CHAPTER EIGHT

ETHICAL ISSUES IN RATIONING AND ALLOCATION OF LIMITED RESOURCES

LEARNING OBJECTIVES

- Understand and be able to explain how the rationing of health care fits within a broader set of issues about allocating the resources of society.
- Be able to analyze the ethical implications of allocating limited health resources to specific types of health services.
- Understand and be able to explain the issues involved in evaluating various explicit and implicit methods of rationing health resources and the ethical considerations involved in each method.
- Be able to analyze the ethical implications of comparative effectiveness research and cost-effectiveness analysis, including the use of those methods in countries with universal health insurance.

IS it really necessary to ration care? Or would there be enough health resources for all if only we could rid the health care system of all of the waste, fraud, abuse, administrative overhead, profits, bureaucrats, bean counters, and lawyers? Eliminating unnecessary expenses would indeed increase the amount of money available for needed health care services. However, as recognized by the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1983), "there is virtually no end to the funds that could be devoted to possibly beneficial care for diseases and disabilities and to their prevention" (p. 19). Because needs for care are infinite and resources are finite, some beneficial care must be denied to some patients on some basis (Morreim, 1989, p. 1014).

For any good or service, rationing becomes necessary when the demand is greater than the available supply. A **rationing system** is defined as a method of limiting consumption of some good or service, in order to limit the demand to the level of supply (Rosen and others, 2005, p. 1098). "Rationing takes place when an individual is deprived of care which is of benefit . . . and which is desired by the patient" (Maynard, 1999, p. 6).

Is it ethical to ration beneficial health care services? In its World Health Report 2000, the World Health Organization (2000) recognized "the ethical principle that it may be necessary and efficient to ration services but . . . it is inadmissible to exclude whole groups of the population" (p.16). Thus, the ethical issue of rationing is not whether it is ethical to ration but rather how the rationing is done. Which methods of rationing are most ethical, and which should be avoided on the ground that they are unethical? One way of limiting the demand for a good or service is by rationing on the basis of the ability to pay (Maynard, 1999, p. 6). With regard to health care, however, most people believe it is extremely unethical to ration scarce resources on the basis of an individual's ability to pay. Therefore, other criteria must be developed and applied to limit demand to the level of supply.

This chapter begins by putting the issues of rationing in context, explaining how rationing of medical care fits within a broader set of issues about different ways to allocate the resources of a society. Decisions about allocating societal resources present a series of questions with important ethical implications. Then the chapter evaluates the various methods of rationing and the ethical considerations in each method. For example, should we ration scarce health care resources on the basis of the age of the individual patient, social worth of the patient, or some other explicit or implicit criterion? This discussion includes an excerpt from an article about rationing of scarce antiretroviral therapy for HIV/AIDS in Africa, and the various ways in which those rationing decisions could be made. This chapter concludes with an analysis of comparative effectiveness research and cost-effectiveness analysis, including the use of those methods in countries with national health systems and universal health insurance. At the end of this chapter, an activity provides an opportunity to evaluate the ethical implications of cost-effectiveness analysis from several different perspectives.

