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Chapter 8

Resolving the Conflict Between Cultural Values and Limited Resources in Providing Health Services to the Elderly

Sylvester J. Schieber

Mounting costs of health care in the United States have stimulated an increasing interest in the allocation of health care services. The discussion about the allocation of health care resources has proceeded down two distinctive paths. One focuses on the macroallocation of resources to the health care sector of our economy. This path generally concludes with the idea that the sustained high growth of the health care sector relative to other sectors in the economy must be curtailed. This conclusion implies that the aggregate flow of resources to the health sector should be stabilized or even diminished, which, in turn, implies that some health services currently available for delivery may be not be available to everyone in the future who might benefit from them.

The other path focuses on the microallocation of resources in the health sector and the ethical issues raised when a wealthy society limits the resources used to sustain individual lives. Microallocation of health care resources is often construed, sometimes pejoratively, as rationing. This path often concludes with the idea that imposing rationing on the health sector is unacceptable. Proponents argue that the emphasis should be on making the existing system of delivery more efficient by simplifying administration and eliminating ineffective services to free added resources for the delivery of necessary care. If these resources are then insufficient to meet overall needs, then the next step is to free resources currently committed to national defense or other governmental activities, to en-

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sure that resources are adequate to provide medical services for everyone who needs them.

Although the debate on whether to ration health care has only recently unfolded, practical realities already have resulted in the relatively widespread rationing of health care services in the United States. Today, between 35 and 40 million people in the United States do not have health insurance, and, without insurance, they do not have the same access to health services as those who are insured. The government has tried to fill this gap through the Medicaid program, but as many as half the poor Americans do not qualify for Medicaid. To address the limits in coverage under Medicaid, the State of Oregon has proposed an explicit limitation on services given under its Medicaid program, to broaden coverage to all the poor. The Clinton administration has approved implementation of this proposal.

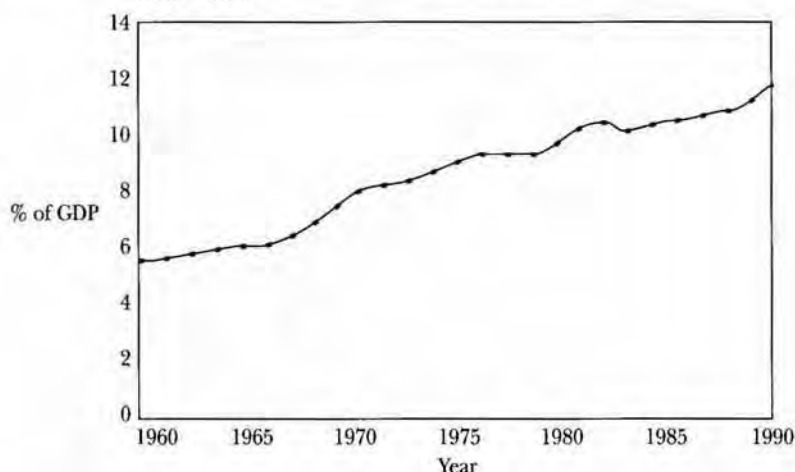
The prospect of any sort of rationing in health services is particularly important to the elderly for many reasons. As a group, the elderly tend to suffer from more chronic illnesses, which are generally incurable, than other groups. Many chronic illnesses, like rheumatoid arthritis and diabetes, can be managed effectively over long periods, but doing so requires an ongoing level of expenditures. Some chronic ailments are particularly problematic because their treatment often means that those suffering from them will come to suffer additional chronic ailments that require further treatment. Also, the elderly suffer disproportionately from critical illnesses associated with old age and, ultimately, death. As a result, they consume disproportionately greater amounts of health service resources.

Advances in medical science and the underlying demographics of the American society portend that, in the future, the elderly will need even more health services than now. The general level of resources that will be available to provide medical services to the elderly and the allocation of those resources cannot be ignored. Before investigating why Americans feel that all medical services should be available to everyone and before investigating whether this philosophy should be curtailed, it is important to assess the nature of the resource limitations giving rise to the debate over health care rationing.

Are Resources Really Limited?

The United States spends more of its national economic output on health care than any other major developed country. Not only do we spend more on health care than other countries, there is a growing sense that Americans are now limiting consumption of other goods and services because of their spending for health care. Figure 8.1 shows the level of

FIGURE 8.1 United States national health care expenditures as a percent of GDP: 1960 – 1990^a



^a Source: Health Care Financing Administration. Office of the Actuary. Data from the Office of National Health Statistics.

national health care spending as a percent of gross domestic product (GDP) for the period 1960 to 1991. Certainly, the figure indicates that the United States has been dedicating an ever growing segment of its GDP to delivering health services. Other segments of the economy grow and shrink over time, however, without raising the same concerns that health care expenditures have elicited recently.

An International Perspective on Health Care Spending

George Schieber, Jean-Pierre Poulhier, and Leslie M. Greenwald have compared the economic performance of the health systems in the 24 countries who are members of the Organization for Economic Cooperation and Development (OECD). They found that in 1990 the 24 countries spent an average of 7.6 percent of their GDP on health care, compared with the United States expenditure of 12.1 percent. They also found that the United States had experienced the largest absolute growth in health care expenditures between 1980 and 1990, growing 2.9 percentage points, compared with 0.6 percentage points across the OECD (Schieber et al. 1992).

In an earlier analysis, the same authors had documented a relationship across nations between national income and spending on health. Richer countries tend to spend more on health care than poorer countries (Schieber et al. 1991). In their more recent analysis, the authors

estimate three regressions to show the relationship between GDP and health spending across the 24 countries for 1980, 1985, and 1990. These results indicate that between 83 and 87 percent of the variation in per capita health spending across the various nations can be explained by variations in levels of per capita income. When applying this model of the 24 countries to the United States, Schieber et al. found that actual per capita expenditures exceeded expected expenditures by \$150 in 1980, \$350 in 1985, and \$700 in 1990 (Schieber et al. 1991). In other words, the United States has been spending relatively more on health care than other major developed nations in relation to American income levels, and the extent to which this has been happening is steadily increasing.

Joseph Newhouse has taken the data developed by Schieber, Poullier, and Greenwald for the seven largest industrial countries in the OECD, looking at the real growth in per capita health spending over the period 1960 to 1990, and he develops somewhat different conclusions (Newhouse 1993). His results are shown in Table 8.1, where he concludes that in inflation-adjusted terms, the rate of increase in health care spending in the United States is not so different from the rate of increase in other major industrial countries. The most significant numbers in Table 8.1 are those in parentheses. They indicate the difference in the rate of growth in GDP and health spending for each of the periods. On this basis, during the 1960s, the United States was in roughly a median position of growth in health care expenditures relative to its overall economic growth. During the 1970s, except for Canada, United States' health care expenditures grew less rapidly than in the other comparison countries. In the United States, however, relative growth in health expenditures compared against GDP outstripped all other countries during the 1980s. Although Newhouse did not show the difference in the health and GDP growth rates over the 30-year period (1960 to 1990), he indicates that the United States' rate was the median for the countries shown. Over the 30 years, the difference in the two rates for the United States was 4.6 percent, compared with 7.7 percent for Japan, 5.7 percent for Italy, 5.2 percent for France, 4.4 percent for Canada, 4.2 percent for Germany, and 3.5 percent for the United Kingdom.

The conclusions drawn by Schieber et al. and Newhouse might seem inconsistent. The former conclude that the United States is spending a constantly increasing share of its resources on health care compared with the other six countries in the group. Newhouse's analysis suggests that the United States growth in the share of resources devoted to health care is in the middle of the other countries. The reason both conclusions are right relates to the underlying base of expenditures devoted to health care in the various countries. Table 8.2 shows the share of GDP devoted to health care for selected years in each of the seven countries in

TABLE 8.1 Real Per Capita Growth Rates in Health Spending and Difference Between Growth Rates in Health Care and GDP for Seven Countries: 1960-1990^a

	1960-1990	1960-1970	1970-1980	1980-1990
<i>Annual Growth in Health Spending Per Capita^b</i>				
Canada	4.7%	6.1% (2.8)	3.7% (0.5)	4.3% (2.5)
France	5.5	7.8 (3.5)	5.3 (3.0)	3.3 (1.7)
Germany	4.4	5.6 (2.2)	6.3 (3.9)	1.4 (-0.4)
Italy	6.1	8.9 (4.1)	6.2 (3.4)	3.4 (1.3)
Japan	8.2	14.0 (5.1)	7.1 (4.2)	3.7 (0.1)
United Kingdom	3.7	3.7 (1.5)	4.4 (2.9)	3.1 (0.8)
United States	4.8	6.0 (3.6)	4.2 (2.5)	4.4 (2.9)

^aSource: Newhouse JP. An Iconoclastic View of Health Cost Containment. *Health Affairs* 1993. Supplement; 163. Calculated from Schieber GJ et al. U.S. Health Expenditure Performance: An International Comparison and Data Update. *Health Care Financing Review*. Summer 1992; 1-88. Gross domestic product (GDP) deflator for country used to deflate.

^bDifference between health and GDP growth rates, in percentage points, is shown in parentheses.

Newhouse's analysis. The reason why the aggregate shift of resources to the health care sector is widening relative to the other countries is that the United States started with a larger base of health spending.

TABLE 8.2 Share of Gross Domestic Product Devoted to Health Services in Selected Countries for Selected Years^a

	1960	1970	1980	1990
Canada	5.5%	7.1%	7.4%	9.3%
France	4.2	5.8	7.6	8.8
Germany	4.8	5.9	8.7	8.1
Italy	3.6	5.2	6.9	7.7
Japan	2.9	4.4	6.4	6.5
United Kingdom	3.9	4.5	5.8	6.2
United States	5.3	7.4	9.2	12.1

^aSource: Calculated from Schieber GJ, et al. U.S. Health Expenditure Performance: An International Comparison and Data Update. *Health Care Financing Review*. Summer 1992; 1-88.

Even though the United States may have had lower rates of growth in the shifting of resources for some periods relative to other countries, more money was devoted to health care services to begin with. Therefore, when the lower growth rate is applied to the bigger base, the United States continues to redeploy relatively more resources into health care services than other countries. For example, the difference in Japan's health expenditure growth rate and their GDP growth rate exceeded that of the United States (2.9 versus 2.8) over the period 1960 to 1990. Japan, how-

ever, was spending only 2.9 percent of its GDP on health services in 1960 compared to 5.3 percent in the United States. By 1990, Japan was spending 6.5 percent of GDP on health compared with 12.1 percent in the United States. Although their rate of redeployment was greater over the period, the Japanese redeployed 3.6 percent of their GDP to health care, compared to 6.8 percent of the GDP in the United States.

Whether analysts focus on the rate at which resources are being redeployed into health care or on the relative magnitude of resources devoted to health care, the international comparisons lead many to conclude that too much of the GDP is devoted to this sector of the American economy. There is no absolute measure, however, that certifies that the American level of expenditures on health care is too high, or that other levels of spending in other countries are just right. If those paying for health care are willing to bear the burden of higher expenditures or more rapid redeployment of resources to health care, then no pressure should be exerted to limit the allocation of these resources.

Third-Party Payers

During 1992, 19 percent of the health services delivered in the United States were financed by direct consumer payments. Most of the remaining services were financed through government transfer programs for needy individuals, social insurance programs to cover the disabled and aged, and private insurance, most of which is paid through employer-sponsored health benefit programs. Various federal government programs accounted for 32 percent of the purchases of health care services. State and local government programs accounted for 14 percent. Private insurance paid for 31 percent of the services delivered. Other private financing, including philanthropy and special grants, accounted for 4 percent (Burner et al. 1992). The major payers for health services delivery have become significant forces in the movement to limit financing for health services.

The Federal Government As Health Services Purchaser

The federal government is the largest single purchaser of health services in the United States. The two health care programs on which it spends the most money are Medicare and Medicaid. In addition, it sponsors many smaller programs aimed at special groups. For example, the Veterans Benefits program provides health services to military veterans, along with other services. The Department of Defense sponsors CHAMPUS to provide health benefits to current military personnel and their dependents. In addition, the federal government subsidizes the

purchase of health insurance by its civilian employees. It also is a major funding source for much of the health research in the country. The relative level of federal government expenditures under five major groupings of programs is shown in Table 8.3. Although the government is concerned about all of these programs, the relative size of Medicare and Medicaid and their growth patterns over the years make them the focal point of most policy discussions related to the federal government as a payer for health services.

The Medicare program was established in 1965 under the auspices of the Social Security Act. At that time, Medicare extended health insurance coverage to individuals over age 65 who were eligible to receive Social Security benefits. Medicare consists of two separate programs: Part A is the Hospital Insurance (HI) program, and Part B is the Supplementary Medical Insurance (SMI) program. In 1973, Medicare coverage also was extended to disabled individuals who were entitled to Social Security or railroad retirement cash benefits. At the same time, coverage was extended to individuals who suffered from end-stage renal disease (ESRD). Medicare is funded through the payroll tax system.

TABLE 8.3 National Health Expenditures by the Federal Government as a Share of GDP for Calendar Years 1960-1990^a

<i>Share of Gross Domestic Product</i>	<i>Medicare</i>	<i>Medicaid/ Public Assistance</i>	<i>Veterans Administration and Defense Department</i>	<i>Research</i>	<i>Other</i>
1960	0.0	0.0	0.3	0.1	0.1
1965	0.0	0.1	0.3	0.2	0.1
1970	0.8	0.3	0.4	0.2	0.2
1975	1.0	0.5	0.4	0.2	0.2
1980	1.4	0.5	0.4	0.2	0.2
1985	1.8	0.6	0.4	0.2	0.1
1990	2.0	0.8	0.4	0.2	0.2

^aSource: Health Care Financing Administration. Office of the Actuary. Data from the Office of National Health Statistics.

Medicaid was also established in 1965 to provide health benefits to low-income families and individuals. Medicaid is a joint venture between the federal and state governments. The federal government provides funding to the states for Medicaid based on a formula that relates each state's average per capita income to the national average. The federal government also establishes guidelines under which the states establish program provisions and then administer them.

When Medicare and Medicaid legislation was being considered, there was grave concern in the medical profession that the government would

intervene in the doctor-patient relationship and also would establish a system of administered prices for services delivered under the programs. To ameliorate these concerns, the original legislation had specific language that prevented intervention in the doctor-patient relationship and provided that charges for health services delivered under the programs would be reimbursed on the basis of "reasonable and customary" charges for similar services.

