Community, and Economic Development Programs. *He wishes to thank Larry Dyckman and Sharon Butler, who helped prepare these remarks.*

Was it when the financial markets became international in scope and events in Europe and Japan became as important to the world economy as events in the United States? It may not even be very useful to dwell on when the change occurred, because one thing is clear: We can't go back. To quote Tom Peters, one of the modern-day gurus of American management, "Though we still harbor fond memories of days when the rules of the game governed everyone but us, we are now, at best, 'one of the big players.'"

TWENTY YEARS AGO, WE UNDERSTOOD POLLUTION TO BE PRIMARILY A LOCAL, URBAN PROBLEM. NOW WE UNDERSTAND THAT POLLUTION KNOWS NO BOUNDARIES—EITHER OF PLACE OR OF TIME.

Environmental problems are the world's problems

Consider, first, our environmental programs. Twenty years ago, we understood pollution to be primarily a local, urban problem. But in the early 1980s, the phenomenon of acid rain changed that understanding. The discovery that sulfur dioxide spewing from coal-fired power plants in the Midwest was killing lakes and forests in other parts of the United States and in Canada made it clear that pollution knows no boundaries, either of place or of time. Wastes and toxic substances are carried by air and water currents far beyond their original sources. And the environmental damage that pollutants cause may not come to light for several years—or even several decades—when they finally accumulate in vulnerable parts of the ecosystem.

It is not just a matter of crossing borders, however; pollution encompasses the globe. The damage caused by chlorofluorocarbons (CFCs) was perhaps the first example of global pollution. CFCs damage the ozone layer in the upper atmosphere, which shields the world from the lethal ultraviolet rays of the sun. In 1985, two British scientists reported a seasonal thinning of the ozone shield over Antarctica. The "hole" has since grown to the size of the continental United States. The depletion of the ozone layer caused by the CFCs now being released may, in a generation, increase the incidence of cancer, damage crops, and kill off marine life half a world away. GAO has reported on the need to find safe substitutes for CFCs and has recently begun a study of the progress being made by the Department of Defense in phasing out its use of CFCs.

While uncertainty surrounds the issue of global warming, the phenomenon poses an ominous threat to the entire planet. The burning of fossil fuels, the destruction of forests, the production of certain synthetic gases—all these activities are contributing to the buildup of large quantities of "greenhouse" gases, especially excess carbon dioxide, in the upper atmosphere. These emissions trap heat

close to the Earth's surface and ultimately lead to global warming, a phenomenon that, depending on its extent, could result in the massive flooding of many low-lying countries. It could also dramatically upset agricultural activities worldwide.

A recent, long-awaited report by the National Academy of Sciences acknowledged that while global warming predictions are highly uncertain, a calamity is possible. The report concluded that policies to cut greenhouse gases are "relatively inexpensive insurance protection against the great uncertainties and the possibility of dramatic surprises." The United States—producing 21 percent of global emissions—is a major contributor of greenhouse gases, as are other industrial nations. In addition, the developing nations may contribute substantially to global warming in the future if they do not adopt policies designed to mitigate the problem. As GAO pointed out in several reports this past year, the United States by itself cannot solve the problem of global warming; it demands international solutions involving both the industrial and the developing nations.

On a positive note, several environmental problems have already led to international agreements and related legislation. Sulfur dioxide emissions—the principal cause of acid rain—are now not only the subject of domestic controls, but of agreements between the United States and Canada as well. Similarly, the amendments to the Clean Air Act contain provisions to implement the Montreal Protocol, an international agreement for the phasing out of chemicals that deplete the ozone. When hazardous waste legislation comes up for reauthorization this year, amendments are likely to include provisions implementing a 1988 international agreement to control worldwide shipments of hazardous wastes.

Altogether, the United States is now a party to some 30 multilateral environmental agreements. Even more treaties are expected in the future: Global warming and biodiversity conventions are already being prepared. An agreement on global warming will likely be particularly difficult to reach. Aside from the uncertainties over the accuracy of global warming predictions, attempts to limit Third World and developing countries' emissions of fossil fuels may be seen by them as deterring their ability to compete in the world marketplace.

Similarly, as our own regulations begin to incorporate the provisions stipulated in existing agreements, the question arises: Do these regulations undermine our competitiveness? Congress is concerned that while the United States may abide by the terms of its agreements, other nations may not. That would place us at a competitive disadvantage vis-a-vis nations that might take their obligations less seriously, since environmental restrictions can be costly to implement. On behalf of Congress, GAO is examining some of the more important treaties to determine how well other nations are monitoring and implementing them.

We have to look at the international ramifications of our domestic environmental programs for another reason, too: The pollution we export may one day return to haunt us. Each year, U.S. manufacturers export hundreds of millions of pounds of pesticides that are not approved for use in this country. At the same time, we import about 7 million tons of fresh fruits and vegetables each year, at least some portion of which carries residues of those banned pesticides. Current domestic programs are inadequate to deal with this international circle of poison—an issue GAO has begun to investigate.