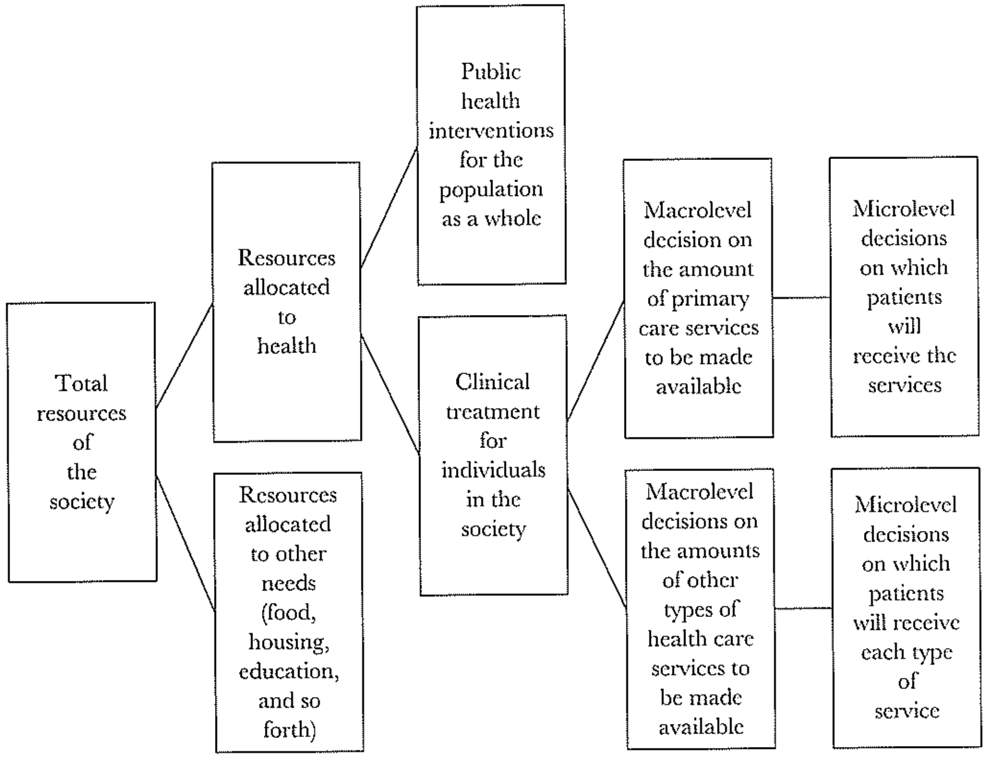
LEVELS OF ALLOCATING RESOURCES

Most discussions about rationing and allocation of health resources focus on specific situations involving denial of care for patients with cancer or other terminal diseases. For example, when people in the United States think about rationing, they might think about a for-profit health maintenance organization (HMO) that refuses to pay for a bone marrow transplant or similar procedure for a patient with cancer, on the ground that the treatment is experimental or "not medically necessary." Similarly, many people in the United Kingdom are concerned about guidelines for the National Health Service (NHS) that declare certain new drugs for cancer to be not sufficiently "cost effective" for use in the NHS. These types of decisions not to provide or pay for specific drugs or treatments are really part of a much broader set of issues about how to allocate the resources of a society. These broader issues, as set forth in the remainder of the chapter and in Figure 8.1, present a series of decisions that proceed from the most general to the most specific, and these decisions have important ethical implications.

First, a society must decide how much of its resources it wants to devote to health as opposed to other societal needs. Money, personnel, and other resources that are devoted to health will not be available for other needs of the population, such as food, housing, or education, and resources that are devoted to those other purposes will not be available for health (Brock, 2004, p. 201). For example, if current trends in the United States continue, health care spending could use up 35 percent of the nation's income by 2040, which would severely reduce the money available for other national priorities (Aaron and others, 2005, p. 1).

The second step in this process is to decide on the appropriate balance between public health interventions for the population as a whole and clinical treatment for individuals in the society. For a health system to use its available resources in a cost-effective manner, it needs to give priority to those interventions that have the most effect on population health for each dollar of spending, rather than to interventions that help only individuals and do not make a significant contribution to overall population health (World Health Organization, 2000, p. 52). Allocating resources in ways that best improve population health would be

FIGURE 8.1 Decision Tree for Allocating the Resources of a Society



consistent with the utilitarian principle of doing the greatest good for the greatest number, and would also promote the ethical principles of justice and beneficence.

Once a society decides how much of its resources it will devote to the category of treatment for individual patients, the next step is to decide on the amount of each type of care that will be made available. Specific levels of resources can be devoted to primary care, secondary care, and tertiary care, as well as other types of health care services, such as mental health and long-term care. Resources can be allocated to specific types of care by making decisions in the process of government budgeting about the amounts of money that governmental entities will spend to provide various categories of health care facilities and services. In some places, governmental entities also have the authority to control the types of health care facilities and services that are available in the private sector. They can impose regulatory barriers to market entry by passing certificate of need laws, for example. In addition, public and private health insurance systems can allocate their resources to specific types of care by making decisions about covered and noncovered services in the process of insurance plan design.

At this level of decision making, ethical principles of utilitarianism, beneficence, and justice militate in favor of devoting as many resources as possible to primary care services. Primary care has more impact on health than other types of care (Starfield and others, 2005). In addition, primary care is less expensive than other services, because it employs lower technology and workers with less extensive training. So primary care is both more effective and less expensive. Therefore, it is not necessary in this situation to make a trade-off between cost and effectiveness. Moreover, primary care provides more benefit for poor people and residents of rural areas, whereas hospital services are used disproportionately by people who are rich, or at least relatively rich. As the World Health Organization (2000) has recognized, the "distribution of primary care is almost always more beneficial to the poor than hospital care is, justifying the emphasis on the former as the way to reach the worst-off" (p. 16).

Determining the total volume of a health care service that will be made available to the public, by methods such as government budgeting, could be described as a **macrolevel decision**. After making that macrolevel decision, society can address the **microlevel decision** of which patients will receive the service. As explained by John Kilner (1984), "Microallocation focuses on determining who gets how much of a particular lifesaving medical resource, once budgetary and other limitations have determined the total amount of the resource available" (p. 18). These microallocation decisions can be made in several different ways, and each of those ways has significant ethical implications.

METHODS OF RATIONING HEALTH RESOURCES

As discussed earlier, it is possible—although not desirable—to ration health care on the basis of ability to pay. That is one of the primary ways in which health care is rationed in the United States, in contrast to the health systems of Europe and other developed countries (Maynard, 1999, p. 6). Although U.S. hospitals have a limited obligation to provide emergency care, and many health care facilities and professionals provide some amount of charity care, inability to pay poses a major barrier to access for millions of people in the United States. More than forty-six million people in the United States are uninsured in the sense that they have no health insurance whatsoever, and many more are severely underinsured. Even people who have health insurance may be unable to pay for necessary care, because their insurance imposes limitations on coverage and requires the patient to pay deductibles and copayments. The system of rationing health care on the basis of ability to pay has been justly criticized on ethical grounds (Persad and others, 2009a). Clearly, it is necessary to find a better way to ration or allocate medical resources.

Another method that has been strongly criticized is rationing care on the basis of the social worth of the individual patient. In the early days of kidney dialysis for end-stage renal disease, anonymous hospital committees chose patients for that life-saving technology by evaluating criteria such as the potential patient's occupation, education, income, net worth, dependents, and record of public service (Sanders and Dukeminier, 1968, pp. 371–378). Members of those secret committees, individuals such as ministers, lawyers, and bankers, could apply these vague criteria in light of their own values and biases in deciding who would live and who would die. People may have very different views about social worth, and it is clearly inappropriate to permit secret committees to make rationing decisions on the basis of their personal views of the social value of particular individuals. Nevertheless, it may be appropriate in some circumstances to allocate resources to individuals who perform certain functions in society, as a way of promoting the overall good of society. For example, during a pandemic flu, it would be ethical to allocate scarce flu vaccine to public health workers and essential medical personnel, so that they would be able to help other members of society (Persad and others, 2009b, p. 426).