The federal cost of Medicare and Medicaid exceeded original expectations. Beginning in the early 1980s, numerous modifications were introduced to bring costs under control. The steady rise in the federal government's cost of its health benefits programs has pushed it into an increasingly aggressive posture of limited budgets and administered prices. Limiting federal health care expenditures when the elderly population is growing and the need for subsidized health services is expanding in the low-income population suggests that something has to give. Some policy analysts believe that aspects of the federal budget other than health care should be limited (Etzioni 1991). They argue that cutbacks should be made on defense spending, space exploration, or other things that have far less merit than providing health services to those who need them.

TABLE 8.4 Federal Budget Expenditures, Revenues, and Deficits as a Percent of GDP For Fiscal Years 1979 and 1990^{a, b}

	1979	1990
Expenditures	20.7%	21.9%
Social Security	4.3	4.6
General Operating Budget	16.4	17.3
Health Care ^c	1.7	2.7
Net Interest	1.8	3.4
Subtotal	3.4	6.1
All Other	13.0	11.2
Defense	4.8	5.5
Civilian	8.2	5.8
Revenues	19.1	18.9
Social Security	4.0	5.2
General Operating Budget	15.1	13.7
Surplus or Deficit	-1.7	-3.0

^aSource: Schultze CL. Paying the Bills. In: Aaron H, Schultze CL, eds. *Setting Domestic Priorities, What Can Government Do?* Washington, DC: The Brookings Institution. 1992; 298.

^bFor 1990, the expenditures and deficits exclude the deposit insurance outlays associated with the savings and loan bailout because of their special and temporary nature.

^cExcludes administrative costs and the inflow of Part B Medicare premiums, both of which are included in the "all other" civilian category.

Charles Schultze's analysis, as presented in Table 8.4, suggests that some of these other limitations already may have been made. He picks 1979 as

the baseline year for his analysis because it was the last nonrecessionary year before Ronald Reagan became President. The 1979 budget reflects the federal government's broad spending priorities before President Reagan's election, without the abnormalities that recessions introduce into government spending. Schultze picks 1990 as the year that best represents the nonrecessionary spending priorities of the federal government toward the end of the Reagan-Bush era. His analysis indicates that, during President Reagan's and President Bush's tenure, there was a decline in most government operations relative to the size of the economy. Social Security increased a small amount, but that was primarily because of growth in the elderly population. Interest expenditures increased, but that was related to the overreliance on deficit financing of government operations during the period. Defense expenditures increased, but President Reagan had made that a central tenant on which he campaigned and was elected. By 1990, defense expenditures accounted for 15 percent more of domestic output than in 1979. Expenditures on discretionary spending on other civilian programs, not including Social Security or major health care programs, had declined by nearly 30 percent over the period, but health care expenditures had expanded by nearly 60 percent.

TABLE 8.5 Projected Federal Budget Expenditures, Revenues, and Deficits as a Percent of GDP for Selected Fiscal Years^{a, b}

	1992	1997	2002
Expenditures	23.8%	23.0%	24.3%
Social Security	4.9	4.8	4.9
Health Care ^c	3.4	4.5	6.1
Net Interest	3.4	3.7	4.2
Subtotal	6.8	8.2	10.3
All Other	12.1	10.0	9.1
Revenues	18.6	19.0	19.0
Surplus or Deficit	-5.2	-4.0	5.3

^aSource: Derived by the author from Congressional Budget Office, *The Economic and Budget Outlook*. Washington, DC: Congress of the United States. August, 1992; 39.

^bThe expenditures and deficits exclude the deposit insurance and Desert Storm outlays because of their special and temporary nature.

^cIncludes only Medicare and Medicaid.

With the collapse of the Soviet empire, priorities in federal spending are again under political review. During President Bush's tenure, expenditures on military operations began to be curtailed. There was also a growing concern among public policymakers over the magnitude and persistence of the federal deficits incurred in the Reagan-Bush era. Much of the rhetoric surrounding the 1992 presidential campaign focused on

the overall level of federal deficit spending and the priorities for future spending on government programs. During the summer of 1992, in the midst of the national campaign, the Congressional Budget Office (CBO) released their annual analyses on the economic and federal budget outlook (CBO 1979). In their report, the CBO projected government operations 10 years into the future, under the assumption that current policies would remain in place over the decade. A summary of their projections is presented in Table 8.5. These projections suggest that to continue existing federal policies for Medicare and Medicaid would increase federal government expenditures for health care by 2.7 percent of GDP over the period, an expansion of nearly 80 percent above current levels.

When President Clinton assumed office in January 1993 he was confronted with the intransigent federal deficit. At the same time, he was trying to develop policies to deliver on one of his major campaign promises: access to adequate health care services for everyone. It quickly became clear that curtailing the growth in federal health care expenditures was crucial to dealing with the government's deficit problem. Table 8.6 shows the effect of bringing Medicare expenditure growth in line with projected growth in Social Security cash benefits and Medicaid in line with expected growth in GDP.

TABLE 8.6 Projected Federal Budget Deficits as a Percent of GDP, Assuming Control of Federal Health Costs for Selected Fiscal Years^a

	1992	1997	2002
Deficit under current policy assumptions	-5.2%	-4.0%	-5.3%
Savings if Medicare growth constrained to growth rate in Social Security	0.0	0.7	1.6
Savings if Medicaid growth constrained to growth rate of domestic output	0.0	0.5	1.1
Savings in interest payments if health costs constrained as assumed ^b	0.0	0.1	0.5
Deficit under assumed control of federal health expenditures	-5.2	-2.7	-2.0

^aSource: Derived by the author from Congressional Budget Office, *The Economic and Budget Outlook* Washington, DC: August, 1992; 39.

^bAn assumed 4.0 percent rate of interest was used to derive the estimated savings in interest payments.

Over time, Social Security benefits increase as the number of retirees grow and as benefits get larger. Each succeeding cohort of Social Security beneficiaries receives higher real benefits than prior cohorts because of general growth in wages. From Table 8.5, it is clear that the CBO projection suggests that Social Security benefits will grow at the same rate as the national economy over the next 10 years. In other words, assuming that Medicare benefits would be constrained at the same rate as Social Security benefits, then some real increase in Medicare expenditures would be permissible.

If the growth of Medicare and Medicaid expenditures can be slowed, it would reduce future federal deficit financing at the margin needed to reduce future interest payments. In developing Table 8.6, a 4 percent annual interest rate was used to calculate the interest savings if Medicare expenditure growth could be held to the Social Security rate growth and if Medicaid could be held to the rate of growth in GDP. Compared to current policy projections, the reduction in each year's reduced program outlays was assumed to accrue evenly during the year. So, the reduction in program outlays nets only a 2 percent savings in the year in which it occurs; but the reductions in deficit financing are cumulative, and a billion dollars saved last year is a billion less in debt now and for future years. Because the United States is projected to remain in deficit financing for the immediate future, a billion dollars borrowed in one year grows in each subsequent year as more money is borrowed to pay the interest. When the savings from each year are added to a cumulative total, the interest savings become significant, growing to a total of 0.5 percent of GDP by 2002.

Indeed, Table 8.6 suggests that bringing Medicare and Medicaid expenditure growth under control is potentially the most effective means of reducing federal deficit financing in the future. It can be argued that more resources should be redeployed from national defense expenditures to meet health care needs, but the practical matter is that defense spending already is being cut significantly to the point that some policymakers are concerned about going too far.

Each American can look to a host of other activities funded by the federal government and point to some things that could be dispensed with happily, but spending on most of these activities was reduced significantly during the Reagan-Bush administrations, and many government programs are in line for further reductions in the future. While the federal government is undertaking its budget trimming exercise, opinion polls show that the public is not willing to limit the types of health services generally available. Americans say they want to have more new technologies and provide more services for the elderly (Gallup 1992). This philosophy must be reconciled, however, with a 10-to-15 year record of

political unwillingness to collect the taxes needed to fund such public commitments, along with everything else.

State Governments As Health Services Purchasers

State and local governments also are large purchasers of health services through various programs, the largest being Medicaid, which finances health care for some 27 million low-income people. In addition to Medicaid, states also fund the delivery of health services through workers' compensation, vocational rehabilitation, and temporary disability programs. They are responsible for general public health programs, as well as prenatal health and programs aimed at young children. In many communities, public hospitals and clinics are funded to provide health services for the lower income populations. Table 8.7 shows the level of expenditures as a percent of GDP through these various state and local programs for selected years between 1960 and 1990.

As stated earlier, Medicaid is funded jointly by the federal, state, and local governments, with the federal contribution being determined by a formula based on the per capita income in each state. John Iglehart calculates that between 1980 and 1988, the cost of the states' share of Medicaid expenditures grew at a compound rate of 9.3 percent. Between 1988 and 1992, the costs grew at a rate of 21.1 percent. Iglehart points out that this rapid, uncontrollable cost of Medicaid, carrying with it a matching obligation on the part of the federal government, is crowding out federal grants-in-aid aimed at supporting cash welfare payments, school-lunch and nutrition programs, subsidized housing, highways, and education (Iglehart 1993).

TABLE 8.7 National Health Expenditures by State and Local Governments as a Share of GDP for Calendar Years 1960-1990^a

<i>Share of Gross Domestic Product</i>	<i>Medicaid/ Public Assistance</i>	<i>Workers' Comp./ Voc. Rehab/ Short-Term Disability</i>	<i>Public/ Maternal/ Child Health</i>	<i>State and Local Hospital plus School Health</i>	<i>Other</i>
1960	0.1	0.1	0.1	0.4	0.1
1965	0.1	0.1	0.1	0.4	0.1
1970	0.3	0.1	0.1	0.3	0.1
1975	0.4	0.2	0.1	0.3	0.1
1980	0.5	0.2	0.2	0.2	0.1
1985	0.5	0.2	0.3	0.2	0.1
1990	0.7	0.3	0.3	0.3	0.1

^a Source: Health Care Financing Administration. Office of the Actuary. Data from the Office of National Health Statistics.

Many factors are behind the rapid increases in expenditures on Medicaid benefits. First, Medicaid is subject to most of the same inflationary pressures that plague the health sector in general. Second, Congress recently has mandated a variety of expanded services aimed at pregnant women and infants. It also established more stringent quality-of-care standards for nursing homes (Pallarito 1991). Lately, many of the cases that qualify for Medicaid benefits are extremely expensive. Today, more than 50 percent of the long-term care provided in the United States is funded through Medicaid (Gallant 1992). In California, nearly half of all AIDS patients and the majority of children with AIDS are treated under Medi-Cal, its Medicaid program. California also reports a growing population of children born to drug-addicted mothers under Medi-Cal. The annual costs of treating a single infant can run to several hundred thousand dollars per year (Rosenblatt 1993). Another reason that Medicaid costs have risen over the last few years is the recession in the American economy, which has resulted in higher levels of unemployment and increased numbers of unemployed workers who now meet the need criteria for eligibility.

For many states, deficit financing of government operations is prohibited by their constitutions. Thus, rapid increases in costs in any major segment of state budgets can cause immediate, significant fiscal problems. The states responded to their Medicaid cost increases in several ways. Some of them imposed rate freezes on benefits provided under their programs. In many instances, however, hospitals sued the states because they were paying unreasonably low rates under the program. The right of the providers to bring these cases was confirmed by the United States Supreme Court in *Wilder v. Virginia Hospital Association*, which set precedent. Several states then were forced to provide higher rates through court rulings (Rosenblatt 1993).

In response to their budgetary problems, some states pursued creative financing schemes to support the state-level Medicaid expenditures and to qualify for larger federal matching contributions. One scheme had the states impose provider taxes on doctors and hospitals that were treating Medicaid patients. These taxes then were added to the bills for services provided under the program, thus raising the overall cost of services provided and, in turn, leading to an increase in the federal contribution. Pennsylvania was one state in which the hospitals had brought suit against the state because it was paying inadequate rates for acute care provided under the program. The federal court ordered a substantial increase in the rates to be paid by the state, thereby increasing the Medicaid budget by \$340 million. To deal with the resulting budget shortfall, 170 hospitals that were treating Medicaid patients formed a foundation and borrowed \$365 million from a bank. They then donated this money

to the state treasury to fund Medicaid benefits, generating enough matching money from the federal government to pay the higher rates without having to raise anyone's taxes. The hospitals were reimbursed immediately for their original donations (Morgan 1993).

In response to these creative funding devices, Congress passed the Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991, sharply curtailing the use of such funding approaches. The states increasingly find themselves in an untenable situation relative to Medicaid. They are caught between soaring costs, budget limits on spending, declining federal contributions, and federal mandates to expand eligibility. In many cases, less than half the poverty population of a state is eligible for benefits, and the provision of benefits is based more on categorical eligibility than on medical need. Providers are increasingly reluctant to give services under the program, and they are restive about the reimbursement received when they participate. The result is that some states are looking for alternative ways to provide services to their needy populations.

The most widely heralded effort is Oregon's plan to expand Medicaid and private insurance coverage to many citizens who currently do not have any insurance. Because the state already has limited resources, it has proposed that coverage be dropped for some medical procedures that had been covered previously, albeit for a narrower population. Jean Thorne has listed many reasons why Oregon is moving away from the traditional Medicaid program. These include the fact that, in Oregon, the current system provides benefits to a working poor woman if she is pregnant but not before she conceives the child; benefits are provided to a poor five-year-old, but not to an eight-year-old sibling; poor men and women without children are excluded; coverage for a poor woman is discontinued when her children complete school; and the system requires open-ended treatment to those who meet the categorical criteria but denies the most basic benefits to those who do not (Thorne 1992). Although Oregon has received approval from the federal government to implement this plan, it has not yet made the necessary funding provisions, and it is possible that the plan may never be put into effect.

Recently, Governor Ned McWherter of Tennessee announced that he would ask the Clinton administration to allow his state to withdraw from Medicaid. Tennessee's Medicaid expenditures went from just under \$1 billion in 1987 to \$2.8 billion in 1993. Tennessee provides benefits to more of its population than required under the federal rules. Medicaid now covers 20 percent of the total population in the state. The program covers the cost of half the state's births and half the expenses incurred in catastrophic illness cases.

Tennessee was one of the states that had used the creative financing

techniques outlawed by Congress in 1991. To make up for the budgetary shortfall that arose because those financing opportunities were no longer available, Governor McWherter unsuccessfully attempted to get the state's first income tax passed in 1992. He then pushed successfully for a 6.75 percent tax on the revenue of the state's 152 acute care hospitals. This measure fell apart, however, when the state announced that the 1994 budget would still be \$764 million short of the \$3.4 billion needed to continue the existing Medicaid program. When state officials indicated they would make this up by cutting payments to hospitals, the hospitals turned on the prior legislation and got the tax repealed. The loss of the revenue from the tax, along with its matching federal contributions, translates into a budgetary shortfall of nearly \$1 billion for Tennessee Medicaid. In response to the Medicaid funding shortfall, Governor McWherter has proposed and the federal government has approved that the existing system be replaced with a managed care program, where those eligible would be turned over to an HMO. The state and federal governments would set rates, quality standards, and eligibility requirements under the plan (Morgan 1993).

