been saved by reducing the use of life-sustaining interventions for dying patients (Emanuel and Emanuel, 1994). If there existed mechanisms to transfer these savings to more efficacious therapies for other people, then limiting the care of the incurably ill could promote distributive justice. Does the limiting of care for profoundly and incurably ill persons necessarily infringe on the principles of beneficence, nonmaleficence, and autonomy, or can these three principles plus distributive justice be brought into union?

The precise condition of profoundly and incurably ill patients determines the ethical issues at stake (Lo, 2000). Some are people with chronic illnesses who have suffered a cardiac arrest, and the issue in these situations is whether to administer cardiopulmonary resuscitation (CPR). Some are terminally ill with cancer, AIDS, or another fatal illness, with an anticipated life span of several days or weeks. Others are people with progressive diseases who may live up to a year, but who suffer constant pain, shortness of breath, or mental anguish. In yet another category are those with severe dementia or strokes, often in nursing homes, who lie in bed year after year, communicating with no one, fed by attendants, incontinent of bowel and bladder.

The tragic human suffering of this spectrum of people in our nation is incalculable. Many of these individuals would prefer that death come sooner rather than later, and many physicians look forward to the death of these patients as a humane blessing. Yet many such patients are kept alive and receive costly medical care of little benefit and possible harm. According to Solomon et al (1993), most physicians overtreat terminally ill patients for whom there is no chance of recovery. Are caregivers prolonging life or prolonging dying? In the words of George Bernard Shaw (1954), "Do not try to live forever. You will not succeed."

What are the principles under which physicians provide or withhold treatment for the profoundly and incurably ill? As a rule, autonomy is paramount. Medical therapies are often instituted or withheld based on what the patient wants. In most cases of children or adults who lack decision-making capacity, the family or a surrogate makes the decisions. Individuals are encouraged to sign living wills (which make known their preferences in the case of terminal illness) and to prepare durable power of attorney for health care documents (which name a health care decision maker should the person become incompetent). Such documents are called advance directives (i.e., they direct physicians how to act in advance of the anticipated event). Advance directives can help to create better understanding of patients' preferences about end-of-life care. However, even when patients and their caregivers engage in general planning for end-of-life care, it is often difficult to anticipate the many different types of circumstances and decisions that might arise for each individual patient (Field and Cassel, 1997; Lo, 2000; Quill, 2000).

Does autonomy have limits? Some physicians and ethicists believe that physicians alone, without a patient's or family's consent, can decide to withhold treatment in cases of medical futility (Callahan, 1991). Such actions are ethically supported by the principles of beneficence and nonmaleficence: Treatment that has no benefit and might do harm should not be given. The difficulty with this view lies in the definition of medical futility. If a medical intervention has less than 1% chance of being successful, is it futile (Schneiderman et al, 1994)? Does "successful" mean simply alive, or does it require a reasonable level of function? If a terminal cancer patient wished to live an extra month, should all possible measures, regardless of cost, be taken to grant this wish, or would such care be futile? The 1994 court decision supporting a Virginia family's desire to keep their anencephalic (missing most of the brain and permanently unconscious) child on total life support and the 1994 decision of a Florida hospital to pay for the care of a brain-dead teenager both speak to the primacy of autonomy in current ethical thought. Controversy continues over the ethical question: Can a physician unilaterally withhold treatment without the patient's or family's consent even if the physician feels that the treatment is futile (Helft et al, 2000)?

Mr. Romero, 66 years old, has incurable emphysema. For 3 weeks, he is on a respirator, an agonizing experience. Two days after going home, his breathing again becomes labored, and he returns to the hospital in a coma from severe respiratory failure. He has no close family, and his personal physician has never asked if he would choose respirator care or CPR, if that becomes necessary. The emergency room physician, after reviewing the previous hospital chart and calling Mr. Romero's physician, decides against the respirator and admits him to the hospital for comfort care.