Why not simply ration scarce health care resources to those patients who need them the most or can benefit the most, on the basis of explicit medical criteria? In fact that is the assumption on which many governments rely when they limit available resources and force health care professionals or others to perform the rationing (Aaron and others, 2005, p. 143). In many countries, governments limit their total expenditures for health care services by appropriating a maximum sum of money to provide or pay for care. Those budgetary limitations, such as are found in global budgeting, are not in themselves methods of rationing. However, they create the need for rationing by limiting the available funds, equipment, facilities, and staff. This forces the "budget-holder" to make the difficult rationing decisions (World Health Organization, 2000, p. 58). Governments and their citizens might assume that limited resources are being allocated on the basis of explicit medical criteria. Unfortunately, rationing care on the basis of medical criteria is not straightforward, typically runs into many difficulties, and raises ethical problems in several ways.

First, in some situations, far too many patients will meet the medical criteria for needing particular treatments, such as antiretroviral therapy for HIV/AIDS in Africa, even if the medical criteria are extremely conservative (Rosen and others, 2005, p. 1098). Therefore, medical criteria alone will not solve the problem of deciding who will receive treatment and who will not. Second, medical criteria can be manipulated by health care providers to obtain resources, such as organ transplants, for their patients, even if their patients are not really eligible for those resources (Persad and others, 2009b, p. 427). In the United States, for example, data indicate that some physicians are willing to lie about a patient's medical condition so that the patient can receive care that the physician considers necessary (Freeman, 1999). Another way in which medical criteria can be abused is by mischaracterizing a patient's personality, behavior, or social situation as a failure to meet the medical criteria for access to limited resources. For example, patients who lack a stable home or income might be excluded from a list of potential recipients of organ transplants on the "medical" grounds that they have not demonstrated a sufficient likelihood of compliance with posttransplant care or a sufficient network of family or community support. Even without manipulation or mischaracterization, medical criteria do not tell us how to allocate limited resources between people with the same degree of medical need. For example, a young person and an old person might have the same severity of medical need for a transplant. Finally, medical criteria are not purely scientific; they include value judgments. As Persad and others (2009b) have explained, "There are no value-free medical criteria for allocation" (p. 423).

Similarly, rationing care on the basis of first-come, first served, waiting lists, queues, or lotteries would present various ethical complications. These methods of rationing seem to be fair, but in fact they would unfairly benefit certain groups of people (Rosen and others, 2005, p 1102; Persad and others, 2009b, pp. 423–424). For example, people with money, education, and influence would have an unfair advantage in finding out about waiting lists and putting their names on those lists. The use of queues would give an advantage to people who are able to travel to a health care facility and spend long periods of time waiting in line. Lotteries would result in decisions to allocate care on a random basis, without the need to make value judgments among potential recipients. Although that would seem to be fair in the abstract, lotteries could lead to absurd results, such as giving scarce life-saving resources to someone who is already extremely old (Persad and others, 2009b, p. 423). Thus, we might actually prefer to incorporate some value judgments into the process for making allocation decisions, such as including or excluding potential recipients on the basis of age.

Some people have suggested that we should indeed ration care on the basis of age, by denying expensive treatments to patients who already have reached a particular age. In the early part of the 1980s, Great Britain essentially rationed kidney dialysis on the basis of age (Aaron and others, 2005, pp. 36–38). Almost no patients over the age of fifty-five received dialysis in Britain at that time, although dialysis is now provided to patients who are much older. In regard to age, Daniel Callahan has argued that "one fundamental goal of health care and medicine is to help young people become old people, but it is not to have old people become infinitely older" (Sage Crossroads, 2003, p. 4). Therefore Callahan recommended replacing the current "infinity model" of unrestricted obligation with a democratically determined age beyond which expensive treatments would not be provided. Callahan recognized that many people would object to his proposal to ration care on the basis of age, but argued that it is the least bad alternative, because all of the demands for care in society cannot be met. In contrast, Christine Cassell strongly objected to rationing care on the basis of age, because it is impossible to set a particular age for appropriate life expectancy, life expectancy differs for men and women, and patients at a particular age are not uniform in their medical condition or their ability to benefit from additional treatment (Sage Crossroads, 2003, pp. 5–6). Persad and others (2009b) have acknowledged "the public preference for allocating scarce life-saving interventions to younger people," but have argued that it is inappropriate to sacrifice a young adult in order to save an infant (p. 425).

Most important, both the current public preference to allocate scarce resources to young people and the controversial proposal to restrict allocation for older people are based on value judgments that might be made differently in different countries and cultures. In his research on the Akamba people of Kenya, for example, Kilner (1984) identified several ways in which age-related preferences for rationing scarce health care resources differed from the usual preferences in the United States.

> For instance, where only one person can be saved, many Akamba favor saving an old man before a young, even where the young man is first in line. Whereas in the United States we tend to value the young more highly than the old because they are more productive economically, these Akamba espouse a more relational view of life . . . . Another Akamba priority documented by the study is: where only one person can be saved, save a man without children rather than one with five . . . . A third surprising (by U.S. standards) priority acknowledged by numerous Akamba is the insistence that it is better to give a half-treatment to each of two dying patients—even where experience dictates that a half-treatment is insufficient to save either—than to provide one patient with a full treatment which would almost certainly be lifesaving [Kilner, 1984, p. 19].

Even within Kenya the Akamba are only one group of people among others, and each group may have its own set of preferences for rationing health care resources. The point is not that one set of preferences is preferable or more ethical than another, but rather that any preferences may be limited to a particular culture. Therefore, preferences of any one culture should not be used as a uniform system of rationing in global health or even within a multicultural society.