It is easy to think of Medicaid as a program oriented primarily at low-income families with small children. In 1990, nearly 68 percent of all Medicaid recipients were children or eligible adults in Aid for Families of Dependent Children (AFDC) families. But the Medicaid participants in AFDC families received only 27 percent of the benefits provided under the program. By comparison, the elderly comprised 13 percent of the recipient population but received 33 percent of the benefits. The remainder of the recipients, 19 percent, were blind or permanently and totally disabled individuals who, in the aggregate, received 39 percent of the benefits paid by Medicaid in 1990 (Social Security Administration 1991). The Medicaid program was envisioned originally as a general poverty program, but because it is the only source of public money for long-term care in nursing homes, the spending on care for the aged and disabled has crowded out the spending for young, poor families. Together the low-income elderly and disabled populations depend almost entirely on these programs and are allotted the majority of resources under them. The prospect that money is going to be readily available to resolve the budgetary and distributional concerns now facing the states appears slim. The states therefore are being forced to limit the availability of resources to fund the health services that have fallen to their responsibility. The allocation decisions implied here cannot be avoided.

Employers as Health Services Purchasers

Employer-sponsored health benefit programs constitute the second largest purchaser of health care services in the United States, larger even

than the state governments. Tabulations of the March 1992 *Current Population Survey* (CPS) indicate that 60 percent of the American population benefits from employer-provided health insurance. Among the non-elderly, 64 percent of the population enjoys such coverage. Among those over age 65 (eligible for Medicare), only 33 percent have employer-sponsored health insurance. Although employers have played a predominant role in the provision of health care insurance since the end of World War II, the inflation that has occurred in the costs is now straining that commitment. Table 8.8 shows the level of health care expenditures made by employers and other private payers for selected years between 1960 and 1990.

Like other major payers for health care benefits, employers are paying more for the benefits provided under their health plans, going from 0.8 percent of GDP in 1965 to 3.1 percent in 1990. And the expenditure levels shown in Table 8.8 do not reflect the full increases in the cost of benefits for those employers who actually provide them. The reason is that as the cost of employer-provided health benefits has risen, the extent of employer-provided health insurance coverage has fallen. The rising total cost is being distributed then across a smaller base of companies every year.

TABLE 8.8 National Health Expenditures by Private Payers as a Share of GDP for Calendar Years 1960-1990^a

<i>Share of Gross Domestic Product</i>	<i>Consumer Payments/ Out-of-Pocket Payments</i>	<i>Employer- Paid Benefits</i>	<i>Private Insurance</i>	<i>Other</i>
1960	2.6	NA	NA	0.2
1965	2.7	0.8	0.6	0.3
1970	2.5	1.2	0.5	0.4
1975	2.4	1.5	0.6	0.4
1980	2.2	2.1	0.6	0.4
1985	2.3	2.6	0.7	0.5
1990	2.5	3.1	0.9	0.6

^a Source: Health Care Financing Administration. Office of the Actuary. Data from the Office of National Health Statistics.

Table 8.9 shows the declining levels of employer-sponsored health benefits coverage by industry for selected years. Between 1980 and 1991, health insurance coverage declined in virtually every industry, except among the self-employed. A 1990 survey of senior level executives in 1800 large firms in the United States found that rising health care costs were the most important human-resource issues facing their companies (Wyatt Company 1990). Employers look at their health benefits programs

as an expense of doing business. Recently, some employers have been facing increases in health benefits as high as 50 to 60 percent per year. In response to the escalating costs, employers have moved to shift more of those costs directly to their employees, by requiring higher employee contributions for coverage and higher out-of-pocket payments for expenses covered under these plans. Wyatt Company surveys indicate that employee premiums for single and family coverage under comprehensive indemnity plans increased 40 percent between 1987 and 1992. For the typical family plan, the employee's share of the total premium in 1987 was just under \$500 per year but had risen to nearly \$1000 per year in 1992. The average deductible under a family plan had risen from \$265 to \$460 over the same period. Despite the increases in the employee cost of participating in employer-sponsored health benefit plans, employers' shares of total plan costs rose from 77 to 85 percent for single coverage between 1987 and 1992 and from 69 percent to 80 percent for family coverage over the period.

TABLE 8.9 Percent of Workers with Employer-Sponsored Health Insurance Coverage by Industry and Selected Years^a

	1980	1985	1990	1991
Agriculture, forestry, and fisheries	24.7	22.7	21.9	20.8
Mining	85.0	78.3	79.3	79.5
Construction	55.2	50.0	47.1	44.8
Manufacturing	80.7	79.8	75.2	74.8
Transportation, communications, and public utilities	81.3	77.6	74.4	73.4
Wholesale trade	71.5	69.8	64.2	65.6
Retail trade	38.6	36.7	33.6	32.1
Finance, insurance, and real estate	67.5	69.2	64.8	65.3
Business and personal services	34.9	35.4	38.3	36.9
Professional services	54.2	57.4	54.3	54.1
Government	69.1	71.1	69.6	66.6
Self-employed, unincorporated	16.2	15.7	18.5	17.7
All industries	57.3	56.2	53.4	52.3

^aSource: Levit KR, Olin GL, Letsch SW. Americans' Health Insurance Coverage, 1980-91. *Health Care Financing Review*. 1992; 14(1); 38.

At the end of 1990, the Financial Accounting Standards Board (FASB) adopted Financial Accounting Standard 106 (FAS 106), entitled *Employers' Accounting for Postretirement Benefits Other Than Pensions*. FAS 106 requires employers to account for post-retirement life and health benefits

on an accrual basis similar to that required for pension plans. The standard dictates cost and attribution methods and requires recognition of liabilities on an employer's balance sheet as well as expenses on an employer's income statement. Although FAS 106 introduced some symmetry between the accounting for the accrual of pensions and retiree health liabilities, tax law treats the two benefits very differently—it allows tax-effective funding of pension obligations as they accrue but does not provide similar funding opportunities for retiree health benefits. The net result of FAS 106 on the one side and tax law on the other is that any employer who sponsors a retiree health benefit is faced with the prospect of creating a sizeable unfunded liability on its balance sheet. For most employers, the standard becomes effective for fiscal years that began after December 15, 1992.

Some employers are concerned that the retiree health liabilities implied by FAS 106 could threaten their economic viability in the capital markets. Some economists argue that investors in the capital markets already had looked through the veil of accounting rules and considered retiree health liabilities when assessing the value of companies (Reinhardt 1989). Although the economists may be correct theoretically in their assessment of the capital markets, it is the employers who can vote with their feet in this case. Since the promulgation of FAS 106, many companies have moved to limit their retiree health liabilities. Some have implemented vesting schedules to curtail sharply the benefits provided to short-term workers. Other companies have shifted their plans from a promise of a defined benefit to the promise to pay a certain amount of the worker's health care insurance premium at retirement. These defined contribution benefits also tend to vary with length of service with the employer. Finally, some employers have eliminated their retiree health plans altogether.

Uwe Reinhardt argues that employers are not adversely affected by health benefits cost increases, at least not those related to active employees (Reinhardt 1989). He contends that health benefits costs are part of the wage bill, and, that as health costs have increased, escalation of other elements of the wage bill have been retarded. Although Reinhardt might be correct in theory, 1800 executives of large companies do not agree completely. Table 8.10 shows their responses to the question, "How does your company try to cover increases in the costs of employer-sponsored health benefit plans?" A substantial majority, 64 percent, believe that some sharing exists for the burden of health benefits cost increases. Among the respondents, 73 percent believe that at least some health cost increases are passed on to consumers in the form of higher prices; 71 percent believe that health cost increases retard profits; and less than

half, 49 percent, agree that health cost increases reduce other forms of compensation.

How employers perceive their relative role in bearing the costs of benefit plans is important in the context of whether they should be dedicating ever increasing resources to the provision of health services for workers and retirees. If employers think that health cost increases are borne by the workers, it is likely they also feel that the workers will let them know the limit on the health benefit share of total compensation. If employers think that health cost increases are passed on in the form of higher prices, however, then their ability to support these benefits indefinitely will depend on competitiveness within the markets in which they operate. Those companies that operate in strong, internationally competitive markets will be at a particular disadvantage because health costs and health inflation rates are so much higher in the United States than in other countries. If employers think that health cost increases are financed at the expense of reduced profits, then their ability to support these benefits indefinitely will depend on profit levels and management's fiduciary obligations to owners.

TABLE 8.10 Methods of Covering Cost Increases in Employer-Sponsored Health Benefits Programs^a

	<i>Percent</i>
Benefits cost increases are passed along to consumers as price increases	14.9
Benefits cost increases reduce profits alone	9.8
Benefits cost increases hold down other forms of compensation to workers	11.2
Combination of lower profits and higher prices	26.3
Combination of lower profits and lower wages	6.0
Combination of higher prices and lower wages	2.7
Combination of all three	29.1

^aSource: Wyatt Company. Employer-Sponsored Health Benefits Programs: A Chronic Affliction or a Growing Malignancy? *Management USA Leading a Changing Work Force*. Washington, DC: Wyatt Company. 1990; 12.

Each perception, whether right or wrong, suggests that some real practical limits will determine what can be pumped into the delivery of health benefits by private sector employers. The declines in the provision of health benefits across almost all sectors of the economy, as documented in Table 8.9, suggest that those limits already are being reached in many firms.

The Perspective of Individual Consumers

Table 8.8 shows that the level of individual consumer out-of-pocket expenditures has remained relatively stable over the period 1960 to 1990. Undoubtedly, some consumers could spend more on health care services than they do now. The elements of society who engender the concern—those people who do not receive adequate medical services in the current environment—tend to be those people in the lower income ranges who already have extremely limited resources to redeploy for their health care needs. Certainly, they do not have enough to meet the high costs of treating many of the chronic and acute illnesses that threaten them today.

Use of Current Resources

If no additional resources are readily available to redeploy to the health care sector in the American economy, then another alternative to rationing might be the more efficient reallocation of already available resources. Indeed, Arthur Caplan argues that moral ethicists who are asked to provide rationing criteria should not be willing to develop these criteria until the inefficiencies and fat in the system have been wrung out (Caplan 1992). Three areas of reorganization or reform are often cited as potential sources of significant savings. These include the unwieldy and overly expensive administration of the system, the prevalence and size of malpractice awards and the defensive medicine practiced to avoid them, and the incentive structure that encourages unnecessary services or services at unreasonable prices.

Reducing Administrative Costs

Joseph Califano, former Secretary of the Department of Health and Human Services, estimates that the administrative costs associated with the American health system are close to \$200 billion annually (Califano 1993). At that level, administrative costs would account for 20 to 25 percent of current health expenditures and would offer a likely target for considerable savings. The private health insurance system that operates in the United States is thought to be particularly expensive because of all the variation in plans' claims filing and review processes. If a consistent package of health benefits were to be offered to everyone, and if a consistent claims process were implemented at the same time, theoretically, much of the current inefficiency could be eliminated.

In June 1991, the General Accounting Office (GAO) released an analysis of the costs and effects of moving to a Canadian-style, single-payer

health delivery system in the United States. The study asserted that a universal system like the Canadian one, administered by a nonprofit agency, would reduce costs because it no longer would be necessary to determine coverage, eligibility for benefits, or risk status. It also would eliminate marketing costs. For providers, it would mean lower billing and clerical costs. The GAO study estimated that if the United States could lower its insurance overhead to the Ontario level, \$34 billion could be saved. Under the Ontario system, American physicians would be able to reduce expenses related to billing, saving an added \$15 billion. Similarly, if hospitals could reduce billing expenses down to the Ontario levels, this would cut expenses by \$18 billion. The GAO posited that these total savings of \$67 billion could be diverted to added health care benefits for those people who currently get unsatisfactory services (GAO 1991).

In December 1991, the CBO released an analysis of two alternative approaches to delivering health care in the United States. Under both scenarios, this study assumed that health insurance would be extended to everyone now uninsured and that health providers would be reimbursed on the basis of Medicare's payment rates. Under one approach, the current diversity of private and public payers would be retained in an all-payer system. In the other approach, the current system would be replaced with a single-payer system. The CBO estimated changes in administrative costs under these proposals that would range from an increase of \$4.4 billion to a decrease of \$17.5 billion under the all-payer system, depending on underlying assumptions. It is estimated that administrative cost savings would range from \$18.2 billion to \$58.3 billion under the single-payer system (CBO 1991). The early discussions among members of the Clinton administration about health care reform suggested that they intended to recommend something that would resemble the CBO all-payer system more than a single-payer system. This approach will produce the least administrative savings.

In testimony during March 1993, Robert Reischauer, Director of the CBO, estimated that potential administrative savings gained by a single-payer system would be around \$30 billion to \$35 billion. He went on to suggest, however, that some of the perceived administrative waste that exists in the current system actually may be reducing current health care costs. Copayments and deductibles add to plan complexity but make consumers more sensitive to the prices involved in their consumption decisions. Utilization review makes administration more expensive but reduces the provision of unnecessary care (Reischauer 1993).

The Health Care Financing Administration (HCFA) has estimated that the combined administrative cost of public financiers of health care, philanthropic organizations, and private health insurers amounts to only 5.8 percent of national health expenditures (Levit et al. 1991). The HCFA

estimate does not include providers' expenses incurred in the maintenance of records and filing of claims, so there might be some additional savings there. Although health care reform **may** reduce administration expenses, it cannot possibly eliminate them. Any new system still will require the collection of contributions from various segments of the population and payments to providers for people covered or benefits provided. Providers still will have to collect and maintain information on the people whom they cover and on the patients whom they treat. Some proposals for health reform have included recommendations that providers will collect and disseminate more extensive information on treatments and outcomes than they already do now, possibly creating a whole new set of administrative information requirements. The potential savings in this area appear to be insufficient to cover the costs of the added benefits that would be provided if health insurance is provided to everyone in the United States.

One aspect of these potential savings that often is ignored is that much of the administrative expense that potentially can be saved is related to relatively labor-intensive activities involved in health plan administration. If the CBO estimate of potential savings (\$30 billion to \$35 billion) could be realized, then that expense level represents a significant number of jobs lost in insurance companies and provider organizations. The elimination of jobs that tend to be clerical and data-processing will not free a large group of people who can be redeployed easily to provide health care services to those not currently getting adequate care. Diverting an extra \$30 billion or more to the direct delivery of care is going to put added inflationary pressures on a delivery system already operating in a highly inflationary environment.