Along the same lines, we are examining congressional concerns that U.S. firms are establishing plants in Mexico to manufacture or assemble goods for export back to the United States as a way of avoiding more stringent U.S. hazardous waste requirements. This is an extremely timely issue in light of the pending U.S.-Mexico trade agreement. We also anticipate examining the effectiveness of

U.S. environmental assistance to Eastern Europe. Following the enormous political upheavals there, we are now able to see the toll that years of unchecked industrial activity had taken on that region's environment. The United States, along with Western Europe, has been providing technical assistance and other aid to the region. We and other industrialized nations have begun to recognize that spending money to modernize industry in less-developed nations is often a cost-effective way of reducing regional and global pollution problems.

International competition in food and agriculture

International issues also figure prominently in our agricultural policies. The United States was once the breadbasket of the world. New Deal programs in the 1930s provided unprecedented support to American farmers as the world emerged from the Depression. Subsidies sought to bolster farm income, ensure an adequate food supply, and stabilize the farm economy. The result: a productivity boom that won preeminence for the United States in international agricultural trade.

But today, the U.S. share of the world's agricultural market is eroding. A new world agricultural economy emerged in the 1980s, at the expense of American agribusiness. The facts are telling. Over the last four years, the U.S. share of the world's wheat market has dropped from 42 to 29 percent. At the same time, the European Community's share has grown from 14 to 22 percent. Furthermore, countries we used to sell grain to—namely, China and India—have now become our competitors. Perhaps one of the most revealing statistics: In the early 1970s, only four countries—the United States, Canada, Australia, and New Zealand—were net exporters of grain. Today, the number of grain exporting countries has climbed to 27.

> POLICYMAKERS HAVE BEGUN TO PROMOTE A MORE MARKET-ORIENTED AGRICULTURAL POLICY, ONE THAT ALLOWS FARMERS TO RESPOND NOT JUST TO SIGNALS FROM THE GOVERNMENT, BUT ALSO TO SIGNALS FROM CONSUMERS.

More broadly, U.S. agricultural exports have not kept pace with the growth in world agricultural trade. The United States retains a 36 percent market share in bulk products, such as wheat and corn. But in intermediate products (for example, vegetable oils and refined sugar) and in consumer-oriented products (from fresh fruit to bakery goods to processed meats) the United States is behind. Moreover, consumer-oriented products are the fastest-growing segment of global agribusiness: In 1988, worldwide trade in these products totaled $136 billion, or

53 percent of all agricultural trade. And yet, at $11.2 billion in 1988, U.S. sales of consumer-oriented products accounted for only 8 percent of the world's agricultural trade and 28 percent of that of the United States.

America's loss of markets has been exacerbated by the 1930s-era programs still in place. These have encouraged the overproduction of crops and sometimes have set price floors for domestic products, allowing foreign countries to expand their own markets in this country.

According to Clayton Yeutter, former Secretary of Agriculture and former U.S. Trade Representative, American agriculture is still "simply farming the programs." In an effort to make the country's agribusiness competitive, policymakers have begun to promote a more market-oriented approach, one that allows farmers to respond not just to signals from the government, but also to signals from consumers. The 1985 and 1990 farm bills were steps in this direction, cutting federal farm programs by $13.6 billion and allowing farmers more flexibility to make planting decisions on the basis of consumer needs rather than on the basis of farm program considerations.

NO LONGER CAN WE ANALYZE DOMESTIC AGRICULTURAL PROGRAMS IN ISOLATION. WE NOW HAVE TO CONSIDER WHETHER THEY ARE ADEQUATE TO HELP U.S. AGRIBUSINESS MEET THE DEMANDS OF THE WORLD MARKETPLACE.

But those crafting domestic policy cannot ignore developments abroad. Market-oriented policies can help American agriculture regain its competitiveness only if foreign countries are open to U.S. exports. To date, many countries that heavily subsidize their farmers—most notably, European countries—have resisted agricultural trade reform. Under the General Agreement on Tariffs and Trade, the administration has been pressing for the liberalization of agricultural trade rules—lowering barriers to promote freer and fairer trade and a more level playing field. Whether these efforts will be successful is not yet clear. But if they are not, it could undermine the agreement reached in the 1990 farm bill to reduce the cost of federal farm programs.

The new global agricultural economy has profound implications for how GAO goes about its work. No longer can we analyze domestic programs in isolation. We now have to consider whether they are adequate to help U.S. agribusiness meet the demands of the world marketplace. We know already that the Department of Agriculture's export policies are ill-suited to this task—focusing primarily on how to dispose of surpluses in bulk products in response to changes in domestic farm policy or unfair foreign competition. Strategic marketing—identifying consumer needs and developing products and delivery systems to satisfy those needs—is crucial to competing in world markets. It is no longer good enough to grow the best bushel of grain: The variety, quality, and delivery of grains must match consumer needs. Still, as we reported in our general management review of the Department of Agriculture, the Department has yet to adopt a strategic marketing

approach that would enable it to lead U.S. agribusiness as an educator, researcher, and technical service provider.

The future prosperity of American agriculture is irrevocably tied to the nation's success in building and maintaining international markets. With that in mind, GAO now must chart the ways in which the federal government can enhance the competitiveness of American agribusiness abroad.