Four hours later, Mr. Romero's nurse enters the room to find him moribund, with short, agonal respirations. The personal physician had not written a DNR (do not resuscitate) order. The nurse initiates CPR. The emergency room physician appears as part of the CPR team, recognizes the patient, and calls off any further resuscitation attempts.

In this case, the emergency physician interpreted the situation as one of medical futility and withheld treatment based on beneficence and nonmaleficence; invoking the principle of autonomy was not possible.
Theng My’s pancreatic cancer has invaded the plexus of nerves behind her stomach and is causing severe pain. Her oncologist recommends that she undergo a course of chemotherapy as the only hope to reduce her suffering. Though the oncologist mentions that the chance of success is only 10% while the probability of highly unpleasant nausea and vomiting is 50%, he emphasizes the chance of significant relief. Desperate, Theng My agrees to the chemotherapy. She experiences no reduction of pain and 20 days of intolerable nausea. Ms. My prays for death; her prayers are answered 1 long month later.

Oncologists in the United States sometimes offer chemotherapy for tumors that respond minimally to treatment. In the United Kingdom, chemotherapy for such tumors is infrequently provided (Aaron and Schwartz, 1984). In the United States, Theng My’s situation is handled by the principle of autonomy, and she is given a choice to receive or forego chemotherapy. The physician’s duty in such a case is to give Ms. My’s objective information on which to make her decision, without biases that might be introduced through personal preference or financial incentive. British physicians are more likely to perceive Theng My’s case as one of medical futility and not even offer such therapy.

Daniel Callahan (1995), an ethicist who has written extensively on issues of aging and dying, regards death after a long, full life as a natural event rather than an evil to be battled relentlessly by medical science. For Callahan (1993), medicine’s obligation is to further a good quality of life and a peaceful death while avoiding a long, torturous life’s end.

Marie is 83, and has been widowed and blind for 3 years. Active until age 80, she now sits in her chair most of the day waiting for her daughter’s half-hour evening visit. She spends many hours thankful for the fulfilling life she has been given but aware that she has nothing left to accomplish. One day she falls and feels intense pain in her right hip. Though she can reach the phone, she calls no one. When her daughter arrives and calls the ambulance, Marie refuses to go. Twelve hours later, she dies peacefully of blood loss into a severely fractured hip.

Many elderly persons fear that they will be abandoned or neglected if they become critically ill, with no one caring about their fate, or that they will be excessively treated and their lives painfully extended. Death after a long, lingering illness marked by dementia and isolation in the back room of a nursing home competes as a vision of horror with that of death in an intensive care unit, a dying ever-interrupted by painful and unwanted interventions (Callahan, 1995). Marie tried to achieve a peaceful death by avoiding contact with the health care system.

RATIONING BY MEDICAL EFFECTIVENESS

We have seen that cost containment does not necessarily equal rationing and that eliminating administrative waste, medical waste, and unwanted interventions for the profoundly and incurably ill before rationing needed services best realizes the principles of beneficence and justice. If rationing of truly beneficial services is needed, however, the issues become even more difficult. If a health care system or program must compromise beneficence because of true fiscal scarcity, how can this compromise be made in a manner that yields the least harm and allocates the harm in the fairest possible way?

Joy Fortune develops Hodgkin’s disease, or cancer of the lymphatic system; she receives radiation therapy and is cured. Jessica Turner develops metastatic cancer of the ovary. She undergoes chemotherapy and dies within 8 months.

In the event of rationing, science is the best guide: The providing or withholding of care is ideally determined by the probability that the treatment will maximize benefits and minimize harm, i.e., by the criterion of medical effectiveness. Radiation therapy can often cure Hodgkin’s disease, but chemotherapy is unlikely to cure advanced ovarian cancer. If rationing is needed and only one of these therapies can be offered, a decision based on the criterion of medical effectiveness would allow for the treatment of Hodgkin’s disease but not of metastatic ovarian cancer.