Restraining Malpractice Awards and Defensive Medicine

One area often cited as contributing to the expensive nature of health services in the United States is the cost of malpractice insurance and the related defensive medicine that doctors provide because of their concerns about malpractice claims. Paul Weiler et al. (1993) have found that the average cost of malpractice liability insurance for a doctor in New York State in 1949 was \$360 per year in 1990 dollars. By 1965, the cost of such insurance had risen to \$1000 per year. Ten years later, it was up to \$7500 per year. By the end of the 1980s, they found that reasonably full insurance coverage cost an average of \$40,000 per year. Although malpractice insurance is more expensive in New York than in many states, a number of large states have similar rates. Even where rates are lower, there still is a concern about the size of malpractice awards and their effects on the practice of medicine.

In 1990, medical malpractice premiums in the United States cost medical providers \$4 billion—0.6 percent of national health expenditures for that year (Insurance Information Institute 1993). Frank Sloan, Randal Bovbjerg, and Penny Githens (1991) have undertaken a detailed review of the medical malpractice market. They conclude that it is reasonably competitive, that coverage is generally available, that some insurers have relatively low premium-to-surplus ratios, and that profits are not excessive. They found little wrong with the operations of malpractice insurers as insurers. They did note that only about half of the premium dollar paid for medical malpractice goes to claimants. They concluded that the industry would make a greater contribution to the welfare of society if it were able to devote less energy to managing claims and litigation and more to managing injuries and rehabilitation.

Weiler et al. (1993) undertook a detailed survey and statistical analysis of the incidence and outcomes of medical malpractice injuries in New York State. Their study was designed to determine the incidence of injury resulting from medical intervention, the extent to which such injuries could have been avoided, the kinds of losses incurred, how much was covered by insurance, and the role that potential litigation plays in reducing such injuries. They performed an in-depth appraisal of the medical records for a sample of 31,000 patients hospitalized in the state during 1984.

The definition of a medical injury in the Weiler study was “any disability caused by medical management that prolonged the hospital stay by at least one day or persisted beyond the patient’s release from the hospital” (Weiler et al. 1993). They estimated that about 4 percent of hospital admissions involved an injury, and about one quarter of those resulted from negligence on the part of the provider. Although many injuries were minor, 14 percent of the injured died. Applied to the American population, the authors conclude that 150,000 persons die per year from medical treatment.

In terms of the tort system’s effectiveness at providing retribution to those injured in the medical delivery process, Weiler et al. found that

On an aggregate basis, one malpractice claim was filed by a New York patient for every 7.5 patients who suffered a negligent injury (that is, a real tort). Because approximately one in two tort claims is ultimately paid, this means that the legal system is actually paying just one malpractice claim for every 15 torts inflicted in hospitals. And even when the focus is on only the most “valuable” tort claims—that is, serious injuries to patients under 70 years of age—the ratio was one claim paid for every three negligent injuries. (p. 137)

Weiler et al. conclude that no litigation surplus exists but that a litiga-

tion deficit is evident because so many people who are being injured do not get any retribution from the system.

Because medical malpractice insurance premiums are such a small part of total health care costs in the United States, malpractice reform could save only a small amount directly and might actually increase total system costs if wider access to retribution is provided to those injured while receiving services. Some analysts argue that it is not the direct cost of malpractice insurance that places the largest burden on the health delivery system but the unnecessary use of tests and procedures to avoid suits. The National Medical Liability Reform Coalition, a collection of various groups that includes the American Medical Association (AMA), estimates that malpractice reform could eliminate \$35.8 billion in defensive medicine over five years (Riley 1993).

Evidence that threats of malpractice affect the nature and level of health services is often anecdotal. One study that sought to document the relationship between malpractice claims and child birth by cesarean delivery found that such deliveries correlated positively with physicians' malpractice premiums, with the number of claims against doctors per 100 doctors at the hospital level, and with the number of claims against hospitals per 1000 discharges (Localio et al. 1973). In 1970, the rate of cesarean deliveries was 5.5 per hundred total deliveries in the United States. By 1980, the rate of cesarean deliveries had jumped to 16.5 per hundred deliveries. By the mid-1980s, roughly one quarter of babies born were delivered in this fashion (United States Bureau of the Census 1992). Stephen Myers and Norbert Gleicher have estimated that the number of necessary cesarean births in this country should be 11.1 percent of total births (Myers and Gleicher 1988).

It was found that in New York State hospitals during 1984 cesarean delivery rates varied outside the range of expectations across hospitals and across doctors who practiced within individual hospitals (Localio et al. 1993). One underlying problem with the persistently high cesarean delivery rates in the 1980s appeared to be that the medical system did not provide enough control over doctors or obstetrical departments in regard to this form of child delivery (Gleicher 1984). But Myers and Gleicher reported on a project at Mount Sinai Medical Center in Chicago to reduce the cesarean-section rate at that hospital from 17.5 percent in 1985 to 12.5 percent in 1986, to 11.5 percent in 1987. The reductions occurred for private and teaching physicians alike. On the basis of their analysis, the authors concluded that the number of cesarean sections could be reduced by up to 450,000 per year nationally without detriment to mothers or offspring. Of particular interest in the context of malpractice liability as a motivator for delivery by cesarean section, Myers and Gleicher

observed that the change in practice pattern had little effect on liability insurance rates (Myers and Gleicher 1988).

Concerns about liability insurance undoubtedly have resulted in the expanded provision of certain medical tests and procedures at an added cost to the system. If the cost of malpractice insurance and most of the cost of defensive medicine could be eliminated, as estimated by the National Medical Liability Reform Coalition, the savings would be less than 1 percent of the cost on an annual basis. Furthermore, the major studies on malpractice insurance that were cited earlier do not come down on the side of eliminating compensation for individuals injured in the delivery of health services but, rather, on the elimination or drastic reduction of the share of malpractice expense currently skimmed off by people involved in the legal process. If a more egalitarian process were developed for compensating everyone injured through the delivery of health services, then the cost of malpractice could increase significantly.

Economic Motivations That Affect Medical Service Delivery

Myers and Gleicher indicated that neither the hospital nor the doctors involved in reducing the rate of cesarean delivery at Mount Sinai Medical Center had any financial incentives to do so. In fact, the authors estimated that, at the time of their study, vaginal deliveries netted the hospital \$3000 less than cesarean section deliveries. They also estimated that the doctor's fees for a vaginal delivery usually were \$250 to \$500 less than for cesarean sections (Myers and Gleicher 1988). Although the example of Mount Sinai indicates that the health delivery system can put the best interests of patients ahead of its own, the economic motivation of providers plays a major role in explaining the delivery patterns of many services provided today.

Alan Hillman asserts that "Society subscribes to the technologic imperative; patients and doctors generally both prefer arrangements that encourage the use of health care technology" (Hillman A 1990). If this is true, then the various means by which doctors are compensated for their services can affect the extent to which they are rewarded for delivering more, relative to less, technologically advanced medicine. Doctors typically are paid in one of three broad fashions: a fee for the services provided; a salary from an organization of which they are a member or an employee; or capitation payment based on the number of people assigned to them and for whom they must provide medical services.

In the fee-for-service arrangement, the doctor typically can realize a higher income by providing more services. Financially, at least, this payment mechanism would encourage the use of more expensive treatments,

even though the treatment may be beyond what is required in some instances.

Doctors who work for a direct salary or who are paid on a flat dollar basis for each person who is eligible to receive services (i.e., a capitated basis) will not receive any higher compensation by prescribing more expensive treatments than necessary and often are affected adversely if they overtreat patients. Many HMOs withhold a portion of the salary or capitation payments until expenses related to referrals and hospitalizations have been settled. If a group of doctors exceeds its allotted budget for referrals or hospitalizations, some or all of the withholdings are lost. In some cases, the individual doctor may be subject to the penalty solely on the basis of assigned cases. Some HMOs even impose penalties over and above the basic withholding in cases of excess referrals and hospitalizations. Coming in under budget often means a bonus on top of payment of the withheld amounts. Finally, it is fairly common that doctors compensated on a capitated basis must pay for outpatient laboratory tests out of their own pocket. Needless to say, this discourages use of outside laboratory referrals.

Financial Incentives and Physician Behavior

Many studies have been done on how these various incentives affect physician behavior in providing health care services. For example, Alan Hillman, Mark Pauly, and Joseph Kerstein analyzed a national survey of HMOs, focusing on financial incentives, resource utilization, and financial performance. After controlling for case mix, they found that financial incentives affected not only the overall financial performance of the HMOs but also the ways in which resources are used. They found that capitation and salary compensation of primary care physicians resulted in fewer days of hospitalization compared with those proscribed by fee-for-service physicians. They also found that for-profit HMOs had lower hospitalization rates than not-for-profit HMOs. Cases in which the doctor was penalized beyond basic withholding for excessive hospital costs resulted in fewer visits per enrollee, but a higher percentage of the patients visited their HMOs more frequently. This suggests that heavy penalties on doctors establish an atmosphere that discourages visits to the clinic, but, that when a truly sick person gets into treatment, the HMO tends to provide services through multiple clinic visits rather than through hospitalization (Hillman et al. 1989).

One study by Sheldon Greenfield et al. analyzed 20,000 patients who visited their doctors during 1986. Resource utilization was measured across four specialties and five systems of care. The specialties were family practice, general internal medicine, cardiology, and endocrinology. The sys-

tems of care were HMO, multi-specialty group fee-for-service, single specialty fee-for-service, solo practice, and single-specialty group-prepaid. After controlling for patient mix, the authors found that the solo practice and the single-specialty fee-for-service systems had hospitalization rates 41 percent higher than the HMOs, and that the patients of the solo practices or single-specialty fee-for-service practices were taking 12 percent more drugs. HMO patients visited their doctors 8 percent more times per year. Payment method also affected utilization. Prepaid patients had lower rates of hospitalization and higher office visit rates than fee-for-service patients (Greenfield et al. 1992).

Another study by David Hemenway et al. analyzed the treatment patterns of 15 doctors who worked for Health Stop, a chain of ambulatory care centers, between 1984 and 1986. Health Stop had 20 centers in the Boston area during this period. Most were staffed by two full-time physicians who each worked shifts of roughly 40 hours per week. Until mid-1985, the physicians were paid \$28 per hour. In mid-1985, the payment scheme was changed so that each doctor received the higher of a flat wage, which ranged from \$28 to \$32 per hour, depending on age and experience, or 24 percent of the first \$24,000 in gross monthly charges and 15 percent of charges above that amount. The authors of this study compared the services provided and charges generated by 15 physicians during two periods: November 1984 through January 1985 and November 1985 through January 1986. They found that 13 of the 15 doctors ordered more laboratory tests per visit under the revised payment scheme. The average for the group increased 23 percent. In the latter period, the number of office visits per month rose by 12 percent, average charges increased by 15 percent, and total charges per month rose by 28 percent. Six physicians generated enough revenue for the volume-incentive package to take effect every month. Seven of them never received more than their base salary, even though most of them increased the intensity of service delivery (Hemenway et al. 1990).

Self-Referral and Physician Behavior

Another set of studies focused on physician ownership of health service facilities and their referral patterns of patients to those facilities compared with physicians without an ownership position in such delivery units. Recently, it has become common for physicians to enter into joint ventures that include buying or building various physical rehabilitation facilities, testing laboratories, radiation therapy centers, and imaging facilities. The concern about these joint ventures is that the doctors who own such facilities have a potential conflict of interest when they refer their patients to those facilities for services.

Jean Mitchell and Elton Scott have evaluated the effects of physician ownership of free-standing physical therapy and rehabilitation facilities on utilization. They found that visits per patient were 39 to 45 percent higher in joint-venture facilities than in those not owned by a group of physicians. Gross and net revenues in the joint-venture facilities were 30 to 40 percent higher. The two types of facilities tend to be staffed differently, with licensed physical therapists and licensed therapist assistants spending about 60 percent more time per visit treating patients in facilities not owned through joint physician partnership. Although the joint-venture operations tended to hire fewer licensed therapists, operating income and mark-up were significantly higher. The joint-venture operations generate more of their revenues from patients who have insurance policies that cover services provided than nonjoint-venture operations (Mitchell and Scott, October 1992).

In June 1988, Congress mandated that the Office of the Inspector General (OIG) at the Department of Health and Human Services (HHS) conduct a study on physician ownership and compensation from health care facilities to which they make referrals. The resulting report to Congress found that at least 25 percent of independent clinical laboratories and 27 percent of physiological laboratories are owned partially or wholly by referring physicians. Patients of the referring physicians who had ownership in independent clinical laboratories received 45 percent more total laboratory services and 34 percent more services directly from the independent clinical laboratories than all Medicare patients in general. Patients of physicians who had an ownership share in independent physiological laboratories received 13 percent more physiological testing than all Medicare patients in general (Kusserow 1989).

Bruce Hillman et al. used a large private insurance claims database to analyze the use of diagnostic imaging by more than 6400 physicians in 65,500 episodes of care. Their analysis focused on all patients who suffered from acute upper respiratory symptoms, pregnancy, or low back pain, and on men who had difficulty in urinating. They found that self-referring physicians ordered imaging examinations 4.0 to 4.5 times more often than physicians who referred patients to facilities in which they had no interest. Not only did the self-referring physicians have more tests done, but they also generated higher average costs for each imaging examination for chest radiography, obstetrical ultrasonography, and lumbar spine radiography. In combination, the higher frequency of examinations and the higher cost per examination resulted in imaging charges per episode that were 4.4 to 7.5 times higher for self-referring physicians (Hillman B et al. 1992).

In a separate study that used similar methodologies, Hillman et al. focused on diagnostic imaging in a Medicare population. In this analysis,

they looked at differences in imaging use and charges for 10 clinical presentations. Across the 10 treatment categories they found that self-referral resulted in 1.7 to 7.7 times more imaging examinations, and that charges were 1.6 to 6.2 times higher for self-referring physicians (Hillman B et al. 1992).

Jean Mitchell and Jonathan Sunshine considered the effects of joint-venture ownership in radiation therapy facilities. They compared the operations of joint-venture facilities and nonjoint-venture facilities in Florida against comparable facilities elsewhere in the United States. They found that joint-venture facilities completely avoid inner city and rural areas. Where they do offer services, joint-venture operations provide relatively more services to individuals who have well paying insurance coverage. The frequency and cost of treatments in joint-venture operations were 40 to 60 percent higher in Florida than in the rest of the country. The differences in frequency and cost of treatment could not be explained by differences in hospital-provided radiation therapy or cancer rates in Florida. Although radiation physicists in the joint-venture clinics provided more treatment and charged more, they also spent 18 percent less time with each patient over the course of treatment than radiation physicists who worked in freestanding clinics. Finally, mortality rates were not reduced in the Florida joint-venture facilities relative to the others with which they had been compared (Mitchell and Sunshine 1992).