The following discussion of various ways of rationing scarce antiretroviral therapy (ART) for HIV/AIDS in Africa is excerpted from an article that evaluated explicit and implicit methods of rationing life-saving medical treatment and noted the conflict between social equity and economic efficiency. The article authors concluded that explicit methods of rationing are more likely to maximize the welfare of society and are more likely to promote accountability and transparency in making decisions on public policy.

EXCERPT FROM "RATIONING ANTIRETROVIRAL THERAPY FOR HIV/AIDS IN AFRICA: CHOICES AND CONSEQUENCES"

BY SYDNEY ROSEN AND OTHERS

. . . The message . . . is clear: rationing of ART is already occurring and will persist for many years to come. The question facing African governments and societies is not whether to ration ART, but how to do so in a way that maximizes social welfare, now and in the future.

Inevitably, the social and economic consequences of rationing a scarce and valuable resource—treatment for a life-threatening illness—will vary widely depending on the rationing system chosen. . . . In this paper, we . . . use an expanded set of criteria to evaluate several rationing systems that already exist in sub-Saharan Africa.

Systems for Rationing

In economic terms, any policy or practice that restricts consumption of a good is a rationing system . . . . Non-price rationing of health care has a long history and is widespread and accepted in many parts of the world, reflecting the widely held view that access to health care should be based on some notion of need, and not determined solely by ability to pay. At the same time, non-price rationing is inherently political. It can be, and often is, used to channel resources toward or away from particular groups for reasons unrelated to their absolute or relative need for the resource.

In this paper, we define an ART rationing system as any allocation of public resources that prioritizes access to HIV/AIDS treatment on the basis of any geographic, social, economic, cultural, or other nonmedical factor. This is important, as virtually all programs will set a medical threshold for access to treatment, in most cases having a CD4 count lower than 200 cells/µl or an AIDS-defining illness. A less conservative medical eligibility threshold, such as that of the United States Department of Health and Human Services, which recommends that ART be started at a CD4 count of 350 cells/µl, would dramatically increase the number of eligible patients and intensify the need for rationing. Even with the more conservative eligibility threshold now being applied, however, the figures . . . indicate that demand for treatment will exceed supply. In the remainder of this paper, we will focus our attention on the nonmedical bases for rationing.

Explicit Rationing Systems

In many cases, governments will set explicit criteria for which types of patients should be eligible for ART first or at lowest cost. The criteria can target selected subpopulations directly, or they can set eligibility requirements that intentionally give some patients better access than others. Possible subpopulations for direct targeting of treatment include:

Mothers of new infants. Rather than face an ever-increasing burden of orphan support, many countries are making ART preferentially available to HIV-positive mothers through testing and treatment at antenatal clinics . . . .

Skilled workers. African countries face the loss of vast numbers of educated or trained workers, whose skills are vital to maintaining social welfare, sustaining output, and generating economic growth. Human capital can be conserved by giving treatment priority to nurses, teachers, engineers, judges, police officers, and other skilled workers whose contributions are important to economic development or social stability . . . .

Poor people. The social justice agenda pursued by some governments and many nongovernmental organizations argues that the poorest members of society, who are least likely to be able to afford private medical care, should have preferential access to publicly funded treatment programs. Means-testing, which can be applied at the level of the household or the community and calibrated to achieve the desired number of patients, is a common way to ration social benefits.

High-risk populations. The extent to which ART can curb HIV transmission is a subject of current debate in the literature. If treatment reduces the probability of transmission by suppressing viral load, then a public health argument can be made for giving preferential access to high-risk populations, such as commercial sex workers, truck drivers, or intravenous drug users.

Governments can also intentionally create eligibility requirements that result in rationing, without specifying particular target populations. Rationing systems of this type include:

Residents of designated geographic areas. One obvious way to limit access to treatment is to offer it only to those who reside in specified geographic catchment areas. These areas can be distributed around the country, centered in regions of high HIV prevalence, or concentrated in urban centers or politically important regions. Excluding patients who do not live within the designated areas may not be feasible, but most patients will not be able to afford the cost of regular transport or permanent relocation.

Ability to co-pay. If patients are required to contribute even a small share of the cost of treatment, the number who can access therapy is likely to fall dramatically. Governments could in principle match supply and demand by setting and adjusting the level of co-payment required. The obvious outcome is a rationing system that favors the upper socioeconomic tiers of patients, who likely include the majority of skilled workers. In some societies men will also have preferential access when a cash payment is required. A drawback of requiring co-payment is that poorer patients may stop therapy because they run out of funds. This is the reason for stopping cited by nearly half of all non-adherent patients in a recent study in Botswana.

Commitment to adherence to therapy. Adherence to treatment regimens has been found to be the most important determinant of the success of ART at the individual patient level. One way to improve the success of a large-scale treatment program, while at the same time limiting access, could therefore be to restrict therapy to patients who are judged to have the ability and willingness to adhere or who demonstrate high adherence after initiating therapy . . . .

Implicit Rationing Systems

The alternative to specifying explicitly who will have priority access to resources is to allow implicit rationing systems to arise. These can be thought of as the default conditions that will prevail in the absence of explicit choices.

Access to HIV testing. Voluntary counseling and HIV testing (VCT) is typically the entry point into an HIV/AIDS treatment program. If some subpopulations, such as youth or particular occupational groups, are targeted for HIV education and VCT services or promotion campaigns, they will have an advantage over others in seeking treatment, as will those who simply live closer to VCT facilities.