If intervention A increases person-years of reasonable-quality life more than intervention B, intervention A is more medically effective. The cost of the two interventions is not considered. Cost effectiveness adds dollars to the equation: If intervention A increases person-years of reasonable-quality life per dollar spent more than intervention B, it is more cost effective. Which is a better standard for rationing medical care: medical effectiveness or cost effectiveness?

If money were not scarce, medical effectiveness (maximizing benefit and minimizing harm) would be the ideal standard upon which to ration care (i.e., the less effective the therapy, the lower its priority on the list of treatments to be offered). But if money were not scarce, we would not need to ration. It is unrealistic to pretend that costs can be ignored (Eddy, 1992).

Suppose that bone marrow transplantation saves as many person-years of life by treating advanced cancers as
does penicillin by curing pneumonia. The former costs $150,000, while the latter can be obtained for $10. There is no reason to ration penicillin, as its cost is negligible, whereas to make bone marrow transplantation similarly accessible is costly. Thus, medical effectiveness is inadequate as a means of deciding which services to ration. Reality demands that costs also be factored in.

Rationing for Society as a Whole

Mrs. Smith's breast cancer has spread to her liver and bone. She has been told that her only slim hope lies in high-dose chemotherapy with autologous bone marrow transplantation (HDC-ABMT), costing $150,000. Even with the optimistic assumption that HDC-ABMT has a 5% cure rate, screening mammography is eight times as cost-effective as HDC-ABMT in person-years of life saved.

In 1991, Dr. David Eddy (1991a) published a compelling article entitled "The Individual vs Society: Is There a Conflict?" Dr. Eddy poses the above case of Mrs. Smith. If medical care must be rationed, it seems logical to spend funds on mammography rather than HDC-ABMT because the former intervention is more cost effective. Dr. Eddy does not confine his analysis to cost effectiveness, however, but moves on to the ethical issues.

Each of us can be in two positions when we make judgments about the value of different health care activities. We are in one position when we are healthy, contemplating diseases we might get, and writing out checks for taxes and insurance premiums. Call this the "first position." We are in a different position when we actually have a disease, are sitting in a physician's office, and have already paid our taxes and premiums (the "second position"). Imagine that you are a 50-year-old woman employed by Mrs. Smith's corporation. [The company] is considering two options: (1) cover screening for breast cancer... or (2) cover HDC-ABMT... Now imagine you are in the first position... as long as you do not yet have the disease (the first position), option 1 will always deliver greater benefit at lower cost than option 2... Now, let us switch you to the second position. Imagine that you already have breast cancer and have just been told that it has metastasized and is terminal... The value to you of the screening option has plummeted because you already have breast cancer and can no longer benefit from screening...

Maximizing care for individual patients attempts to maximize care for individuals when they are in the second position. Maximizing care for society expands the scope of concern to include individuals when they are in the first position. As this example illustrates, the programs that deliver the most benefit for the least cost for society (option 1) is not necessarily best for the individual patient (option 2), and vice versa. But as this example also illustrates, individual patients and society are not distinct entities. Rather, they represent the different positions that each of us will be in at various times in our lives. When we serve ourselves in the second position, we can harm ourselves in the first. (Eddy DM: The individual vs society: Is there a conflict? JAMA 1991a;265:1446. Copyright 1991, American Medical Association.)

Physicians generally care for patients in Dr. Eddy's second position—when they are sick. But if the cost of treating those in the second position reduces resources available to prevent illness for the far larger number of people in the first position (who may not be seeing physicians because they feel fine), the individual principles of beneficence and autonomy are superseding the societal principle of justice. One could even say that choosing for individuals in the second position violates beneficence for those in the first position. On the other hand, if all resources go to those in the first position (eg, to cost-effective screening rather than highly technical treatment for those with life-threatening disease), injustice may be committed in the other direction by ignoring the costly needs of the very ill.