Because doctors who own a share in these various facilities apparently behave so differently from those who do not, the prevalence of ownership could be an important determinant in the overall costs generated in various categories of services. Kusserow, in the OIG report cited earlier, estimated that 12 percent of the physicians who bill Medicare had ownership interests in facilities to which they made referrals (Kusserow 1989). Jean Mitchell and Elton Scott cite a 1990 AMA study that estimates that about 8 percent of respondents on a survey of 4000 doctors indicated an ownership interest in a facility to which they referred patients (Mitchell and Scott Nov. 1992).

Mitchell and Scott also undertook a detailed study of physician ownership in Florida that was more intensive than prior studies (for example, see Mitchell and Sunshine 1992). They based their analysis on a mailed questionnaire with a subsequent vigorous call-back effort to nonrespondents and an effort to correct any information that was incomplete or inconsistent. They ultimately received completed questionnaires from 82.4 percent of a potential 2669 facilities. They found that more than three fourths of the ambulatory facilities and more than 90 percent of the diagnostic imaging centers were owned by referring physicians. By comparison, 5 percent of the acute care hospitals and 12 percent of nursing homes had physician owners. They estimated that at least

40 percent of the physicians involved in direct patient care in Florida are joint-venture owners in facilities to which they refer patients but in which they do not practice (Mitchell and Scott 1992).

Focusing on the structure of ownership for medical facilities and the incentives inherent in the way doctors are compensated would appear to have significant potential for freeing resources that could be redeployed to provide health services to those not receiving them now. This probably would be more fruitful than expecting large windfall gains from administrative simplification of the health delivery system or from malpractice reform. All avenues available to improve the efficiency of the American health system should be pursued as far as feasible. In the long term, however, the prospect of limitations on the general availability of some health services that become unaffordable must be faced, and everyone who might want these services may not enjoy free access.

The Philosophy of Limits

Ten years ago, Roger Evans undertook a detailed analysis of evolving health care technology and the implications for resource allocation and rationing decisions. In a two-part presentation of his analysis published in the *Journal of the American Medical Association*, he suggested that few clinicians had been faced with resource allocation or rationing decisions. Indeed, he observed that many would argue such behavior represents a "conflict of interest and is contrary to the Hippocratic oath" (Evans 1983). Putting the resource allocation issue in the framework of the Hippocratic oath provides an interesting perspective on the relative roles of various players in the provision of health care.

In 1965, when Congress was considering the amendments to the Social Security Act that eventually established Medicare and Medicaid, there was grave concern about the government's intrusion into the doctor-patient relationship. The final legislation that established Medicare was explicit—the government would not exercise "any supervision or control over the practice of medicine or the manner in which medical services are provided, or over the selection, tenure, or compensation of any officer or employee of any institution, agency, or person providing health services" (Social Security Amendments, Section 1801).

As noted earlier, to fulfill its commitment, the government gave license to doctors to carry out their Hippocratic oath and to bill the benefits provided under Medicare back to the government on the basis of "reasonable and customary" charges. Following the practice of Blue Cross, hospitals were to be reimbursed on the basis of the cost of providing services. Many employer-provided health insurance programs soon followed suit in paying for services provided on the basis of cost, or provid-

ing services for the reasonable and customary charges. To a large extent, the whole of society was co-opted into taking the Hippocratic oath implicitly in that everyone seemed willing to write the checks that paid for services provided by doctors carrying out their explicit oaths. It is now clear that the costs of some services are unaffordable under that arrangement. The federal government has been attempting to limit its expenses under Medicare and Medicaid for more than 10 years. State budgets are at the point of breaking under Medicaid. Employers are scrambling to get away from the financial burden of benefit programs.

If the federal and state governments and employers can begin to set effective limits on the aggregate amount of resources made available to the health sector, and if elimination of inefficiencies is not adequate to meet everyone's health care "needs," then microallocation decisions will still need to be made. This creates a direct conflict with what some people believe to be a "widely accepted social norm that any expenditure is justified in preserving an individual life" (Blank 1988). Unlimited services cannot be provided to all consumers at the micro level and be paid for under limited budgets at the macro level. Any discussion that concerns limitation of health services in any fashion has to incorporate the elderly, because they consume a disproportionate amount of the total services provided in relation to their relative numbers in the population.

Arthur Caplan has observed that "It is far easier to begin a moral discussion about the allocation of scarce resources, such as kidney dialysis units, than to ask health practitioners and patients to live with the fact that society has decided not to fund a sufficient number of machines to treat all who are in need" (Caplan 1992). It appears that Caplan draws a distinction between the concepts of macroallocation and microallocation of resources that were discussed briefly at the outset of this chapter. In the context of macroallocation, global budgets can be prescribed and grand allocation formulas can be devised to distribute resources on detailed, risk-related bases without looking a single patient in the eye. Because Caplan is the Director of Biomedical Ethics and a professor in the departments of philosophy and surgery at the University of Minnesota, he undoubtedly sees many of the difficult, real-life choices that doctors often face in allocating facilities, time, and other resources among individual patients.

Larry Churchill argues that philosophical medical ethics has been too focused on the micro-oriented problems of dealing with individual treatment situations and has largely ignored the macro issues of justice. If the focus truly is on the individual, then to pour fantastic amounts of resources into saving a single life is a justifiable goal, without considering the costs levied against society in pursuit of that goal. Part of the problem is that basic human impulses manufacture susceptibilities to malady.

If a drowning person calls for help, there is a natural "urge to rescue." In identifying with another person, humans tend to feel a moral obligation to help in distress. Ironically, that same moral obligation need not apply if the individual who wants help is part of a larger, amorphous mass that collectively and perhaps continually needs aid (Churchill 1987). Churchill offers an example of this conflicting sense of moral responsibility when he points to former President Ronald Reagan's appeal to the public for a liver to save a little girl from Accokeek, Maryland whom he had seen on television. President Reagan then sent an Air Force jet to fly her and her parents to Pittsburgh for a transplant operation at the same time that he was cutting back basic programs for low-income mothers and children. Unlike the transplant patient, these people were not individually recognizable to the President. Churchill believes that in sorting out moral obligations concepts of community welfare must be kept in mind. He argues that religious doctrines of stewardship prohibit the allocation of resources to extend one life at the great cost of others. Great sums should not be spent to extend a life at the margin if others in society are deprived of decent, basic health care (Churchill 1987).

Daniel Callahan contends that Americans have come to see a longer life as a basic right. The health care system has assumed a role of conqueror over disease and extender of life, but at a great cost. Callahan says that in many cities, it is the hospital that is the newest and most technologically equipped building with the schools among the oldest, forced to get by with technologically outdated equipment. As this system has developed, we have lost sight of our finite characteristics, subject to aging, decline, and death. Like Churchill, Callahan also argues that the focus of the health delivery system must shift from the individual to the community. The basic principles behind this system should include a guaranteed minimal level of health care for everyone and firm limits on individual demands for medical cures. In cases in which curative medicine no longer can resolve maladies, according to Callahan, "caring medicine," which includes social, psychological, and palliative support for the afflicted, should prevail (Callahan 1990).

Arthur Caplan also feels that the implementation of limits (i.e., rationing) on the delivery of health services represents a special subset of allocation issues from a moral perspective. He offers the paradigm of a lifeboat. Rationing is needed when everyone on the lifeboat wants the food and water that is insufficient to sustain the whole group. He argues that the following conditions are prerequisites for rationing: a shortage of life-supporting, life-sustaining resources; everyone wants whatever resources are available; resources cannot be replenished; there are not enough resources to supply everyone; and the amount of resources is too small to sustain everyone. In applying the lifeboat metaphor to medical

services, Caplan concludes that "rationing" ought to be limited to cases where life-saving resources are truly scarce (e.g., supply of donor organs for transplantation); where existing resources cannot be subdivided further or stretched; where it is clear that these resources can save lives; and where people want access to the resources. Unless these conditions are met, Caplan concludes that rationing cannot be morally justified (Caplan 1992).

Paul Menzel has attempted to sort out the moral issues of allocation among competing groups. He addresses the vital question of how to develop principles and rules for directing limited resources to the young as opposed to the elderly, to the severely ill as opposed to the not so severely ill, toward illnesses that strike large numbers of people as opposed to those that strike only few people. Menzel concludes that society's primary priority is not to focus strictly on life extension. In a situation where young people who need services must compete with the elderly for the same services, it is not fair to count only the lives saved in allocating resources; it is better to count years of life saved. Improving the quality of older lives puts stronger claims on resources than mere life extension. In analyzing the issues and surveying the work of other philosophers on issues related to severity and numbers, Menzel unearths some competing, morally fundamental principles that leave the dilemma of how to allocate limited resources unresolved (Menzel 1983). In practical terms, however, the budget dilemmas discussed earlier are forcing attention onto the moral dilemmas. If these moral dilemmas cannot be eliminated, then ways must be found to live with them and deal with them on an ongoing basis.

The International Experience

Earlier analysis showed that the American experience with spending on health care had been somewhat different than that of most major developed countries in the world. Not only do Americans spend more on health care, but the rate of increase in these expenditures has exceeded that of most other countries in the last 30 years. Despite a relatively high rate of spending on health care, 89 percent of the general public in the United States feels that the system needs fundamental change or needs to be revamped completely. By comparison, 43 percent of Canadians, 48 percent of Germans, 52 percent of French, 51 percent of Netherlanders, and 53 percent of Japanese feel the same way about their respective systems (Blendon et al. 1990).

One aspect of the general satisfaction with health systems relates to the accessibility of care. Most major developed countries have constructed health care systems that give access to everyone. In recent discussions on

health care reform in the United States, considerable time has been spent in figuring out how to provide universal access to a comprehensive package of benefits. Colleen Grogan points out that in other countries, policymakers have spent little or no time on deciding what goes into the universally available package of comprehensive benefits. In other countries, it is clear, however, that "comprehensive benefits does not mean unlimited care" (Grogan 1992). Although other governments do not define a specific package of benefits, they do control expenditures by limiting the consumption of certain medical services.

In some instances, they do this by designating specific groups as being ineligible for certain treatments. Henry Aaron and William Schwartz point out, that, until the early 1980s, most people in Great Britain over the ages of 55 or 60 who had chronic kidney failure were not offered hemodialysis. When costs for dialysis came down, the treatment was offered more frequently to the older population. Another way that other countries limit expenditures is simply to not provide certain services, or to limit their availability drastically. Again, Great Britain is a good example in that many tertiary-care university hospitals have no computed tomography scanner (Aaron and Schwartz 1990). In this case, the government can set limits on the procedures offered by fiat or by budget controls at the provider level.

The Canadian health care system is made up of 12 separate provincial or territorial plans financed largely through general revenues. Physicians' charges are fixed through a negotiated fee process, and hospitals operate on overall global budgets. Consumers can choose their own physicians who are in private practice and who are paid on the basis of services provided. The doctors do not bill patients but are paid by the public health plans. Most of Canada's hospitals are public community or university hospitals, owned by voluntary corporations, religious organizations, or local governments. Basic hospital fees are paid by the public system, although private insurance can be used to pay for a private room during a hospital stay. Hospitals develop separate budgets to cover operating and capital expenditures. The operating budget establishes the overall limit on resources available to the hospital but does not dictate the internal allocation of resources. The hospital administration and medical staff do that. Capital budgets are the mechanisms by which the provinces control the capacity of the hospital system and the implementation of new technologies. The result is that the diffusion of expensive technologies is not nearly as widespread as in the United States. For example, in 1989, Toronto had one radiation treatment center compared to 13 in Boston. Similarly the United States had eight times as many magnetic resonance imaging units per million as Canada. The net result of the limitations on resources in Canada is that there is considerable queuing for services, yet the Cana-

dian people appear to be much happier with their system than Americans are with theirs (Graig 1993).

In Germany, health services are financed through a network of approximately 1150 sickness funds. Everyone who earns less than a specified amount, approximately \$41,000 in 1993 in former West Germany and \$30,000 in former East Germany, must belong to one of these funds. Only about 1 percent of the population, all above the income limits, opt out of the system. The system provides benefits that are among the most comprehensive in the world, covering medical, dental, inpatient hospital care, and prescription drugs, with no deductibles or minimum copayment amounts. Physicians provide ambulatory care either through a regular office setting or through a hospital in which they work. Office-based physicians do not provide services once a patient enters a hospital, and those physicians who work in a hospital do not provide outpatient services. Doctors are paid by regional physician associations but must operate their practices on a fixed budget. Physician associations monitor the volume of services provided by each doctor as a cost-control device. If the volume of services exceeds the budgeted volume, then fee levels are adjusted downward to bring actual expenditures back in line with the budget. Physicians must accept the amount paid as payment in full for the services rendered. At the hospital level, regulated hospital planning coupled with per-diem rates and physician fees control overall budgets. The payers and providers of services deal with each other as large organizations that engage in collective bargaining to set rates. Germany had one of the most impressive records among major developed countries on controlling health cost growth during the 1980s, yet their system exhibits scant evidence of rationing or widespread queuing, and their system garners almost universal support from the general public that it covers (Graig 1993).

In Japan, large companies can set up their own independent plans for employees. Small- and mid-sized firms are covered by plans managed by the government. Mutual aid associations provide coverage for government workers and school workers, as well as for ship crews and day workers. The National Health Insurance program covers everyone else, including the self-employed, unemployed, and retirees. None of the plans has a deductible, but all have copayments that were introduced in 1984 to stem the rate of growth in national health expenditures that had been relatively high during the 1960s and 1970s. Employees insured under employer plans pay 10 percent of covered costs, whereas their dependents pay 20 percent of inpatient services and 20 percent of outpatient services. Those covered under the National Health Insurance plan pay 30 percent of all costs. These copayments are limited to \$400 per month for most of those covered, or \$200 per month for low-income individuals.

The government sets targets for health spending growth based on the growth in GDP. To control costs, it sets a uniform, nationwide fee schedule for inpatient and outpatient services. Billing beyond the government set prices is not allowed. The fee schedules are set by negotiation that includes representation from health care providers, payers, and consumers. Because no overall global budget exists or no limits have been set on health care expenditures, some providers tend to increase the volume of services as they game the system. Still, after fairly strong inflationary increases in health costs during the 1960s and 1970s, Japan was able to stabilize the growth in their health care outlays as a percent of GDP during the 1980s, maintaining more widespread support from their population than the United States has been able to maintain from its citizenry (Graig 1993).