Patient costs. Most countries will scale up their treatment programs incrementally, at first offering services at only a few facilities before gradually adding more . . . . For most patients, bus or taxi fare will be required for regular trips to the clinic, and each trip will take up a good deal of time. Previous research has found that indirect costs due to travel time and transport play an important role in limiting access to medical care. Unless transport is subsidized, limiting the number of service sites will effectively ration treatment to those who live nearby and to better-off households that have the resources to travel.

First come, first served. In the absence of any other requirements, most facilities are likely to treat everyone who is medically eligible, until the supply of drugs, diagnostics, or expertise runs out. Patients who arrive after that happens may be put on a waiting list, sent to another facility, or simply sent away. This approach, which reflects an absolute shortage of treatment "slots," is likely to favor three groups of patients: those who are already paying privately for antiretroviral drugs and shift over to publicly funded treatment once it is available; those who develop AIDS-related symptoms first, in most cases because they were infected earliest; and the few HIV-positive individuals who do not yet have AIDS but have taken the initiative to go for a test and know their own status.

Queuing. One of the most common ways to ration scarce resources is the time-honored, time-consuming tradition of queuing. While it is possible to create a waiting list that keeps track of individuals' places in line, in many African countries the queue is a literal line outside the clinic door. Such queuing will favor patients whose opportunity cost of time is low. This group is likely to be dominated by unemployed men and by women who can bring their small children with them. It may penalize employed persons and farming households that face a high seasonal demand for labor.

No matter what system is used, informal and/or illicit arrangements can often be made that give preferential access to treatment to those with social, economic, or political influence. In all of the implicit systems, and in some of the explicit ones, there will very often be a high degree of queue jumping. Elites capture a disproportionate share of resources in all countries; in developing countries, where enforcement of rules tends to be weak and informal arrangements common, it is safe to assume that members of the elite who are medically eligible for therapy will find a way to get it. De facto rationing on the basis of social or economic position will thus occur. It is the phenomenon of queue jumping that turns what appear to be equitable, if inefficient, rationing systems, such as first-come, first-served, into an inequitable and inefficient approach.

Many other potential criteria for rationing ART have been proposed or are in use. Treatment access could be targeted, for example, to young people (because they respond best to the therapy and have their most productive years ahead of them); families of current patients (to promote adherence); those with debts (so that the loan default rate does not increase); patients with tuberculosis (to suppress transmission of tuberculosis); or children (who are least able to protect themselves).

Evaluating the Systems

The different approaches to rationing ART described above will inevitably have very different social and economic consequences for African populations. In this section, we assess the rationing systems' probable outcomes using criteria that capture most of the principles that governments use to evaluate policies and social investments. They are by no means the sole criteria of interest, nor should they necessarily be given equal weight. We propose them only as a starting point for thinking about the consequences of alternative approaches.

Effectiveness. Does the rationing system produce a high rate of successfully treated patients? . . .

Cost savings. Is the cost per patient treated low, compared to other approaches? . . .

Feasibility. Are the human and infrastructural resources needed for implementation available? We define an approach as feasible if there are no obstacles to carrying it out that appear to be insurmountable under typical conditions in sub-Saharan Africa.

Economic efficiency. To what extent does the system mitigate the long-term impacts of the HIV epidemic on economic development? . . .

Social equity. Do all medically eligible patients, including those from poor or disadvantaged subpopulations, have equal access to treatment? . . .

Rationing potential. Will the chosen system sufficiently reduce the number of patients? . . .

Impact on HIV transmission. To what extent does treatment reduce HIV incidence? Preferentially treating those who are likely to transmit the virus could reduce HIV incidence more than treating those who are not likely transmitters.

Sustainability. Can the system be sustained over time? This criterion pertains to the durability of the source of funding. . . .

Effect on the health care system. How does the system for allocating ART affect the country's health care system as a whole? The choice of rationing strategies could influence whether expanding treatment access will strengthen general health services for poor communities or drain resources from non-HIV health care to meet the demand for ART, further crippling general health services. . . .

There are several limitations to the analysis presented . . . Cost and feasibility are clearly related, for example; at some level of cost, any system could be considered feasible. . . .

Conclusions . . .

Rationing of medical care is not a new phenomenon, nor is it by any means limited to developing countries. Waiting lists, whether for specific procedures, organs for transplant, or experimental treatments, are common in North America and Europe. Many state governments in the US are explicitly limiting access to more expensive AIDS drugs. The HIV/ AIDS crisis in Africa is simply bringing the need for rationing into stark relief.

There is no single rationing system, or combination of systems, that will be optimal for all countries at all times . . . . [All systems make a] trade-off between economic efficiency and social equity: rationing systems that rate high in terms of efficiency generally rate low in terms of equity. African societies will place different weights on the values inherent in goals such as equity and efficiency . . . .

Because access to antiretroviral drugs is a matter of life or death for patients with AIDS, the choice of rationing systems matters deeply. African governments can take one of two courses: ration deliberately, on the basis of explicit criteria, or allow implicit rationing to prevail. Implicit rationing is not likely to maximize social welfare, nor does it allow for transparency and accountability in policy making. We believe that the magnitude of the intervention now underway and the importance of the resource allocation decisions to be made call for public participation, policy analysis, and political debate in the countries affected. Several proposals have been made for how such processes could be carried out. In the absence of such processes, decisions about access to treatment will be made arbitrarily and will, most likely, result in inequity and inefficiency—the worst of both worlds. Governments that make deliberate choices, in contrast, are more likely to achieve a socially desirable return from the large investments now being made than are those that allow queuing and queue-jumping to dominate. Countries that promote an open policy debate have the opportunity to ration ART in a manner that sustains both economic development and social cohesion—in the age of AIDS, the best of both worlds.