BECAUSE OF THE COUNTRY'S RENEWED DEPENDENCE ON IMPORTED OIL, THE UNITED STATES IS MORE VULNERABLE TODAY TO AN OIL SUPPLY DISRUPTION THAN IN THE MID-1980S.

An increasing reliance on foreign oil

Another issue closely linked with international developments is energy. The reason, of course, is that U.S. security relies so heavily on foreign oil and will rely on supplies from abroad even more in the future.

In the middle to late 1970s, the United States began its foray into energy policy development. It was then that the nation's petroleum imports first exceeded its domestic production. Subsequently, in the first half of the 1980s, the United States reduced its dependence on imported oil by cutting consumption and, in response to higher world oil prices, increasing production. These trends, however, were reversed in the latter half of the decade. Since 1985, U.S. daily oil consumption has increased by over 1 million barrels and, according to 1989 data from the Energy Information Administration, is now approaching the 1976 consumption level. Oil consumption is expected to continue increasing during the 1990s. By the year 2000, it will be an estimated 18.6 million barrels each day.

Similarly, since 1985, domestic production has decreased. Because of lower prices, domestic production of crude oil has fallen by about 1 million barrels per day. Again, this trend is expected to continue.

These two facts—increased consumption and decreased production—have combined to make the United States increasingly dependent on imported oil, especially oil from the strategically sensitive Persian Gulf, which has the world's largest concentration of proven oil reserves and most of the world's idle oil production capacity. By 1989, net daily imports of oil (gross imports minus exports) increased by about 3 million barrels per day over the 1985 level, to about 7.2 million barrels per day. It is projected that net imports will increase from 42 percent of total U.S. oil consumption in 1989 to 55 percent by the year 2000.

The United States is, of course, better able to respond to an oil crisis now than it was during the 1970s, when U.S. oil supplies were disrupted by the 1973-74 oil embargo imposed by the Organization of Petroleum Exporting Countries, as well as the 1978-79 Iranian revolution and the subsequent Iran-Iraq war. The Strategic Petroleum Reserve, which stores more than 580 million barrels of crude oil in caverns and mines in Louisiana and Texas, provides some insurance against potential oil supply interruptions and the impact they might have on the economy. Nevertheless, because of the country's renewed dependence on imported oil, the United States is more vulnerable today to an oil supply disruption than it was during the mid-1980s.

The nation's need to secure sufficient and reliable oil supplies necessarily draws GAO into the international arena. Indeed, the Iraqi invasion of Kuwait last August stirred new interest in Congress about U.S. energy security, and GAO has received numerous requests for analyses.

In response to one request, we are analyzing how prices suddenly increase when oil supplies are disrupted. We have found that the price of oil is now generally based on the futures market price at the time the oil is delivered in the United States rather than at the time it is loaded onto tankers in foreign ports. Furthermore, since the petroleum prices set by the futures market reflect what traders believe the future supply and demand for crude oil will be, even a small interruption in the world's supply of oil can trigger an immediate rise in domestic wholesale prices and, consequently, in retail prices at the pumps.

Increases in the price of energy have repercussions throughout the economy. An increase of one cent per gallon in the price of jet fuel adds $160 million to the airline industry's annual expenses. The price of consumer goods also rises since high fuel prices drive up the cost of transportation. If sustained, a five-dollar increase in the price of a barrel of oil can trim 0.5 percent to 1.0 percent from the country's gross national product. The U.S. reliance on oil imports, then, makes the country's economy vulnerable to events that may take place halfway around the world.

Related to these issues are our extensive studies of the Strategic Petroleum Reserve. If the reserve's purpose is to be achieved, during emergencies oil from the reserve must be quickly and effectively introduced into the market. Any operational delays encountered in drawing down the reserve can lessen its impact on oil prices and thus on stabilizing the U.S. economy. But we found operational problems with the reserve. For example, distribution of the oil could be hampered by the fact that there may not be enough U.S.-flag tankers to transport the oil between U.S. ports.

Responding to the world energy situation, the administration recently announced a National Energy Strategy. One of its themes is that our dependence on foreign oil is not as important as our economy's dependence on oil in general. The strategy points out that in 1979, when oil prices rose sharply, Japan, which is totally dependent on imported oil, suffered less economic damage than did Great Britain, which is self-sufficient. The strategy also confirms that, without new production, we and the rest of the world are likely to grow even more dependent on Middle Eastern oil in the future. The strategy recommends that, to enhance our energy security, we seek diversified sources of oil outside the Persian Gulf. It also includes proposals aimed at helping developing countries use energy more cleanly

and efficiently. For example, it recommends actions to promote the export of energy-efficient technologies and clean coal.

Given the impact that energy has on practically all phases of the world economy, GAO will continue looking for energy policy options to reverse current trends—by developing alternative fuels, for example, or by reemphasizing fuel efficiency in the transportation sector, the major consumer of oil. As we recently testified before a congressional committee, current energy prices do not cover all the costs to society of obtaining and using energy. For example, our heavy use of fossil fuels produces a range of adverse and expensive environmental consequences. We pointed out that relatively low energy prices reduce the incentives for developing and using energy-efficient technologies. With this in mind, we will support Congress as it carefully scrutinizes the administration's National Energy Strategy to ensure that the nation adopts policies and programs that help it profit from the lessons that should have been learned in the 1970s.