Facing the Moral-Economic Conflict

Daniel Callahan noted that health research investment and health care costs correlate extremely closely. For example, he notes that between 1979 and 1987 costs in health research and development increased by 180 percent and national health costs rose by the same number (Callahan 1992). He concluded that evolving health technology is the culprit behind much of the increasing health cost burden in the United States. He is especially concerned about the prevalence of life-extending technologies that get more expensive because they keep health care consumers around longer in an increasingly debilitated state of existence. He argues that much of the extension-of-life-at-all-costs philosophy ignores the quality of life that is being extended.

The trade-off between the reasonable extension of life and the residual quality of life most certainly is not a one-to-one relationship in many cases. The person with end-stage renal kidney failure who undergoes hemodialysis certainly does not enjoy the same quality of life after the onset of illness and initiation of treatment as before. Yet, the relatively normal functioning of patients who receive dialysis suggests that coexistence between life and treatment regimen can be achieved to a tolerable state that allows them to enjoy much that life has to offer and to contribute to their families and society in many ways. Egregious cases can occur at the margin, however, especially when vast sums of resources are devoted to treatments and all parties already have conceded that those expenditures will not overcome the hopelessness of the medical situation. In some cases, the providers make the Herculean commitment; in others, the patient's family refuses to let go of a dying loved one; finally, the state often plays a role in committing resources to extending lives by forcing continued treatment in cases where the medical professionals involved

and the families involved already have agreed that nontechnological treatment is the only humane way to proceed.

Burton Weisbrod has written an essay that examines the interrelationship between the growth in health insurance in the United States and evolving technology (Weisbrod 1991). He argues that the expansion of health insurance, which, for many years, paid doctors and hospitals on the basis of submitted charges, has encouraged the development of cost increasing technologies, which, in turn, have increased the demand for insurance.

Weisbrod observes that some technologies increase expected costs of treatment for a given disease, whereas others may decrease it. Similarly, some technologies increase the variance in the cost of treating a disease, whereas others may decrease it. If a technology increases not only the expected cost but also the variance in the cost of treating a disease, then such a technology will increase the demand for insurance. If the technology reduces both, it will tend to reduce the demand for insurance. He views the spectacular growth in private and public health insurance since the end of World War II as evidence that technologies have increased both the cost *and* variance of treating diseases.

Weisbrod uses Lewis Thomas's three levels of technology in medicine to develop this analysis (Thomas 1975). The first level is "nontechnology," which helps patients cope with diseases that are poorly understood or that have no known cures. Nontechnology medicine is essentially the equivalent of the "caring medicine" that Callahan advocates in hopeless cases where no cure is available. Next is "halfway technology," which encompasses treatments that are not curative but that sustain life, although they often produce some reduction in quality of life. These technologies include transplants, treatment of cancers, and the like. The third level is "high technology," which includes truly preventive and curative procedures that can be used because of the disease mechanism and ways to treat it are well known. Nontechnologies and high technologies tend to be relatively inexpensive to deliver; halfway technologies, however, can be expensive.

Weisbrod reasons that the type of insurance available to consumers affects the kinds of technologies developed in the health sector. He notes that the historical pattern of providing coverage for new products and procedures once they move beyond the "experimental" stage is particularly important. If developers of technology believe that the potential costs of delivering a future product or service will be paid by insurance upon delivery, even though it might not be covered currently, it still is in their best interests to invest in the technology. An insurance system that tends to pay for almost any service once it is no longer experimental and one that tends to pay for the costs incurred in the delivery of health ser-

vices on a retrospective basis encourages the development of halfway technologies that extend life with no regard for cost. Weisbrod also contends that the retrospective payment structure characteristic to health insurance in the United States since the end of World War II has tended to encourage the development of halfway technologies because no incentive is given to providers to avoid expensive technologies, even if only marginally effective.

In contrast, a prospective payment system encourages health care providers to seek out technologies that reduce costs, because prospective payment gives providers a flat rate without regard to the actual costs incurred in delivery. Throwing expensive, unproven, or marginally beneficial technology at a health problem significantly increases the likelihood that the prospective payment will not cover the costs of treatment. Prospective payment encourages the development of high technologies, but, in its absence, more nontechnology care would be given than occurs under a retrospective payment system.

If the United States were to move to a universal prospective payment health delivery system, it would cast many health care providers into a much different role than they are in today. To adopt such a system would inevitably raise questions about the general availability of services and whether or not providers were not reducing overall quantity and quality of services to meet budget constraints. Alan Hillman has pointed out that many HMOs already present doctors with a potential conflict of interest because the level of care provided to a patient can directly affect remuneration (Hillman A 1987). The same is true, however, when a doctor bills an insurance company retrospectively on a fee-for-service basis. In that case, the conflict of interest operates in the opposite direction. In trying one more treatment, prescribing one more x-ray, or requesting one more laboratory test, the doctor influences compensation directly. It would seem that only doctors compensated on a direct-salary basis, with no incentives for the economic performance of their employer, are truly free of the conflict-of-interest situations discussed at length earlier. In such cases, though, the employer undoubtedly would oversee the doctor's use of resources in treating patients.

Some doctors have made it clear that they are troubled by having to take an active role in the explicit allocation of health services among the service population. Doctors of earlier generations, however, faced the same dilemma of allocating scarce resources. Under the modern widespread practice of reimbursement for "reasonable and customary" charges for whatever services provided, many doctors no longer faced the earlier, traditional need to limit services to individual patients. Even as Medicare and Medicaid began to curtail reimbursement rates, it often was possible to shift expenses that were not being reimbursed from patients who had

public insurance or no insurance to patients covered by private insurance. As employers have become increasingly aware of the extra burdens that their plans have had to shoulder, they have moved to limit the extent to which they become a dumping ground for costs that others refuse to cover. Although some doctors may not want to participate in allocation

TABLE 8.11 Area Variations in Selected Medicare Procedures: Utilization Rates Per Thousand Beneficiaries^a

	<i>Number of Areas</i>	<i>5th</i>	<i>25th</i>	<i>50th</i>	<i>75th</i>	<i>95th</i>	<i>Coefficient of Variation</i>
Office visits (per enrollee)	344	2.58	3.01	3.36	3.79	4.59	0.18
Hospital visits (per enrollee)	344	1.57	2.15	2.59	3.16	3.95	0.27
Consultations	340	162.07	221.70	276.72	349.19	548.15	0.42
CT scans (head)	344	34.29	46.01	53.42	64.41	77.84	0.26
CT scans (other)	344	25.45	36.26	44.59	54.55	76.55	0.33
Arthrocentesis	344	7.42	18.81	28.15	41.53	72.83	0.64
Upper GI endoscopy	344	9.84	16.66	20.73	25.36	36.83	0.36
Colonoscopy	344	9.42	15.63	20.30	27.46	422.25	0.44
Electrocardiogram	344	448.96	603.69	708.37	841.34	1130.30	0.27
Coronary angiography	303	2.04	5.08	7.38	9.78	14.05	0.52
Cystoscopy	344	5.80	13.49	19.68	24.16	37.63	0.47
Transurethral resection of the prostate	312	11.19	15.96	19.62	22.94	31.40	0.30
Destruction of benign lesions, facial	339	14.63	29.09	43.02	69.15	112.75	0.63
Destruction of benign lesions, nonfacial	339	16.93	30.69	49.93	72.12	160.60	0.98
Carotid endarterectomy	144	0.77	1.41	2.03	2.93	4.66	0.57
Cataract removal/ lens implant	316	6.36	15.76	22.23	29.33	41.02	0.46
Cholecystectomy	233	2.63	3.88	4.81	5.85	8.71	0.38
Modified radical mastectomy	148	1.87	3.01	3.93	4.77	6.22	0.33
Breast biopsy with excision	201	2.65	4.66	6.03	7.90	11.20	0.44
Total hip procedures	171	1.19	1.92	2.53	3.54	4.89	0.42

^aSource: 1985 Part B Medicare Annual Data Beneficiary File as reported in Holahan J, Berenson RA, Kachavos PG. Area Variations in Selected Medicare Procedures. *Health Affairs*. Winter 1990; 169.

decisions, the practical reality is that they no longer can avoid it. In many cases they already are making explicit allocation decisions to limit the services that they provide to some patients. And the general public may be more comfortable with a physician in the role of judge than a politician.

A highly variable allocation of health services already exists for some elderly people. John Holahan, Robert Berenson, and Peter Kachavos have analyzed area variations in the provision of 20 different medical procedures to Medicare beneficiaries who received fee-for-service benefits in 1985 (Holahan et al. 1990). In developing their analysis, they used a five percent sample of beneficiaries and aggregated them into groups by metropolitan statistical area (MSA) for each MSA in the United States and for non-MSA parts of each state except for Rhode Island and New Jersey. This gave them 344 potential areas to compare procedures that were fairly common. Some procedures were not provided frequently enough in some areas with smaller populations to give statistically reliable estimates of the actual treatment patterns for that whole population. In these cases, the analysis focused only on treatment patterns in areas that produced enough observations to support the analysis.

The gross results of their analysis are presented in Table 8.11, which reveals wide variation in the utilization rates for most procedures included in the study. The authors found several factors to be statistically significant in explaining these variations. For example, they found that the prevalence of specialists in a geographical area increased utilization rates. Their major conclusion, however, was that much of the variation in treatment patterns could not be accounted for by the individual characteristics of the area populations, the service providers, or other criteria that had been measured. It is possible that the practice of medicine tends to take on a local pattern as doctors in any given locale adopt treatment regimens similar to those used around them or with which they are already familiar. The common practice in one area might differ significantly from those in other areas. The overall variations in the provision of health services under Medicare may be attributed largely to common practice variations of physicians across localities. This suggests that more widespread dissemination of information regarding effective treatment regimens might result in more consistent and appropriate treatment patterns across the country.

One specific finding in this study that relates to the elderly does not follow from the data in Table 8.11. In their analysis, the authors found that "The seventy-five and over population is less likely to have CT scans, both of the head and the rest of the body, and less likely to have upper GI endoscopies, coronary angiographies, transurethral resections of the prostate, and cataract removal with lens implants. It appears that some proce-

dures are simply not done on very old persons" (Holahan et al. 1990). It is possible that the de-facto, decision-making process on selective limitation of health services in this country is similar already to the processes that exist in Canada, Great Britain, or Germany, for instance, where doctors clearly face allocation decisions because of the national budget constraints imposed on their health delivery systems.

Any further constraint of resources to the health sector in the United States will create some moral dilemmas, but lack of constraint is creating the same moral dilemmas. At the federal government level, the size and persistence of federal deficits gives rise to long-term equity questions among generations. Although some individuals have argued that national priorities should be rearranged to divert certain existing government expenditures to the delivery of yet more health care services, no absolute moral standard can certify that the current priorities are inferior to some other politically acceptable priorities. At the state government level, the relative burden of medical costs has infringed recently on other public obligations. Although the trade-off between providing a liver transplant for a small child and building a road or staffing a school room is not something anyone relishes, the orderly evolution of society depends on governments meeting the latter obligations. Although employers in this country have accepted an unusually large role in providing health insurance protection to workers and their dependents, these same employers have not been freed from their obligations to provide safe jobs and fair compensation to their workers, or from their responsibility to provide a reasonable return to the members of society that make ongoing operations possible.

One area that must be addressed under the possibility of an allocation system is the general availability of good information on what works, what is cost effective, and the probabilities of favorable outcomes. It is ironic that our "high technology" medical system has placed so little emphasis on outcomes research. Prescription drugs and some medical devices are the only major categories of services or products that must be proven effective before new technologies can be adopted and paid for under the current reimbursement system. Elaborate clinical outcomes studies will not be developed quickly. In the short term, more emphasis should be placed on expert panels to develop treatment protocols derived from a consensus on what works and what does not. This information, combined with a move to capitated payment systems, could eliminate much of the unnecessary and ineffective care provided today. If medical practitioners begin to use this information to determine their own practice patterns, then potential elimination of inefficient and ineffective care will ameliorate the breadth and depth of allocation decisions that otherwise must be faced.

If medical providers cannot help establish and implement the mechanisms for making health service delivery affordable and equitable in America, then, ultimately, more programs like the one that Oregon has proposed for its Medicaid program will be needed. It is not clear whether the Oregon approach is any less fraught with moral dilemmas than one in which medical providers work out treatment regimens and protocols among themselves to provide a finite level of services to those who need them. The hope that Americans are willing to pay for every possible health service or product that the current system might devise and make that service or product available to anyone who might want it is not viable in the current economy and is unlikely to be so any time in the foreseeable future.

References

- Aaron H, Schwartz WB. Rationing Health Care. *Across the Board*. July/August, 1990; 34-39.
- Blank RH. *Rationing Medicine*. New York: Columbia University Press. 1988; 85.
- Blendon RJ, Leitman R, Morrison I, Donelan K. Satisfaction with Health Systems in 10 Nations. *Health Affairs*. 1990; 9(2); 188.
- Burner ST, Waldo DR, McKusick DR. National Health Expenditures Projections Through 2030. *Health Care Financing Review*. 1992; 14(1): 19.
- Califano Jr. JA. The Last Time We Reinvented Health Care. *Washington Post*. April 1, 1993; A23.
- Callahan D. *What Kind of Life: A Challenging Exploration of the Goals of Medicine*. New York: Simon & Schuster Inc., 1990.
- Caplan AL. *If I Were a Rich Man Could I Buy a Pancreas?* Bloomington: Indiana University Press. 1992; 289.
- Churchill LR. *Rationing Health Care in America: Perceptions and Principles of Justice*. Notre Dame, Indiana: University of Notre Dame Press, 1987.
- Congressional Budget Office. *The Economic and Budget Outlook*. Washington, DC: Congress of the United States, August, 1992.
- Congressional Budget Office. *Universal Health Insurance Coverage Using Medicare's Payment Rates*. Washington, DC: Congress of the United States. 1991; 22-33.
- Etzioni A. Health Care Rationing: A Critical Evaluation. *Health Affairs*. 1991; 10(2): 89-95.
- Evans RW. Health Care Technology and the Inevitability of Resource Allocation and Rationing Decisions. *Journal of the American Medical Association*. 1983; 249(15): 2048.
- Callant MH. Limits on Medicaid Program Fund Transfers. *Healthcare Financial Management*. October 1992; 34.
- Gallup Organization. *Public Attitudes on Setting Health Care Limits, 1992*. Washington, DC: Employee Benefit Research Institute. October 1992; 24.
- Gleicher N. Cesarean Section Rates in the United States: The Short-Term Failure of the National Consensus Development Conference in 1980. *Journal of the American Medical Association*. 1984; 252(23): 3273.
- Graig LA. *Health of Nations*. 1st ed. Washington, DC: Wyatt Company, 1991.
- Greenfield S, Nelson EC, Zubkoff M, Manning W, Rogers W, Kravitz RL, Tarlov