Source: Excerpted from "Rationing Antiretroviral Therapy for HIV/AIDS in Africa: Choices and Consequences," by Sydney Rosen, Ian Sanne, Alizanne Collier, and Jonathon L. Simon, 2005. *PLoS Medicine*, *2*(11), 1098–1104 (references, tables, and some text omitted). Copyright: 2005 Rosen et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

COMPARATIVE EFFECTIVENESS RESEARCH AND COST-EFFECTIVENESS ANALYSIS

Every health system must develop a method of making the difficult decisions about allocation of resources and rationing of care. Even countries with national health systems and universal health insurance coverage, such as the United Kingdom and other European countries, need to find their own ways of limiting care. Some of those countries use methods that are based, at least in part, on comparative effectiveness research and cost-effectiveness analysis.

Comparative effectiveness research (CER) is the analysis of different groups of patients to evaluate the relative effectiveness of different treatments. This research provides information on which to base clinical treatment and health policy (Garber and Tunis, 2009, p. 1925). For example, researchers might evaluate whether surgery, radiation therapy, or chemotherapy is most effective in treating patients with a particular form of cancer. Alternatively, researchers might evaluate whether a new drug is more effective than an existing drug in treating a particular condition. CER is different from the analysis used for approval of a new drug product by a regulatory agency, such as the U.S. Food and Drug Administration, which might evaluate the safety and potential effectiveness of a new drug by comparing it to a placebo rather than to an existing drug (Avorn, 2009, p. 1927). However, the evaluation of effectiveness for CER is similar to the evaluation of effectiveness for regulatory approval in at least one important respect. Like the analysis for regulatory approval, CER does not include consideration of the cost of a particular method of treatment.

In contrast to CER, **cost-effectiveness analysis (CEA)** evaluates the improvement in health in relation to the different cost of each alternative treatment (Jamison and others, 2006, pp. 42, 56). If the same amount of money were devoted to each alternative, which alternative would produce more improvement in overall health status? Thus CEA identifies the way to obtain the greatest benefit to health from the use of limited funds (Brock, 2004, p. 202).

CEA is not the same as **cost-benefit analysis (CBA)**, which puts a financial value on human life or years of human life. According to Cutler (2007), one year of life is usually valued at approximately U.S.$100,000 (p. 1099). CBA compares the financial cost of a proposed intervention with the financial gain of human lives that would be saved or extended by that intervention. Jamison and others (2006) contrast the two methods this way: "One of the advantages of using cost-effectiveness ratios is that they avoid some ethical dilemmas and analytical difficulties that arise when attempting cost-benefit analyses. Applying the alternative analytical technique of cost-benefit analysis requires assigning a monetary value to each year of life. By foregoing this step, cost-effectiveness analysis draws attention exclusively to health benefits, which are not monetized" (p. 44). For these reasons, CEA has become the primary tool in health policy for comparing the costs of alternative interventions and determining the most effective use of finite resources.

Jamison and others (2006) also explain how cost-effectiveness analysis can be used to help make decisions at various levels of a health system (pp. 48–51). At the macrolevel, CEA can be used to compare alternative uses of limited funds to address different diseases or conditions. For example, spending U.S.$1 million to expand immunization coverage for children would improve health status between 1,000 and 10,000 times more than spending the same amount of money to provide open-heart surgery in certain high-risk cases (p. 49). CEA can also be used to compare alternative ways of treating the same disease, such as drug therapy versus surgery for treatment of the same medical condition. Finally, CEA can be used to compare two different drugs for treatment of the same medical condition, such as comparing a new drug to an existing drug. At that level of analysis, however, it is important to consider whether the methodology is sufficiently accurate to compare relatively small differences in effectiveness. In fact, Jamison and others (2006) recommend using CEA to identify interventions that differ by orders of magnitude, rather than interventions that differ by smaller amounts that could be affected by methodological issues (p. 48). At that level of analysis it is also important to remember that CEA indicates only the average effectiveness for a group of patients, or even a subgroup of patients with certain characteristics, and does not necessarily indicate the most effective treatment for any particular patient. Moreover, there may be complications in using data from clinical trials to evaluate the relative effectiveness of different drugs when the clinical trials were not originally designed to collect data for that purpose (McGuire and others, 2008, p. 4).

The use of cost-effectiveness analysis also raises important ethical issues in making health policy and allocating limited health resources. Those who serve as stewards of scarce health care resources have an ethical obligation to use those resources in the most cost-effective manner. CEA can help to determine the best ways to meet that ethical obligation. However, using CEA means that some treatments will not be provided, even if they would be effective, because they are less cost effective than other uses of society's limited funds. According to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1983), "some health services (even of a lifesaving sort) will not be developed or employed because they would produce too few benefits in relation to their costs and to the other ways the resources for them might be used" (p. 19). Although that statement seems to be reasonable in the abstract, many people would object strenuously if the same statement were to be made by a for-profit insurance company or HMO.

In terms of ethical theory, CEA is utilitarian. It uses quantitative analysis in an attempt to determine the greatest good for the greatest number of people. CEA not only considers the number of people who would be benefited or harmed by a particular intervention but also incorporates methodologies to consider the degree to which people would be benefited or harmed. Specifically, CEA measures the number of years of life that would be gained or lost, and makes adjustments to that number of life years on the basis of quality of life (**quality-adjusted life years [QALYs]**) or on the basis of disability (**disability-adjusted life years [DALYs]**).