COMPETITION FROM FOREIGN AIRLINES IS A KEY ISSUE FACING THE U.S. AIRLINE INDUSTRY. GAO IS STUDYING THE POTENTIAL IMPACT OF EC 92 ON THE COMPETITIVENESS OF U.S. AIRLINES.

International events affect the transportation sector

The globalization of trade and economic activity has had a profound impact on U.S. transportation, especially the airline industry. Over the past decade, international air traffic has grown by more than 80 percent and, in fact, now exceeds domestic traffic. Thus, the market for worldwide travel is becoming increasingly important to U.S. airlines. Consider American Airlines as an example: In 1983, its routes outside the United States were concentrated in the Caribbean and Central America. Today, it also flies to the Far East, Europe, and South America.

Competition from foreign airlines, therefore, is a key issue for the U.S. airline industry. For example, GAO is now undertaking a study of the impact of the economic integration of Europe on the competitive position of U.S. airlines. By the end of 1992, the European Community is scheduled to become a single economic entity. While this will almost certainly lower barriers for European airlines flying

between points in Europe, it could also erect barriers against U.S. airlines serving European markets. Today, several U.S. airlines offer service between different European nations. But after 1992, the Europeans may well consider such flights to be service within the "Nation of Europe"; in exchange for allowing U.S. airlines to offer them, Europeans may demand for themselves the right to offer service between U.S cities. This practice—known as cabotage—is currently not allowed under U.S. aviation law.

Another question GAO is examining: Would allowing a greater foreign presence in the U.S. domestic airline market preserve competition? The shakeout of U.S. airlines in this era of deregulation might leave the United States with only three to five airlines, as additional carriers go bankrupt or merge with stronger airlines. We have pointed out that fares are about 25 percent higher at those U.S. airports where only one or two airlines handle most of the traffic. As more airlines leave the industry, the problems associated with market concentration will likely increase. Some industry observers suggest that the answer is to allow greater foreign investment in U.S. carriers—as the administration has proposed—or to permit foreign airlines to compete here.

But these solutions have both advantages and disadvantages. On the one hand, letting in foreign airlines could spur competition. Foreign airlines might also provide needed capital for financially ailing U.S. airlines. On the other hand, foreign airlines might constitute unfair competition for U.S. airlines because some foreign airlines are subsidized—that is, wholly or partly owned by their governments. Foreign investment in U.S. airlines has an impact on national security, too. U.S. airlines are required to supply aircraft to the Civil Reserve fleet in times of national emergency. During the Persian Gulf War, for example, two-thirds of our troops were flown to the Middle East on planes supplied by U.S. airlines. Would the United States be able to force such obligations on foreign airlines operating here?

A continuing international aviation issue highlighted by the Persian Gulf War is airline security—an issue GAO has visited many times. Following the loss of Pan Am Flight 103, we assessed the additional security measures taken by the Federal Aviation Administration at foreign airports. Passengers flying U.S. airlines are subject to longer and more thorough checks than those flying most foreign airlines. Screening may soon include a costly new thermal neutron analysis for plastic explosives. A major issue on the congressional agenda is not only who will pay for these screening systems and how well they work, but also what competitive problems U.S. carriers will face due to the fact that foreign airlines generally do not have to bear these costs or follow the same security procedures.

As international travel increases, questions arise about the standardization of international air traffic control procedures—something that bears on both safety and travel efficiency. Because differing and often antiquated air traffic control systems operate in many nations, the United States has an excellent opportunity to take the lead in this area by helping other nations apply the lessons it has learned in modernizing its own system.

Competition from abroad affects not only the airline industry but the ground and sea transportation industries as well. After pioneering high-speed ground transportation research in the 1950s and 1960s, the United States cut federal research funds, thereby forfeiting its leadership position to other industrial nations.

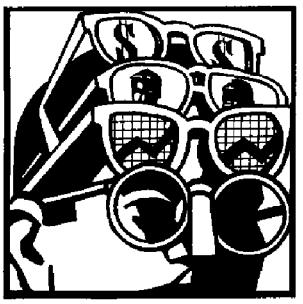
As a result, technological innovations in high-speed ground transportation by Japanese and European firms are now being considered for adoption here to help us deal with our highway and airport congestion problems. The French are operating high-speed trains that have attained speeds of 300 miles per hour, while the Germans and the Japanese are developing a whole new ground transport technology—magnetic levitation (MAGLEV) systems. GAO is studying alternative approaches for siting MAGLEV systems in the United States. The principal issue facing the United States is whether the perceived social benefits from high-speed ground transportation systems justify their enormous application costs.