Clearly, no ideal method of rationing medical care exists. The use of cost-effectiveness as a measuring stick raises ethical problems and, because of the difficulty in determining the cost-effectiveness of different interventions, has scientific limitations (see Chapter 8). All efforts should be made to control costs painlessly before resorting to the painful limitation of effective medical care. But if rationing is inevitable, a balance must be struck among many legitimate needs: The concerns of healthy people for illness prevention, the imperative for acutely sick people to obtain diagnosis and treatment, and the obligation to provide care and comfort to those with untreatable chronic illness.

Rationing Within One Health Program: The Oregon Plan

The previous discussion of rationing medical care nationwide presumes a mechanism that redirects savings from interventions not performed toward more cost effective services. In fact, such a mechanism does not exist nationwide. Only in specific medical care programs do we find a decision-making apparatus for allocating expenditures. One example is the Oregon Health Plan (Bodenheimer, 1997).
In 1994, Oregon added 100,000 poor, uninsured Oregonians to its Medicaid program. To control costs, a prioritized list of services was developed, and the state legislature decided how many services would be covered. The prioritized list was based on how much improvement in quantity and quality of life the treatment was likely to produce. The final list contained 745 condition-treatment pairs, and the State of Oregon currently pays for items above line 574 on the list; conditions below that line are not covered (Kilborn, 1999). What are some of the Oregon Health Plan’s ethical implications?

(1) The plan is more than a rationing proposal; its chief feature is to extend health care coverage to 100,000 more people. That aspect of the Oregon plan promotes the principle of justice.

(2) Another positive feature of the plan is its attempt to prioritize medical care services on the basis of effectiveness, which, if rationing is needed, is a reasonable method for deciding which services to eliminate.

Other features of the Oregon plan must be viewed as negatively impacting distributive justice, or equal access to care without regard for ability to pay.

(1) In 1996, 12% of beneficiaries reported being denied services because they were below the line on the priority list. Of those, 78% reported that the denial had worsened their health (Mitchell and Bentley, 2000). Medical services are rationed for Oregon’s poor but not for anyone else.

(2) The plan targets beneficial medical services in a state with considerable medical waste. In 1988, many areas of Oregon had average hospital occupancy rates below 50%. The closing of unneeded hospital beds could have saved $50 million per year, enough to pay for some of the treatments eliminated in the plan (Fisher et al, 1992). Oregon did not exhaust its options for “painless” cost control before proceeding to potentially “painful” rationing.

Rationing Within One Institution: Intensive Care

Ms. Wilson is a 71-year-old woman with a recently diagnosed lung cancer. Obstructing a bronchus, the tumor causes pneumonia, and Ms. Wilson is admitted to the hospital in her rural town. She deteriorates and becomes comatose, requiring a respirator. By the eighth hospital day, she is no better. On that day, Louis Ford, a previously healthy 27-year-old, is brought to the hospital with a crushed chest and pneumothorax suffered in an automobile accident. Mr. Ford is in immediate need of a respirator. None of the six patients in the intensive care unit can be removed from respirators without dying; of the six, Ms. Wilson has the poorest prognosis. She has no family. No other respirators exist within a 50-mile radius (Jonsen, 1998). Should Ms. Wilson be removed from the respirator in favor of Mr. Ford?

Resources may be scarce throughout an entire nation or within a small hospital. Microallocation refers to the amount and distribution of resources within a society, whereas macroallocation refers to resource constraints at the level of an individual physician or institution. Macroallocation decisions may be more significant, affecting thousands or millions of people. Microallocation choices can be more acute, bringing ethical dilemmas into stark, uncompromising focus and placing issues of resource allocation squarely in the lap of practicing physicians. The microallocation choice involving Ms. Wilson incorporates all four ethical principles, which must be weighed and acted upon within minutes.

(1) Beneficence: For whom? This ideal cannot be realized for both patients.

(2) Nonmaleficence: If Ms. Wilson is removed from the respirator, harm is done to her, but the price of not harming her is great for Mr. Ford.