- AR, Ware JE. Variations in Resource Utilization Among Medical Specialties and Systems of Care. *Journal of the American Medical Association*. 1992; 267(12): 1624-1630.
- Grogan CM. Deciding on Access and Levels of Care: Comparison of Canada, Britain, Germany, and the United States. *Journal of Health Politics, Policy and Law*. 1992; 17(2): 213-232.
- Hemenway D, Killen A, Cashman SB, Parks, CL, Bicknell WJ. Physicians' Responses to Financial Incentives, Evidence from a For-Profit Ambulatory Care Center. *New England Journal of Medicine*. 1990; 322(15): 1059-1063.
- Hillman AL. Financial Incentives for Physicians in HMOs, Is There a Conflict of Interest? *New England Journal of Medicine*. 1987; 317: 1743-1748.
- Hillman AL. Health Maintenance Organizations, Financial Incentives, and Physicians' Judgments. *Annals of Internal Medicine*. 1990; 112(12): 892.
- Hillman AL, Pauly MV, Kerstein J. How Do Financial Incentives Affect Physicians' Clinical Decisions and the Financial Performance of Health Maintenance Organizations?. *New England Journal of Medicine*. 1989; 321(2): 86-92.
- Hillman BJ, Joseph CA, Mabry MR, Sunshine JH, Kennedy SD, Noether M. Frequency and Costs of Diagnostic Imaging in Office Practice—A Comparison of Self-Referring and Radiologist-Referring Physicians. *New England Journal of Medicine*. 1990; 323(23): 1604-1608.
- Hillman BJ, Olson GT, Griffith PE, Sunshine JH, Joseph CA, Kennedy SD, Nelson WR, Bernhardt LB. Physicians' Utilization and Charges for Outpatient Diagnostic Imaging in a Medicare Population. *Journal of the American Medical Association* 1992; 268 (15): 2050.
- Holahan J, Berenson RA, Kachavos PG. Area Variations in Selected Medicare Procedures. *Health Affairs*. 1990; 166-175.
- Iglehart JK. Health Policy Report, The American Health Care System, Medicaid. *New England Journal of Medicine*. 1993; 328(12): 898.
- Insurance Information Institute. Medical Malpractice Insurance, 1982-1991. *The I.I.I. 1993 Fact Book*. 1993; 29.
- Kusserow RP. *Financial Arrangements Between Physicians and Health Care Businesses*. Washington, DC: Office of the Inspector General. U.S. Department of Health and Human Services. May 1989.
- Levit KR, Lazenby HC, Cowan CA, Letsch SW. National Health Expenditures, 1990. *Health Care Financing Review*. 1991; 13(1): 36.
- Localio AR, Lawthers A, Bengtson J, Hebert L, Weaver S, Brennan T, Landis R. Relationship Between Malpractice Claims and Cesarean Delivery. *Journal of the American Medical Association*. 1993; 269(3): 366.
- Menzel PT. *Medical Costs, Moral Choices: A Philosophy of Health Care Economics in America*. New Haven: Yale University Press. 1983; 184-212.
- Mitchell JM, Scott E. New Evidence of the Prevalence and Scope of Physician Joint Ventures. *Journal of the American Medical Association*. 1992; 268(1): 80-84.
- Mitchell JM, Scott E. Physician Ownership of Physical Therapy Services, Effects on Charges, Utilization, and Service Characteristics. *Journal of the American Medical Association*. 1992; 268(15): 2055-2059.
- Mitchell JM, Scott E. Physician Self-Referral: Empirical Evidence and Policy Implications. *Advances in Health Economics and Health Services Research*. 1992; 13; 27-42.
- Mitchell JM, Sunshine JH. Consequences of Physicians' Ownership of Health Care Facilities—Joint Ventures in Radiation Therapy. *New England Journal of Medicine*. 1992; 327(21): 1497-1501.

- Morgan D. Loopholes Closing for Strapped States. *Washington Post*. February 7, 1993; A23.
- Morgan D. Tennessee Medicaid Crunch Mirrors a National Ill. *Washington Post*. March 29, 1993; A1, A6.
- Myers SA, Gleicher N. A Successful Program to Lower Cesarean-Section Rates. *New England Journal of Medicine*. 1988; 319(23): 1511-1516.
- Newhouse JP. An Iconoclastic View of Health Cost Containment. *Health Affairs*. 1993; 12(Supplement): 152-171.
- Pallarito K. Budget Deficits Threaten to Shut Out Medicaid Benefits. *Modern Healthcare*. April 22, 1991; 26.
- Reinhardt UE. Health Care Spending and American Competitiveness. *Health Affairs*. 1989; 8(4): 5-21.
- Riley K. Task Force Mulls Law on Medical Liability. *Washington Times*. March 19, 1993; C1.
- Reischauer RD. CBO Testimony before the Subcommittee on Health, Committee on Ways and Means. U.S. House of Representatives. Washington, DC: March 2, 1993; 17.
- Rosenblatt RA. Medicaid Bills for Poor Up 25% in U.S., 36% in California. *Los Angeles Times*. March 18, 1993; Home Edition, Part A; 25.
- Schieber GJ, Poullier JP, Greenwald LM. Health Care Systems in Twenty-Four Countries. *Health Affairs*. 1991. 10(3):22-38.
- Schieber GJ, Poullier JP, Greenwald LM. U.S. Health Expenditure Performance: An International Comparison and Data Update. *Health Care Financing Review*. 1992. 13(4):3.
- Sloan FA, Bovbjerg RR, Githens PB. *Insuring Medical Malpractice*. New York: Oxford University Press. 1991; 206-218.
- Social Security Amendments. Section 1801, Title SVII. Health Insurance for the Aged and Disabled. 42 USCS 1395:6811.
- Social Security Administration. *Social Security Bulletin, Annual Statistical Supplement, 1991*. Washington, DC: Social Security Administration. 1991; 271.
- Thomas L. *The Lives of a Cell*. New York: Bantam Books. 1975; 37-40.
- Thorne JL. The Oregon Plan Approach to Comprehensive and Rational Health Care. In: Strosberg MA, et al., eds. *Rationing America's Medical Care: The Oregon Plan and Beyond*. Washington, DC: The Brookings Institution. 1992; 25-26.
- U.S. Department of Commerce. Bureau of the Census. *Statistical Abstract of the United States: 1992*. 112th ed. Washington, DC: U.S. Government Printing Office. 1992; Table no. 86; 67.
- U.S. General Accounting Office. *Canadian Health Insurance, Lessons for the United States*. Washington, DC: United States General Accounting Office. 1991; 60-66.
- Weiler PC, et al. *A Measure of Malpractice, Medical Injury, Malpractice Litigation, and Patient Compensation*. Cambridge, Mass: Harvard University Press. 1993; 2.
- Weisbrod BA. The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment. *Journal of Economic Literature*. 1991; 29; 523-552.
- Wyatt Company. Employer-Sponsored Health Benefits Programs: A Chronic Affliction or a Growing Malignancy? *Management USA: Leading a Changing Work Force*. Washington, DC: Wyatt Company. 1990; 2.
- Wyatt Company. Unpublished data from its 1987 *Group Benefits Survey* and 1992 *Wyatt COMPARE Survey*.

Commentary: David A. Asch

Sylvester Schieber entitles the last section of Chapter Eight, "Facing the Moral-Economic Conflict." This commentary focuses on the last section of his chapter and begins, in a sense, where Dr. Schieber ends. He concludes with the statement that, "The hope that Americans will be willing to pay for every possible health service or product that the current system might devise and then make that service or product available to anyone who might want it is not viable in the current economy."

Dr. Schieber should be commended for his comprehensive analysis in support of this last statement. He brings together a tremendous amount of thought and information about the resources that presently support health care in this country, comparisons across developed nations, and potential trends for the future. Dr. Schieber's figures tell much about the United States' capacity to deliver health services. Ultimately, however, the important question to answer is how much of that capacity should be supported?

This question assumes a perspective slightly different from the view of many health economists. The common view, as Dr. Schieber suggests, is that "no absolute moral standard exists that would certify the current priorities as inferior to other politically acceptable priorities." Indeed, there is no obvious reason why 20% or even 50% of the United States gross domestic product (GDP) should not be devoted to health care if that is what Americans want. Although the current ruckus over health care reform suggests there may be some absolute political standards for setting priorities, there are no absolute moral standards that dictate how much health care capacity to support.

The position expressed in this commentary is that there is an absolute moral requirement for a society to make some sort of *decision* about how much health care spending to support, regardless of what that level is. The current political interest in health care reform is as convenient a reason as any to begin that process now, but, in the abstract, it makes

sense for societies to develop a formal mechanism with which to set priorities, something that in this case, perhaps, should have begun long ago.

The argument presented here is that we must make active decisions to set priorities and that setting priorities has more to do with supporting health than anything else. In the end, the title of Dr. Schieber's paper is misleading, because it suggests that we can resolve the conflict between cultural values and limited resources in some absolute sense. The position of this commentary is that there is no satisfactory resolution to this problem. Instead, in the area of health care benefits for the elderly or, indeed, in any area that addresses health care justice, there simply is no way to avoid conflict. The search for some sort of acceptable solution is destructive because it wastes time and prevents us from making the hard choices that we cannot avoid.

The remainder of this discussion will touch upon three related issues. Each of these represents a basic concept that underlies the conflict that Dr. Schieber addresses. These underlying concepts explain why the conflict between values and resources is irreconcilable and why we should stop seeking resolution.

The first issue is that the health care system is like a commons upon which we all graze, and unless a commons is actively managed and regulated, everyone loses. The message is that if we are to share common resources, we must cooperate as a group; to do this, we must learn to restructure personal incentives. The second issue is that the whole point about limited resources is that we sometimes have to say no to some truly beneficial services. The message here is that despite the reduction in costs we might achieve by reducing administrative hassles or defensive medicine, trimming the fat is never enough. We must learn to set reasonable limits, and *reasonable* limits will always exclude some truly beneficial services. The third issue is that even if we establish health as our most important priority, we must stop thinking of health as something only medicine can provide. The message here is that there are alternative paths toward health, and we must focus on the goals rather than on the process.

The goal of this paper is to demonstrate that these three concepts are connected; that they are indeed the basic concepts that underlie this problem; and that, although each of us already understands and accepts these three concepts, at the same time we seem unable to accept their logical implications.

The Tragedy of the Commons

Each of us has had the experience of going to a restaurant with a group of friends and deciding what to eat. When ordering from the menu, we

may choose differently if we are getting separate checks or if, instead, we will later split the bill. A single diner ordering within a group will order more than otherwise, because increases in the cost of one meal will increase the total bill relatively little. Since each diner faces the same choice, however, all may overorder. The end result is that the entire bill becomes progressively larger, and each person's share of this bill turns out to be perceptibly higher than it might have been had each planned to pay separately.

This general phenomenon has been called the tragedy of the commons (Lloyd 1833). Imagine a pasture open to a group of shepherds. As each shepherd allows his animals to graze the land, he may conclude that the cost to him of adding one more sheep to the herd is more than offset by the gains. He gets all the benefit of the additional animal but only a share of the cost. As a result, the rational shepherd adds one more animal to his herd, and then another, and yet another. But since all rational shepherds reason the same way, in time the commons becomes so overcrowded with sheep that there is insufficient grass for grazing. As Garrett Hardin observed, there is no technical solution to this common problem: "Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all" (Hardin 1968).

The resources available for health care have been likened to a medical commons (Somers 1971; Hiatt 1975). Health insurance sustains that similarity because health insurance insulates individuals from the costs of their choices and, thereby, attenuates the financial implications of individual decisions on individual decisionmakers. The issue really is no different from the problem of moral hazard (Pauly 1968). As in the restaurant, where the diners are prompted to order the more expensive entree or the second dessert, the tragedy of the health care commons is that individuals will demand more health care than they would if they faced the full cost themselves.

There is no reason to blame health insurance alone for creating a medical commons. Physicians and other health care providers have been coconspirators, for they have long supported the view that whatever can be done for the patient should be done. Professional norms like these induce demand (Eisenberg 1986).

Still, the central issue is that health insurance sustains the medical commons. Deductibles and copayments help patients sense on a personal level the costs of their individual decisions, but deductibles and copayments in the end merely turn full insurance into partial insurance. The same issues remain—patients are still at least partially numb to the potentially painful financial implications of their decisions, and so they will tolerate more than if they were not insured.

This is a fundamental problem that has no solution. As long as we allow individuals to purchase health insurance—and there are many compelling reasons why health insurance is, all told, probably a good thing—our aggregate demand for health services remains artificially high.

Most people intuitively understand and accept this idea. What is surprising is that, despite the simplicity of this concept, so many seem unwilling to accept its implications. As Daniel Callahan has observed:

There is a widespread belief that we can find some managerial fix, some wonderful incentive scheme to get doctors to use only proven treatments based on parsimonious diagnostic procedures, for instance. That belief is matched in fervor only by the hope that we can find some entitlement fix, some scheme that reduces government expenditures while leaving patients satisfied with their nicely calibrated out-of-pocket expenses. (Callahan 1990)

The commons represents a marketplace where the invisible hand does not support equilibrium. The tragedy of the commons is that the invisible hand leads to destruction. The only way to avoid that destruction is to establish an active process that sets limits.

Beyond Trimming the Fat

This notion leads to the second point. Dr. Schieber outlines several ways to reduce health care costs without changing the amount of services provided. These mechanisms include streamlining the health care system to reduce its administrative costs; altering the malpractice tort liability system so that awards are reduced, awards are directed more toward patients than attorneys, and the practice of defensive medicine is undermined; and restructuring the financial incentives that lead to the oversupply of and induced demand for unnecessary medical services. Each of these mechanisms represents one form of trimming the fat. Individually, each may produce various amounts of savings, but the actual amount of savings is less important than the obvious point—we ought to eliminate wasteful practices in health care no matter how small the gains.

It is one thing to suggest that we ought to trim the fat, but it is entirely another thing to suggest that trimming the fat somehow might address or even solve the cost problem we face in health care. Trimming the fat is not a *solution* to anything. Even if United States health care expenditures amounted to only 1% of the GDP, we ought to try to eliminate waste. Waste is inherently bad.

The problem with focusing on waste is not that it gets us nowhere. The problem is that the exercise is an excuse not to address the real issue.

The real issue is the problem of diminishing marginal returns. This is a basic principle from elementary microeconomics: Firms ought to stop producing when the marginal costs of production exceed their marginal gains. At this point, there is still unmet demand for goods and services, but the demand cannot support the cost of producing those goods and services.

The implications of this very basic idea ought to be clear in the case of health care, whether it is for the elderly or any other segment of the population. If we are unwilling to put a price on health benefits, then we immediately commit an unlimited amount of resources to health and go bankrupt. As soon as we put a finite value on health benefits, there is some point at which the cost of the next health service is not worth its benefit. If we stop providing services at that point, as we should, we will have failed to provide services that convey some benefits.