In the maritime area, the long decline in the size of the U.S.-flag fleet represents a potential threat to America's competitive position in international trade. Our national security is also affected. The need to maintain an adequate U.S.-flag fleet became evident during the Persian Gulf War, when essential sealift capabilities were barely sufficient to support our military operation. Our fleet has declined over the years largely because U.S. shipping companies could not compete with the low wages and government subsidies that characterize the operations of foreign firms. As the Secretary of Transportation recently commented when he released the administration's National Transportation Policy, which deliberately omitted a discussion of maritime policy, we cannot come to grips with our problems in this area simply by dealing with domestic issues.

WE WILL ALL NEED TO BRING A BROADER, MORE GLOBAL FOCUS TO BEAR AS WE ATTEMPT TO RESOLVE THE MANY "DOMESTIC" PROBLEMS THAT AFFECT OUR NATION'S HEALTH AND LIVELIHOOD.

A broader, global focus

Even as brief a survey as the one I have presented here demonstrates that the line between domestic and international issues is disappearing. As a nation, we must consider the international implications of environmental, agricultural, energy, and transportation issues in relation not just to the economy but to all aspects of our national well-being. Congress, the administration, and GAO will need to bring a broader, more global focus to bear as we attempt to resolve the many "domestic" problems that will affect our nation's health and livelihood. •



QUALITY TIME

Andrea Gabor

THE MAN WHO DISCOVERED QUALITY: HOW W. EDWARDS DEMING BROUGHT THE QUALITY REVOLUTION TO AMERICA—THE STORIES OF FORD, XEROX, AND GM

New York: Random House/Times Books, 1990. 326 pp.

By Gilbert M. Mayhugh

W. Edwards Deming has often been referred to as the "genius who revitalized Japanese industry." In the United States, however, his reputation has not been widespread until the past decade, when concerns about declining U.S. economic competitiveness have triggered greater interest in his ideas about organizational management and quality processes. Still, the American reaction to Deming's philosophy tends to be mixed. Many laud his approach as an excellent means of boosting quality and productivity, while others see it as antithetical to fundamental American values. Who is right? And why have this man's ideas been so attractive yet so controversial?

Andrea Gabor, a senior business editor at *U.S. News and World Report*, discusses Deming's philosophy and its implications for America's position in the international economy of the 1990s. At the center of Deming's approach are his Fourteen Points of Management Obligation—a set of principles for ensuring quality by anticipating and meeting the desires of the customer. Deming makes clear that these 14 points constitute a carefully integrated package. An organization cannot pick and choose which it will implement and which it will not; *all* of them are necessary for an organization to operate with an overall continuity of purpose.

A key feature of Deming's approach is the involvement of every employee, division, and supplier in the effort to anticipate and meet customers' needs. All workers are empowered to make continual improvements in their contributions to this effort; workers seek ways to add value to the quality of the organization's performance. Management's responsibility is to continually solicit suggestions from employees and to act upon those suggestions.

Deming compares an organization that has accepted his principles to an orchestra playing a symphony. Each organizational unit is like a musical instrument. When each understands its specific role and its contribution to the overall performance, and when all the parts work together harmoniously, the organization does not merely satisfy its customers—it elates them.

Although Deming's philosophy may sound simple, it is very different from traditional American management. Implementing it will require radical transformations in management philosophy and practices. Therefore, it is not easy to put into practice. Gabor discusses several companies that have tried to do so, including Ford, Xerox, and General Motors.

In the early 1980s, Deming angrily asked a group of Ford executives, "Why can't America compete?" He attributed 85 percent of the company's problems to management. This kind of characterization often startles and upsets Deming's listeners, provoking them to justify their past actions and to question his knowledge and understanding of organizational dynamics. Deming typically counters with an example, such as a bank in which tellers are doing their jobs poorly. These poor performances, Deming states, are symptoms of much larger problems that haven't been addressed. One needs to ask: Do the tellers understand their jobs? Have education and training been provided? Are the existing recognition and reward systems designed to create open communications, teamwork, and a comfortable rather than fear-ridden atmosphere? Do tellers feel empowered to

GILBERT M. MAYHUGH is Deputy Director for Quality Management in the Office of the Comptroller General, GAO.

work well and to make continuous improvements in the service they provide to customers? Deming would say that the answers to these questions are the result of policy decisions made in the boardroom—which is also where solutions to employee performance problems must originate.

One of the most controversial steps that Deming advocates is the elimination of the annual employee rating system. The majority of companies that implement Deming's principles save this one for last, since many managers want to feel they can control performance. What they need to implement, instead of more traditional employee rating systems, are performance feedback systems that provide continuous information on the quality of products or services and the impact of that quality on the organization's customers.

One company that eliminated its annual ratings system—Powertrain, a division of General Motors—realized that it must also change its policy on merit pay. Powertrain management spent years studying alternatives to its current performance appraisal and merit pay systems. Most recently, they are tending to favor an approach similar to that of many Japanese companies, in which compensation is based largely on rank, expertise, and years of experience rather than on "merit."