(3) Autonomy: Withdrawal of therapy requires the consent of the patient or family, which is impossible in Ms. Wilson’s case.

(4) Justice: Should resources be distributed on a first-come first-served basis or according to need?

These are tragic decisions. Many physicians would remove Ms. Wilson from the respirator and make all efforts to save Mr. Ford. The main consideration would be medical effectiveness: Ms. Wilson’s chance of living more than a few months is slim, while Mr. Ford could be cured and live for many decades.

Less stark but similar decisions face physicians on a daily basis. On a busy day, which patients get more of the physician’s time? In an HMO with an MRI waiting list, when should a physician call the radiologist and argue for an urgent scan, thereby pushing other people down on the waiting list? Situations involving microallocation demonstrate why, in real life, the physician is forced to balance the interests of one patient against those of another and the interests of individuals against the imperatives of society.
A BASIC LEVEL OF GUARANTEED MEDICAL BENEFITS

Don Rich is a bank executive who receives his care through a New York City HMO. He develops angina pectoris, which remains stable for over a year. An exercise treadmill test suggests mild coronary artery disease. Although this evaluation indicates that Mr. Rich's condition can be safely managed with medications, he asks his cardiologist to arrange a coronary angiogram with an angioplasty or coronary bypass if indicated. He is told that the HMO has finite resources for such procedures and limits their use to patients with unstable angina or highly abnormal treadmill tests, for whom the procedures are more efficacious. Mr. Rich flies to Texas, consults with a private cardiac surgeon, and receives a coronary angiogram at his own expense.

Most people in the United States believe that health care should be a right. But how much health care? If every person has a right to all beneficial health care, the nation may be unable to pay the bill or may be forced to limit other rights such as education or fire and police protection. One approach to this problem is to limit the health care right to a basic package of services. (In the case of Don Rich's HMO, angiography for stable angina pectoris is not within the basic package.) Any services beyond the basics can be purchased by individuals who choose to spend their own money. Under managed care, each managed care organization determines the overall benefit package, and particular services for particular patients are sometimes approved or denied in arbitrary fashion (Light, 1994).

This solution creates an ethical problem. If a service that does produce medical benefit is not included in the basic package or is denied by an HMO medical director, that service becomes available only to those who can afford it. Where should society draw the line between a basic level of care that should be equally available to all, and "more than basic" services that may be purchased according to individual ability and willingness to pay (Eddy, 1991b)? Unless the basic package covers all beneficial health services, the principle of distributive justice, that all people equally receive a reasonable level of medical services without regard to ability to pay, will be compromised.

THE ETHICS OF HEALTH CARE FINANCING

Yoshiko Takahashi's first heart attack came at age 59. It was minor, and she felt well the next day. Then came the real shock: because of her high blood pressure, her private insurance policy considers disease of the cardiovascular system a "preexisting condition" and will not cover costs for its treatment. She demands to go home to limit her hospital bill. Twelve hours later comes the second heart attack, which is severe. She is readmitted to intensive care and remains in the hospital for 8 more days. Because of persistent pain, she is a candidate for coronary angiography, which she refuses on account of the cost. When she purchased the insurance, Ms. Takahashi had not understood its terms because her English skills were poor.

Decisions by physicians encompass only one aspect of resource allocation; the payers of health care have great power in the distribution of medical care. The policies of the private insurance industry, which covers the largest number of people in the United States, raise important ethical issues. In the case of Yoshiko Takahashi, the insurer company, rather than her physicians, largely determined what kind of medical care she received.

Private insurance may be experience rated (see Chapter 2), with premiums costing more for people or groups with a higher risk of illness. Under the practice of experience rating, people who need health care the most (because they have a chronic illness) are less likely to be able to purchase affordable health insurance. Many people feel that private insurers violate the justice principle because those most in need of services have the least chance of gaining coverage for those services.