What this means is that trimming the fat is never sufficient. There is no way we can avoid the situation in which we fail to provide services that convey true benefits. You have to cut lean. This is the price of Lewis Thomas' "halfway technologies" that Dr. Schieber discusses (Thomas 1974). As Howard Hiatt has argued, "[a]s we develop more and more practices that may be beneficial to the individual but not to the interests of society, we risk reaching a point where marginal gains to individuals threaten the welfare of the whole" (Hiatt 1975).

As in the case of the tragedy of the commons, this is a simple point that flows inescapably from a basic concept that we all understand. Nevertheless it is surprising how many believe that by trimming the fat, or by identifying some other managerial fix, we can somehow avoid the situation in which we say no to truly beneficial services. The message is that we must learn to set reasonable limits, and *reasonable* limits will always exclude some medical care that really does make a difference.

Alternative Paths to Health

The degree to which we cut into the lean will be determined by the priority we place on health. This notion introduces the third point. No matter where health sits on our list of priorities, the goal is health, not the provision of medical care. So much of the current thinking about health seems to confuse the goal with the process. The distinction is a simple concept, like the tragedy of the commons or the law of diminishing marginal returns, and yet, once again, the implications of this simple concept continue to be ignored.

In fact, medical care is probably much less relevant to aggregate health than many other social institutions. Historically, the really important advances in health have come from significantly more fundamental

changes, like public sewers and fresh water, or overall improvements in the economy.

Dr. Schieber notes how some believe that "any expenditure is justified in preserving an individual life" (Blank 1988). That statement needs to be qualified. Americans have been able to establish budgets for highway or product safety, building codes, and a host of nonmedical interventions whose explicit goals are to promote health and preserve life. The uproar over the prospect of global health care budgeting is a recent example of the distinction made between medical and nonmedical paths to health and welfare. The glib explanation for the current interest in health care cost containment is that for years the medical enterprise has been given an unlimited budget, and they have "exceeded" it. No other path toward health and welfare has been similarly endowed.

A variety of political and psychological reasons explain how the distinction between medical and nonmedical paths to health can be maintained in the minds of otherwise thoughtful people who clearly understand—on some level—that there is no distinction at all. One political reason may be the power of the medical lobby. One psychological reason may be the urgency and compelling plight of the identifiable patient versus the unknown statistical highway fatality (Churchill 1987).

Whatever the reasons, the distinction leads to waste and inefficiency. As Howard Hiatt notes, the "widely accepted but narrow interpretation of health as an exclusively medical concern . . . contributes to continuing raids on the commons by expensive practices" (Hiatt 1975). The ultimate tragedy of maintaining this artificial distinction is that we forego opportunities for real improvements in health. Each dollar we contribute to some expensive medical practice of limited value might instead have been used to widen highway lanes or strengthen bicycle helmets.

This discussion began with Dr. Schieber's claim that there may be no absolute moral standard by which to judge any system of priorities. This claim may be legitimate; nevertheless, there is an absolute moral requirement that we set some priorities. If we are able to set priorities in some areas that affect health, like highway safety, we ought to be able to do the same for medical care. And unless we are willing to tolerate inefficiencies in the ways we allocate resources across alternative paths toward the same goal, those priorities need to be consistent—which is to say that they must be based on those goals, not on any one specific process.

Conclusion

Recognizing medical care as only one of many means to an end highlights the alternative uses for our resources and, in itself, provides a compelling argument for allocating those resources on the basis of the mar-

ginal gains that they can achieve. These are the micro issues in health care resource allocation. The macro issues are all the same, although they take various names: setting priorities, determining the size of the medical commons, or, more currently, establishing global budgets.

The argument presented in this commentary is that there is no resolving the conflict between individual needs and social goals. The reason this conflict is irreconcilable can be found in very simple notions that we all learned to accept before we finished high school. Yet the inescapable conclusion of these three notions—the tragedy of the commons, the law of diminishing marginal returns, and the distinction between process and goals—seems to be continually lost on those who search for the perfect copayment or deductible, the perfect reimbursement system for physicians, or the perfect way to trim the fat. These are all good things, but, in the end, they are no substitute for actually saying no to some truly beneficial medical services that will help real patients.

Garrett Hardin notes that "Every new enclosure of the commons involves the infringement of somebody's personal liberty" (Hardin 1968). The practical implications of this comment may not be perfectly clear in the case of health care, but it would seem that the elderly are at great risk, and that arguments such as these could redefine how their health care benefits are determined. Most of the popular and useful measures of health benefits rely in some way on counting up the years of life saved by alternative health interventions. Because older people, by and large, have fewer years left to live no matter what, interventions targeted to the elderly have a lower ceiling of potential gain than those targeted to the young. Without getting more specific, it seems logical that if we are able to accept the commons as a finite resource, to allocate that resource according to the benefits we receive, and to recognize alternative paths to the same goal, then many medical interventions for the elderly are going to seem very frivolous indeed. We need to say no more often in the provision of medical care. We need to say it to our physicians, and our physicians need to say it to their patients. If we learn, finally, how to say no, then the elderly are going to hear that word a lot more than other segments of the population.

References

- Blank RH. *Rationing Medicine*. New York: Columbia University Press. 1988; 85.
 Callahan D. *What Kind of Life: The Limits of Medical Progress*. New York: Simon and Schuster. 1990; 27.
 Churchill LR. *Rationing Health Care in America: Perceptions and Principles*. Notre Dame, IN: University of Notre Dame Press. 1987.
 Eisenberg JM. *Doctors' Decisions and the Cost of Medical Care*. Ann Arbor: Health Administration Press. 1986; Chapters 2-4.

- Hardin G. The Tragedy of the Commons. *Science*. 1968; 162:1243-1248.
- Hiatt HH. Protecting the Medical Commons. *New England Journal of Medicine*. 1975; 293:235-241.
- Lloyd WF. *Two Lectures on the Checks to Population*. Oxford: Oxford University Press. 1833.
- Pauly MV. The Economics of Moral Hazard. *American Economic Review*. 1968; 533-539.
- Somers AR. *Health Care in Transition*. Chicago: Hospital Research and Educational Trust. 1971; 153-157.
- Thomas L. *The Lives of a Cell*. New York: Viking. 1974; 31-36.

Commentary: John M. Burns

In Chapter Eight, Sylvester Schieber discusses extensively the fundamental conflicts that have led to the current state of affairs in the American "nonsystem" of health care. The prominent issues examined by Schieber include runaway costs, excessive care, and growing numbers of underinsured or uninsured. This commentary evaluates the success of Schieber's presentation.

In 1944, Tinsley Harrison noted, "the present day tendency is toward the fine minute history followed by a five day barrage of special tests in the hope that the diagnostic rabbit may suddenly emerge from the laboratory hat" (Harrison 1944). Medical benefit plans that provide entitlement to services lead to the indiscriminant use of diagnostic testing, one factor that contributes to the high cost of health in the United States, as compared to Canada and Europe for instance. Additional causes are (1) administrative cost excesses; (2) unbridled technology and specialization without concern for yield; (3) insatiable demand for services; (4) unrealistic expectations and poor medical judgment; (5) medical legal concerns; and (6) greed (Hadler 1990). The major reasons for the conflict described by Schieber are the secondary costs of excessive and unnecessary care. For example, Milliman and Robertson, the Seattle-based actuaries and consultants, recently projected that "nearly 60% of the time patients spend in hospital is medically unnecessary" (Axene and Doyle 1993).

The entitlement to health care benefits, especially that provided to the elderly and encouraged by the vested interests of the stakeholders, contributes significantly to the excessive demands of the patient consumer. Certainly, Americans must learn to cope with an aging society that now consumes almost 40% of all health care in the country. The entitlement orientation of consumers and the failure of the health care nonsystem to minimize unnecessary care has created a situation in which "the amount of health care that the elderly can consume is limited only by the imagination and ingenuity of scientists, physicians, drug companies, and other producers of other health care goods and services" (Fuchs 1993).

If excessive costs were the only consequence of the situation, it would be bad enough; but, keep in mind a 1981 finding that 36% of patients

admitted on a general medical service at a university hospital acquired an iatrogenic illness. Indeed, in 9% of all persons admitted, the incidence was considered major in that it threatened life or produced considerable disability, and that 2% of iatrogenic illness was believed to contribute to the death of the patient (Steel et al. 1981).

Schieber's views are debatable, particularly when he states that chronic ailments are problematic because their treatment often means that yet some additional chronic ailments will result from treatment and will require further treatment. As Dr. Alexander Leaf (Harvard Medical School) stated in a recent article, "the objection is invariably raised that preventing illness early will only increase the burden of chronic diseases at a later age. This, it is argued, would increase the sum total of human suffering and adversely affect health costs. But evidence for such gloomy outcome from optimizing health as the major goal of the health care system is what is lacking. . . . Disease prevented is not necessarily disease postponed" (Leaf 1993). The perverse incentives of the system undoubtedly contribute to the lack of emphasis on preventive care. After all, it is the doers, not the preventers, who reap rewards. Prevention is too invisible and even boring. Watching a fire is more exciting than a smoke detector (Dans 1993).

Schieber also contends that "state and local governments are large *purchasers* of health services through a variety of programs." (author emphasis) This statement also is debatable. Undoubtedly, government is a *payer* of benefits, but whether or not the government purchaser has the sophistication to specify a particular product so that an informed purchase can be made is highly doubtful.

The issue of rationing is raised by Schieber as the inevitable consequence of cost control. The definitions proposed by Hadorn and Brook would help resolve this apparent dilemma (Hadorn and Brook 1991). They suggest the following:

- Rationing is the societal toleration of inequitable access to health services acknowledged to be necessary by reference to necessary care guidelines;
- Health care needs are desires for services that have been reasonably well demonstrated to provide significant net benefit for patients with specified clinical conditions;
- Basic benefit plans or insurance packages should provide for all and only acknowledge health care needs, again by reference to appropriate clinical guidelines.

The definition of care on the basis of standards of necessity and appropriateness should help resolve the conflict between cultural values and

limited resources, a conflict that is one of perception more than of reality. According to a recent editorial, "Restriction of care to that which is known to be appropriate or to that which an informed patient consents and redesign of the processes of care or the provision systems are approaches that do not require rationing of care" (Schoenbaum 1993).

An excellent review is available from the Washington Business Group on Health that addresses malpractice reform. It might be advisable for both Schieber and interested readers to examine this work, especially in light of the presentation on malpractice in Chapter Eight.

With regard to excessive care, Schieber offers the Chicago Mt. Sinai caesarean section study as an example. A better reference for the appropriate number of necessary caesarean births might be the massive work done by Chalmer, Enkin, and Keirse (1990). In this analysis, which reviewed studies of 60 key journals from 1950 onward and which included surveys from over 40,000 obstetricians and pediatricians in 18 countries, the authors were able to document that little improvement occurs in outcome of pregnancy when caesarean rates rise above 7 percent! Finally, the moral and economic conflict in providing care for the elderly, as discussed in Chapter Eight, appears to be based on the false assumption that whatever is done should be done, and, as a result, "values" come into conflict.

The fundamental issue involved in addressing health care, the cost of health care, and the apparent real conflicts with societal cultural values and norms is the failure to address the issues of necessity and appropriateness. The provision of excessive or futile care should not produce conflict in values and affordability. Instead it should lead to the requirement that the payer or purchaser document that any health care for which reimbursement is sought should be necessary and appropriate. For many older persons, hospitalization results in functional decline despite cure or repair of the condition for which they were admitted. This is called a "cascade to dependency," a phenomenon common to the treatment of the elderly that only creates a need for further care and costs. Unless the appropriateness of care and the consequences of incomplete care are addressed, the cascade will continue to be a self-fulfilling promise. Studies have been completed on the effectiveness of specially designed units for treatment of the elderly (Creditor 1993).

Equally disturbing in the discussion of health care delivery is the notion of compulsory payment for unwanted treatment or court-ordered reimbursement for unproven medical technology (Annas 1992; Ferguson et al. 1986). Undoubtedly, the cascade effect of medical care—referring to a process once started that proceeds step-wise to its full and seemingly inevitable conclusion—is a major cost factor in medicine (Mold and Stein 1986). As so frequently stated, the first mistake is often the biggest. In

addition, the subject of medical futility is being raised more frequently in medical journals.

All in all, Schieber's chapter provides a significant amount of information on comparative costs and utilization patterns. Most of the relevant issues that contribute to the dilemma are raised. Until the health care product is defined on the basis of medical necessity and appropriateness, however, the conflict between cultural values and limited resources remains a perception, not a reality.

References

- Annas GJ. Adding Injustice to Injury. *New England Journal of Medicine*. 1992;327:1885-1887.
- Axene DV, Doyle RL. *Analysis of Medically Unnecessary Inpatient Services*. Seattle: Milliman and Robertson, Inc., 1993.
- Chalmer I, Enkin M, Keirse MJNC. *Effective Care in Pregnancy and Childbirth*. Oxford: University Press at Oxford; 1989.
- Creditor MC. Hazards of Hospitalization of the Elderly. *Annals of Internal Medicine*. 1993;118:219-223.
- Dans PE. Perverse Incentives, Statesmanship, and the Ghosts of Reforms Past. *Annals of Internal Medicine*. 1993;118:227-229.
- Ferguson JH, Dubinsky M, Kirsch PJ. Court-Ordered Reimbursement for Unproven Medical Technology. *Journal of the American Medical Association* 1993;269:116-2121.
- Fuchs VR. Dear President Clinton. *Journal of the American Medical Association*. 1993;269:1678-1679.
- Hadorn VC, Brook RH. Toward Fewer Procedures and Better Outcomes. *Journal of the American Medical Association*. 1991;266:3328-3331.
- Hadler S. The Internal Destruction of the American System of Medical Practice. *Bulletin of Hennepin County Medical Association*. 1990;March/April:6-9.
- Harrison TR. The Value and Limitation of Laboratory Tests in Clinical Medicine. *Journal of the Medical Association of Alabama*. 1944;13:381-384.
- Leaf A. Preventive Medicine for our Ailing Health Care System. *Journal of the American Medical Association*. 1993;269:616-618.
- Mold JW, Stein HF. The Cascade Effect in the Clinical Care of Patients. *New England Journal of Medicine*. 1986;314:512-514.
- Schoenbaum SC. *Journal of the American Medical Association*. 1993;269:794-796.
- Steel K, Gertman PM, Crescenzi C, Anderson J. Iatrogenic Illness on a General Medical Service at a University Hospital. *New England Journal of Medicine*. 1981;34:638-642.