Other top executives have reached similar decisions. William Hodgson, former director of the Medical Research Division of American Cyanamid, has also made the break from performance-based pay. As Gabor puts it, "It's not that Hodgson can't identify high performers—rather, he is convinced that from the standpoint of overall productivity, it isn't useful to make those distinctions. . . . Making fine-line distinctions, he says, will just turn people off." According to Tom Laco of Proctor & Gamble, a company that is reevaluating its appraisal policy, "real satisfaction comes from accomplishment and . . . Total Quality Control (the Japanese version of Deming's principles) . . . helps everyone get superior results." Many companies have implemented or are testing alternative reward and recognition systems to emphasize teamwork and openness to new ideas, to remove barriers between employees and management, and to encourage that quality be built into every work process. This requires that employees hold themselves accountable for performing quality work at every stage; it's not enough to inspect for quality once a product is completed or a service is delivered.

Although Gabor presents a wealth of information on Deming's philosophy, she reserves final judgment on his approach. She points out that it took Japan more than 25 years to become a leader in quality, productivity, and competitiveness, whereas U.S. companies have been pursuing this goal for less than a decade, with setbacks as well as successes. Do U.S. companies and government organizations have the commitment and patience to become truly world-class? In Gabor's view, "the true success will become evident—when it becomes clear whether the company's yen for improvement has survived the man who inspired it."

I would recommend Gabor's book as an update on selected companies' implementation of Deming's philosophy of management. But I feel the book does have a significant shortcoming—its failure to adequately discuss what Deming refers to as "profound knowledge." Deming emphasizes the need for managers and leaders to gain profound knowledge by studying the phenomenon of systems, the theory of variation, the theory of knowledge, and the science of psychology. Without this profound knowledge, leaders will have no theory to guide their implementation of quality management—no framework to help them tailor an approach that fits their organizations. *With* profound knowledge, however, managers will be in a strong position to lead their organizations through the changes Deming advocates.

If they are properly applied, I believe that Deming's principles can strengthen America's ability to compete internationally. His approach deserves continued study and custom-tailored application to organizations that are striving to achieve—or regain—world-class prominence. •

CHECKS AND BALANCES

Mark A. Peterson

LEGISLATING TOGETHER: THE WHITE HOUSE AND CAPITOL HILL FROM EISENHOWER TO REAGAN

Cambridge, Massachusetts: Harvard University Press, 1990. 342 pp.

By Robert Homan

How are laws really made in this country? Conventional wisdom maintains that America's chief legislator is not Congress but the President. Those who hold this view stress the formal separation of powers between the executive and legislative branches of government and see the law-making process as a "zero-sum game of power" that the President usually wins. That the President should dominate Congress in this way is considered appropriate and necessary, since the President is elected by the nation as a whole and therefore, presumably, personifies the national interest.

But, according to Harvard professor Mark Peterson, this "presidency-centered perspective" is inaccurate. In its place, he offers what he calls a "tandem-institutions perspective." As Peterson sees it, the law-making process involves much more cooperation and consultation between the White House and Congress than is usually acknowledged by scholars, textbooks, or the media. For example, legislative proposals planned for a President's State of the Union message are often discussed beforehand with Members of Congress and their staffs, at whose suggestion proposals may be modified or even deleted before the speech is presented.

Such consultation is common, according to Peterson; he cites many instances of it that came up during his interviews with former government officials. One domestic policy aide from the Carter administration recalled an occasion when he, two senators, and their staffs negotiated a trucking deregulation bill "pretty much line by line." Communication between the White House and Capitol Hill may also occur during hearings, social gatherings, and telephone calls.

How Congress reacts to legislation proposed by the White House depends partly on the communication style of the President in office. Jimmy Carter, for instance, was criticized for not consulting Congress before proposing legislation—particularly during the first two years of his term—and for neglecting to stroke egos on Capitol Hill. By contrast, Lyndon Johnson's personal communication technique was, according to some observers, to "wear out the telephone." One Johnson advisor recounted a story about the President calling a senator at two-thirty in the morning. "How are you doing?" the President asked, as if he had phoned in the middle of the day. The senator responded, "I was just lying here waiting for you to call me, Mr. President."

Other factors besides communication style also come into play. According to Peterson, presidential consultations with Congress are most likely to occur and to have a positive impact when the issues at hand are of considerable importance both to the White House and to Capitol Hill; when the President and Congress are willing to cooperate; and

ROBERT HOMAN is an evaluator in the Government Business Operations Issues group in GAO's General Government Division.

when the President wants a quick legislative solution, is not constrained by campaign promises, and is disposed to working with Members of Congress.

Peterson backs up these generalizations with extensive research. In addition to conducting interviews with more than 100 participants in and observers of the legislative process (including presidential and congressional staff, journalists, and two former presidents), Peterson also analyzed nearly 300 of the White House's domestic legislative initiatives and the congressional reactions to them, from the Eisenhower years all the way through to the Reagan administration.

Peterson divides these initiatives into five major categories, depending on their outcomes. The first, inaction, is the most common (occurring in 25 percent of these cases), since most bills never emerge from the congressional committees to which they are referred. The second most common outcome (24 percent) is consensus, which occurs when both Congress and the President agree on a stated goal, such as the education initiatives that followed the Soviet Union's launch of Sputnik. Third (20 percent) is opposition dominance—Peterson's term for congressional blocking actions, including majority votes and filibusters, that succeed in preventing Presidents from getting anything they propose. The fourth most common outcome (19 percent) is compromise—the bargaining that occurs when both sides have something to trade. Finally, the least common category (11 percent) is what Peterson calls presidential dominance, which occurs when Presidents get everything they propose; examples include Reagan's tax- and budget-cutting bills and Johnson's civil rights legislation.