Health insurance executives, however, have a different view, believing that private health insurance is fair. An advertisement sponsored by the insurance industry argued,

If insurance companies didn't put people into risk groups [experience rating], it would mean that low-risk people would be arbitrarily mixed in with high-risk people...and [low-risk people] would have to pay higher rates. That would be unfair to everyone. (Light DW: The practice and ethics of risk-rated health insurance. JAMA 1992;267:2503. Copyright 1992, American Medical Association.)

According to this notion, it is unfair to force one person or group to pay for the needs or burdens of another. An alternative view, citing the principle of distributive justice, holds that young and healthy people should pay more in health costs than they use in health services so that older and less healthy people can receive health services at a reasonable cost. Even from the perspective of one's own long-term self-interest, it may make sense to pay more for health care while young and healthy, and to pay less when advanced age creates a greater risk of becoming sick.

A much-discussed issue involves individuals whose behavior, particularly smoking, eating unhealthy diets,
and drinking alcohol in excess, is seen as contributing to their ill health.

Jim Butts, a heavy smoker, develops emphysema and has multiple hospitalizations for respiratory failure, including many days on the respirator. Randy Schipp, a former shipyard worker, develops work-related asbestososis and has multiple hospitalizations for respiratory failure, including many days on the respirator. Should Jim pay more for health insurance than Randy?

Gene eats a low-fat diet, exercises regularly, but has a strong family history of heart disease; he suffers a heart attack at age 44. Mac eats fast foods, does not exercise, and has a heart attack at age 44. Should Mac pay more for health care coverage than Gene?

One view holds that individuals who fall sick as a result of high-risk behavior such as smoking, substance abuse, including use of alcohol, and consumption of high-fat foods are entirely responsible for their behavior and should pay higher health insurance premiums. Opponents of this idea see it as "blaming the victim" and argue that high-risk behaviors have a complex causation that may involve genetic and environmental factors including uncontrollable addiction. They cite a number of facts to support their position. The food industry spends about $15 billion per year on television advertising; the average child sees between 15,000 and 25,000 food commercials each year, 80% for products with poor nutritional value. The tobacco industry heavily advertises to teenagers. Illegal drug use is associated with poverty, hopelessness, and easy availability of drugs. Some evidence finds a genetic predisposition to alcoholism. To the extent that individuals are not entirely at fault for their high-risk behavior, it would be unfair to charge them more for health insurance. On the other hand, it seems sensible that users of tobacco and alcohol pay through taxes on those products.

WHO ALLOCATES HEALTH CARE RESOURCES?

The predicament of limited resources has been likened to a herd of cattle grazing on a common pasture. The total grazing area may be regarded as the entirety of economic resources in the United States. A smaller pasture, the medical commons, comprises that portion of the grazing area dedicated to health care. The herd represents the nation's physicians, using the resources of the commons in the process of providing care to patients. Physicians, guided by medicine's moral imperative to "do everything possible for the patient," continually attempt to extend the borders of the medical commons. But communities outside the medical commons have legitimate claims to societal resources and view the herd as encroaching on resources needed for other pursuits (Hiatt, 1975; Grumbach and Bodenheimer, 1990).

Who decides the magnitude of the medical commons, that is, the resources devoted to health care? Physicians and other health care providers, whose interventions on behalf of their patients add up to the totality of medical resources used? The sum of individual consumer choices operating through a free market? Health insurance plans, watching over their particular piece of the commons? Or government, using the political process to set budgetary limits on the entire health care system?

Traditionally, physicians and patients have had a great deal to say about the size of the medical commons. In the United States, the medical commons has been an open range. The quantity and price of medical visits, hospital days, surgeries, diagnostic studies, pharmaceuticals, and other such interventions determine the total costs of medical care. This is not the case in other nations, where government health care budgets constitute a "fence" around the medical commons, setting a clear limit on the quantity of resources available. As discussed in Chapter 9, the United States may be moving toward a more fencelike approach to containing costs. Unlike in other nations, however, the U.S. approach may not have a single medical commons enclosed within a national or regional global budget. Instead, the medical commons in the United States may be parcelled out into numerous subpastures, each representing an HMO or other organized health care system working within the constraints of fixed, pre-paid budgets. Not all pastures will be equal in size, and the fences may have holes that allow patients to purchase additional services outside of the organized systems of care.