However, CEA does not consider the degree of equity in distribution of these benefits or harms. As Brock (2004) has explained, "Cost effectiveness and utilitarian standards require minimising the aggregate burden of disease and maximising the aggregate health of a population without regard to the resulting distribution of disease and health, or *who* gets what benefits" (p. 215, italics in original). Therefore, experts in CEA caution that it should not be used alone to make rationing decisions, but rather should be used in conjunction with an analysis of equity in the distribution of benefits (Brock, 2004, p. 221; Persad and others, 2009b, pp. 427–429; Jamison and others, 2006, p. 52). As Jamison and others (2006) have written, "cost-effectiveness should not be the exclusive basis for making health-related public policy decisions and should be complemented with information about distributional consequences" (p. 52). Several methods exist for complementing CEA with consideration of other social values (Drummond, 2008).

In addition to its failure to consider equitable distribution, cost-effectiveness analysis requires making certain assumptions and methodological decisions. Each of those assumptions and methodological decisions is based on a value judgment with significant ethical implications (Brock, 2004, pp. 221–222). For example, CEA requires making a value judgment about whether to give the same weight to years of life for patients of different ages or, alternatively, to weight years of life more heavily for young people, elderly people, or people of working age. The QALY system treats one year of life equally for patients of all ages, subject to adjustment for quality of life. That value judgment can lead to the irrational and unfair result of treating one year of additional life for a seventy-year-old as being the same in value as one year of additional life for a twenty-five-year-old, provided there was no difference in the quality of life (Brock, 2004, p. 207; Persad and others, 2009b, p. 428). The DALY system is also problematic from an ethical perspective, because it gives more weight to an additional year of life for a person of working age than it gives to an additional year of life for a person who is too young to work or too old to work, assuming similar states of disability (Brock, 2004, p. 207; Persad and others, 2009b, at 428). Jamison and others (2006) chose to use the DALY system, but decided not to provide greater weight on the basis of age (p. 41). As discussed earlier, people in different countries and cultures have very different views on the issues of rationing by age and the value to be given to individuals at different stages of life. Therefore it seems inappropriate to apply the quantitative methodology of CEA as a uniform framework for health care allocation decisions in all countries and cultural groups.

Another value judgment with ethical implications is the definition of life expectancy. Should cost-effectiveness analysis use a uniform life expectancy for all human beings in determining the benefits of a proposed treatment, or should CEA use different life expectancies for people in various countries or for people of different races, genders, and economic status? Technical accuracy in calculating the actual benefits of a proposed treatment would seem to require recognition that some people have lower life expectancies and will continue to have lower life expectancies, even after receiving the proposed treatment. However, that approach to CEA would make it appear more valuable in terms of QALYs or DALYs to save a rich person in North America who has a long life expectancy than it would be to save a poor person in Africa with a shorter life expectancy. Under these circumstances the developers of the DALY system elected to apply a uniform life expectancy, based on the long life expectancy of Japan, except for that portion of the difference in life expectancy by gender that is based on biological factors (Brock, 2004, p. 211–12). In contrast, Jamison and others (2006) elected to use regional averages of life expectancy, which tends to lower the cost effectiveness of proposed treatments in developing countries with shorter life expectancy, but facilitates more appropriate comparison of proposed treatments within a region (p. 41). The point here is not that one approach or the other is correct, but rather that there is no single approach that resolves all of the ethical problems of using CEA.

Ethical problems also arise in making adjustments for disability or quality of life for purposes of cost-effectiveness analysis (Persad and others, 2009b, p. 427). In considering the benefit of a proposed intervention, it is logical to adjust the additional life years that would be gained by the applicable level of disability or quality of life that would result from the proposed intervention. For example, most people would agree that ten additional years of life in a persistent vegetative state would be worth much less than ten additional years of life in a fully functional condition. Moreover, adjusting for various levels of disability helps to recognize the cost effectiveness of valuable treatments that would prevent more serious disabilities (Jamison and others, 2006, pp. 43–44). The ethical problem is how to weigh various levels of disability or differences in quality of life without imposing our value judgments or discriminating against persons with disabilities. Some of the adjustments for disability that are used in CEA are based on the opinions of health professionals, although persons who actually have those disabilities might reach very different conclusions because of coping, adaptation, and cultural or socioeconomic differences (Brock, 2004, pp. 203–206). Moreover, quantitative methods of CEA give less weight to treatment of persons with disabilities than they do to treatment of persons without disabilities, which led Brock (2004) to conclude that CEA may unfairly discriminate, in violation of the basic ethical principle of justice (pp. 218–220).

For all these reasons, policymakers should not make rationing decisions simply on the basis of numerical calculations derived by means of CEA. They should remember the caveats from experts in CEA about focusing on interventions that differ by orders of magnitude and about using CEA in conjunction with an analysis of equity in the distribution of benefits. They should also remember that the numbers generated by CEA are affected by certain assumptions and methodological decisions, each of which is based on a value judgment with ethical and cultural implications. The real danger is that politicians, health officials, media, and the public will ignore all these caveats and give far too much credence to numbers that appear unassailable because they are based on a scientific methodology and generated by computer.