These findings, Peterson argues, support his tandem-institutions perspective. Conflict—that is, presidential dominance or opposition dominance—occurred in fewer than one-third of these cases, whereas cooperation in the form of compromise or consensus was the outcome in 43 percent of them. Not surprisingly, consensus and presidential dominance were most common during the first year of a presidential term—the so called "honeymoon" period.

Of the seven Presidents in Peterson's study, Reagan (through 1986) was the most successful at getting his domestic initiatives passed as introduced (27 percent), and Carter was least successful (2 percent). Yet Peterson cautions that these percentages do not necessarily reflect political skills or presidential leadership. Rather, he reminds the reader that circumstances beyond Presidents' control influence congressional responses to their initiatives. The legislative initiatives of other Presidents in Peterson's study also had low success rates—5 percent for Nixon and 6 percent for Ford. This pattern further undercuts the traditional presidency-centered perspective and bolsters Peterson's point about circumstantial influences.

One circumstance that clearly affects lawmaking is Congress's own committee structure. Over the 30-year period that Peterson studied, the number of congressional committees and subcommittees increased dramatically—and so did instances of congressional inaction. Moreover, presidential dominance over budget initiatives declined precipitously after the passage of the Budget and Impoundment Control Act of 1974, which created budget committees in both houses of Congress. According to Peterson, Congress consented to 40 percent of presidential budget initiatives before the act; from its passage through Reagan's first term, it consented to none, except through the process of reconciliation. Others are likely to disagree with some of Peterson's conclusions, pointing to the increasingly confrontational relationship between Congress and the presidency from Nixon on, and the ability of the Reagan administration to define the policy agenda and to dominate the policy-making process—including the budget.

Although a tandem-institutions style of legislating seems to be an obvious approach in a democratic system, it may at times yield outcomes that appear decidedly undemocratic. For instance, bargains struck between the President and Congress may include provisions favoring specific Members of Congress or interest groups, which then get written into law. Such favoritism is of course an easy target for critics of the system.

On the whole, however, the tandem-institutions model seems conducive to democratic outcomes. The fact that Congress's power counterbalances the President's is beneficial to American democracy, Peterson suggests. If the diverse viewpoints that exist in this country are to have an impact on the legislative process, one single individual—even the President—must not wield undue influence. Instead, Congress, whose membership reflects multiple points of view, "must play a significant part in the development and evaluation of public policy." •

WAR AND CULTURE

Paul Fussell, editor

THE NORTON BOOK OF MODERN WAR

New York: Norton, 1991. 830 pp.

Paul Fussell

WARTIME: UNDERSTANDING AND BEHAVIOR IN THE SECOND WORLD WAR

New York: Oxford University Press, 1989. 330 pp.

By Jeffrey Itell

In the aftermath of the Persian Gulf War, the overwhelming defeat of the Iraqi Army and the sparseness of allied casualties have induced an almost endorphin-like rush of American pride and confidence. Consequently, it will be some time before most U.S. citizens fully contemplate the horrors of this most modern of wars as it was experienced both by frontline Iraqi troops and by allied troops engaged in fierce combat. Americans may have glimpsed these horrors in the accounts of the capture and confinement of allied soldiers or in the descriptions of Iraqis trapped in the traffic-jammed roads leading from Kuwait City—roads that became killing fields. But most people will probably try to overlook the horror and focus instead on the military success.

In his books on modern war, Paul Fussell—a literary scholar and critic who was severely wounded during World War II—strongly argues against taking such a scrubbed and disinfected view. Fussell commented in a February *Washington Post* interview that Americans don't appreciate the reality of war because, over the past century, it has been so distant a phenomenon. "It's fun if you don't have to fight in it. It's like a game, it's like a big adventure. The whole war would change if Iraq would bomb Washington." Iraq didn't, of course; and Fussell predicted that the Iraq War "will be more sanitized even than the Second World War, because the technique of sanitizing has been highly developed and it's more sophisticated than it was before."

Fussell's goal in these two books is to strip modern war of its romance, its gloss, and its euphemisms—that is, to tell the story of war as the combatants see it. Ironically, Americans tend to describe their games as wars and their wars as games. Football players *throw bombs, fight it out in the trenches*, and *blast through defense lines*. In war, on the other hand, Americans *engage, neutralize*, or *pacify* (attack or kill) the enemy; soldiers become *casualties* (are killed or maimed) or suffer from *combat fatigue* (madness).

What Fussell does—in his own writing and in his compilation of other people's—is to disclose the unpleasant truths lurking beneath these euphemisms. As a result, neither of these books makes for light reading. But both provide valuable insights into the conduct of modern war.