Ethical considerations play a role in both open and closed medical care systems. In the U.S. open range, the principles of beneficence and autonomy have the upper hand, tending toward an expanding, though not highly equitable, system. Fenced-in systems, in contrast, balance the more expansive principles of beneficence and autonomy with the demands of distributive justice in order to allocate resources within the medical commons.

If the United States moves toward a more fenced-in medical commons, decisions will be needed about who gets what. Do all 90-year-old people with multiple organ failure receive kidney dialysis that may extend their lives only a few months? Are very low birth weight infants afforded neonatal intensive care even with a less than 5% chance of leading a normal life? Do individual physicians, interacting with their patients, have the final say in making these decisions? Should societal bodies, such as government, commissions of interested parties, or professional associations, set the rules? Should democratic elections be held?
Ultimately, allocation issues come down to daily clinical decisions about which individual patients will receive what types of care (Lo, 2000). Physicians and other caregivers may well recoil from the prospect of "bedside rationing," believing that allocative decision making unduly compromises their commitment to the principles of beneficence and autonomy. Levinsky (1984) has argued that physicians must maintain their single-mindedness in maximizing care for each patient:

There is increasing pressure on doctors to serve two masters. Physicians in practice are being enjoined to consider society's needs as well as each patient's needs in deciding what type and amount of medical care to deliver... When practicing medicine, doctors cannot serve two masters. It is to the advantage both of our society and of the individuals it comprises that physicians retain their historic single-mindedness. The doctor's master must be the patient. (Levinsky, NG: The doctor's master. N Engl J Med 1984;311:1572. Abstracted from information appearing in NEJM.)

Yet, if physicians abstain from the arena of macro-allocation decision making, who is to decide? Currently, these decisions are often made in a relatively arbitrary fashion by medical directors of private insurance companies and HMOs. Studies have documented that such decisions vary from plan to plan, and even within a single insurance plan, a medical director may make different decisions on different days for similar patients (Light, 1994). Some observers feel that if physicians refuse to accept two masters, then medicine will be granting micro-allocation decisions to HMO officials, judges, or legislators. In this view, the physician of the twenty-first century will continue to face individual patient responsibilities, but cannot escape the obligation to balance the wishes of individual patients against the larger needs of society (Cassel, 1985; Morreim, 1989).

If physicians are to serve two masters (ie, to maintain their dedication to individual patients while at the same time responsibly managing resources), they need rules to assist them. These rules should operate at both a population and an individual level. At the population level, society should ideally decide which general treatments are to be collectively paid for through the process of universal health insurance. At the individual level, rules are needed to guide decisions about the prioritization of resources for specific patients. The workings of organ transplantation provide a model of how physicians can serve two masters: They do everything possible to procure organs for their transplant patients, but also accept the rules of the system that attempt to allocate organs in a fair manner (Benjamin et al, 1994). A similar approach has been instituted in Canada to deal with the limited capacity for cardiac surgery. Cardiac surgeons and other physicians have cooperated in developing a formal scheme for prioritizing patients for cardiac surgery on the basis of medical urgency (Naylor, 1991).

The modern physician is caught in a global ethical dilemma. On the one hand, patients and their families expect the best that modern technology can offer, paid for through private or public insurance. The imperatives of beneficence, nonmaleficence, and autonomy rule the bedside. On the other hand, grave injustices take place on a daily basis: An uninsured young person with a curable illness is unable to pay for care, while an insured, bedridden stroke victim incurs vast medical bills during the last weeks of her ebbing life. Should not the physician at the stroke patient's bedside be concerned about both patients? However this dilemma is resolved, the principle of justice will relentlessly peek at the physician from under the bed.

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