The Norton Book of Modern War is the more comprehensive of the two volumes. An anthology of letters, poems, and excerpts from memoirs, novels, and contemporary journalism, the book encompasses the Spanish Civil War, both world wars, and the Korean and Vietnam Wars. Fussell succeeds in arranging the selections to provide a chronology of events and to convey a sense of the wars' scope. He is less successful, however, at offering a broad range of viewpoints. Most writers included are either British or American, with a few Germans along the way. There are no Japanese entries for World War II, and only one Vietnamese memoir from the Vietnam War.

Another deficiency—one that Fussell notes and laments—is the virtual absence of accounts of the Korean War. Fussell speculates that "perhaps the war followed too closely on the Second World War, so that the Korean horrors could seem already too familiar to require literary exposure."

Despite these omissions, Fussell's selections are compelling—at times, exhausting. From the First World War, he includes the expected excerpts from Robert Graves, Siegfried Sassoon, and

JEFFREY ITELL is a senior evaluator in the Food and Agriculture Issue Area of GAO's Resources, Community, and Economic Development Division.

Erich Maria Remarque. But he juxtaposes these with the memoirs of professional, rank-and-file soldiers such as Frank Richards, whose understated description of trench warfare demonstrates that skill and serendipity play equal parts in determining an individual's survival.

Among the standouts of the World War II collection is Eugene B. Sledge's account of the first two days of the Marine Corps assault on Peleliu. After a brutal beach landing, Sledge's platoon moved inland, facing constantly escalating dangers from well dug-in Japanese troops and from heat, disease, and shortfalls in supplies. Sledge's skillful recreation of these harrowing events makes for strong drama.

Of the Vietnam-era selections, I was particularly struck by Keith Walker's interviews with women veterans. Note Maureen Walsh's account of how combat duty as a Navy nurse hardened her, and of how she eventually reached some accommodation with the horror of her wartime experiences. "Well, what can I say, I did come back from the holocaust, from that horrific experience over there, with a very peaceful philosophy, a very changed value system about life and death."

In his earlier book *Wartime: Understanding and Behavior in the Second World War*, Fussell uses the same types of sources to develop his thesis that modern war is basically a series of criminal blunders and slaughter. During World War II, Americans expected that they could win because of their superior mobility and technology. As a retort to this assumption, Fussell approvingly quotes one of Evelyn Waugh's diary entries: "They are saying, 'The generals learned their lesson in the last war. There are going to be no wholesale slaughters.' I ask, how is victory possible except by wholesale slaughters?" *Wartime* is devoted to proving Waugh's view correct. For example, Fussell mocks "precision bombing" as an activity as likely to kill friends as foes.

Fussell also spends many pages examining the interactions between war and culture, with chapters on alcoholism among troops, the "ideological vacuum" in which soldiers fought, and the use of popular media to "accentuate the positive" and "speak with one voice." In particular, Fussell criticizes the media and celebrities for shielding citizens from the horrors of war (a practice he shows was not common before the 20th century). As he observes, a "peruser . . . of the picture collection *Life Goes to War* (1977), a volume so popular and widely distributed as to constitute virtually a definitive and official anthology of Second World War photographs, will find even in its starkest images no depiction of bodies dismembered. . . . The letterpress correspondents, radio broadcasters, and film people who perceived these horrors kept quiet about them on behalf of the War Effort. . . . By not mentioning a lot of things, a correspondent could give the audience at home the impression that there were no cowards in the service, no thieves and rapists and looters, no cruel or stupid commanders."

Despite his convincing portrayal of the realities of war, Fussell's books should be read with some skepticism. For instance, his assertion that soldiers are either duped or coerced into war through misinformation or propaganda overlooks the fact that patriotism and ideology can serve as motivations. Fussell's conclusions—especially those about the Second World War—are too much colored by a Vietnam War-era cynicism.

Throughout both books, Fussell reiterates his opinion that the objectives of wars are always misguided. He argues that although Woodrow Wilson undertook the First World War to make the world safe for democracy, all the war did was make the world safe for Hitler. And Fussell points out that the Second World War, ostensibly begun to safeguard Poland's independence, ended with the delivery of Poland to the control of the Soviet Union. Consequently, he sides with Ernest Hemingway, whom he quotes in *The Norton Book of Modern War* as saying, "Never think that war, no matter how justified, is not a crime."

But I think that, in order to justify his conclusions, Fussell misreads history. Hitler was not able to rise to power because of the allied nations' aims in World War I but because of their subsequent inability to secure regional peace. And few would argue that the Second World War was fought solely over Poland; rather, it was a clash of ideologies in which accommodations had to be made with communism in order to defeat fascism. War may be an absurd way to settle these types of disputes, but it also may be the only way available. Therefore, although Fussell makes a meaningful contribution by showing that war is always stupid, he does not convincingly demonstrate that war is always criminal. Showing the stupidity, however, is achievement enough. •

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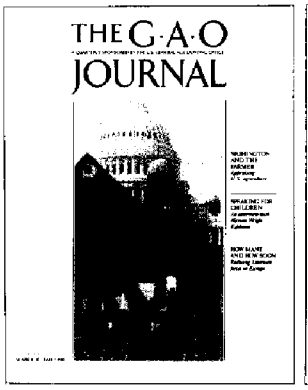

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