At the present time, several countries use cost-effectiveness analysis in an attempt to identify the most effective treatments, obtain the best value for their money, and limit their health care expenditures (Chalkidou and others, 2009). Some European countries that have national health systems and universal insurance coverage use CEA to limit the costs of the benefit package they have undertaken to provide to their residents. In the United Kingdom, for example, the National Institute for Health and Clinical Excellence (NICE) provides guidance for the NHS about the use of new medicines, treatments, and technologies (Owen-Smith and others, p. 1936; Newdick, 2005). One of the goals of NICE has been to create uniformity in the adoption of new treatments, rather than allow each local health authority to make its own decision, which would lead to differences in availability of particular treatments on the basis of "post-code" (Newdick, 2005, p. 665). NICE uses the cost per QALY to decide whether a new treatment is a cost-effective use of NHS resources. As in every system of CEA, the methodology used by NICE is based on certain value judgments (Rawlins and Culyer, 2004). For example, NICE modified its analysis to consider the additional value that society in the United Kingdom places on life-extending treatments (National Institute for Health and Clinical Excellence, 2009). In fact NICE has demonstrated its willingness to permit use of some expensive drugs that can prolong life for a minimum of three months, provided the drugs are used for treatment of diseases that affect a small enough number of patients to prevent budgetary problems (Cheng, 2009).

Compared to European countries, the United States has made much less use of CEA. In 2009, the U.S. Congress provided more than $1 billion for comparative effectiveness research (CER) to evaluate the effectiveness of various treatments, but not for CEA to evaluate the costs of alternative treatments. Nevertheless, opponents of the legislation have argued that the funding will lead to rationing of care and payment limitations on the basis of cost effectiveness (Avorn, 2009). Proponents of CER, both inside and outside the U.S. government, have denied that CER will lead to rationing and have insisted that CER will simply help doctors and patients to have more informed conversations about their options for treatment. However, many proponents of CER are also hoping that it will help to reduce the increasing costs of care in the United States (Connolly, 2009). The U.S. Congressional Budget Office (2009) has acknowledged that research alone would probably not have a significant effect on health care costs and that reducing costs would probably require changes in the payment policies of insurance companies and public programs, in order to alter the incentives for patients and their doctors (p. 15). In Germany, France, and Australia, organizations that were established to perform CER, without a mandate to consider the cost of treatment, later experienced "mission creep" to include explicit consideration of costs (Chalkidou and others, 2009, p. 353). Under these circumstances the debate is continuing in the United States about the appropriate scope and likely effect of the more than $1 billion in newly funded research on comparative effectiveness.

SUMMARY

Every health system, including national health systems with universal insurance coverage, must develop some method of making difficult decisions about the allocation of resources and rationing of care. This chapter has evaluated the various methods of rationing limited health resources, both explicit and implicit, and has analyzed the ethical implications of using each method. As explained in this chapter, decisions about the most appropriate way to ration scarce health resources are based on value judgments that differ across countries and cultures. Thus, we should not impose the values of any particular country or culture as a uniform method of rationing in global health or within multicultural societies.

Experts agree that there is no single best method of rationing (World Health Organization, 2000, p. 59; Brock, 2004, pp. 202–203). Some experts recommend combining ethical principles into complex systems for making allocation decisions (Persad and others, 2009b, p 426). Some stress the importance of procedural fairness in making these difficult decisions, including accountability, transparency and public participation (Rosen and others, 2005,

p. 1103). Others argue that procedural solutions are insufficient, that societies also need to consider substantive ethical principles such as equity and justice (Persad and others, 2009b, p. 429; Brock, 2004, p. 203). Ultimately, developing an effective and ethical system of rationing may require significant cultural change. People need to accept the fact that they are simply not going to get all of the health care services that they want, or even all of the services that are potentially beneficial. What people can get is a sense of comfort and social solidarity from knowing that significant improvements are being made in the public health and welfare of their country.

KEY TERMS

comparative effectiveness research (CER)
cost-benefit analysis (CBA)
cost-effectiveness analysis (CEA)
disability-adjusted life years (DALYs)
macrolevel decision
microlevel decision
quality-adjusted life years (QALYs)
rationing system

DISCUSSION QUESTIONS

1. From the most general to the most specific, what are the decisions that each society must make in allocating its resources for health?
2. In your opinion, are explicit or implicit methods of rationing more ethical? Why?
3. What are the differences among cost-effectiveness research (CER), cost-effectiveness analysis (CEA), and cost-benefit analysis (CBA)?
4. What are the ethical implications of using cost-effectiveness analysis to make rationing decisions?

ACTIVITY: COST-EFFECTIVENESS ANALYSIS IN A COUNTRY WITH UNIVERSAL HEALTH CARE COVERAGE

The Republic of Arborea (a fictional example) is a democratic country that provides universal coverage for its residents through a system of tax-supported, national health insurance. The Ministry of Health (MOH) provides funding to local health authorities (LHAs), in the form of a fixed annual budget for each

LHA, calculated on the basis of population in each area. LHAs are required to provide all the health services authorized by MOH to all residents of their areas, but LHAs may not spend more than their annual budget from MOH. If an LHA runs out of money before the end of a year, MOH will not provide any additional funding to the LHA for that year. Thus, LHAs need to use their resources in ways that will meet all their obligations to their area residents without exceeding their annual budgets.

Three years ago the government of Arborea created a national-level agency known as the Center for Quality Assessment (CQA). CQA provides guidance to MOH about the use of new medicines, treatments, and technologies in order to identify the most effective treatments and help MOH obtain the best value for its money.

If CQA determines that a new drug is not cost effective, that drug will not be provided to patients through the national health insurance system. However, if CQA recommends a drug, all patients in the country will have the right to receive that drug through the national health insurance system, provided that drug is prescribed by their physicians. Neither CQA nor MOH will provide any additional funding to the LHAs to pay for new drugs that CQA has recommended. Therefore LHAs need to use their existing funds for this purpose, and might need to eliminate the use of other drugs or treatments that have not been recommended—or even evaluated—by CQA.

In evaluating new drugs and technologies, CQA uses the cost per QALY to decide whether a new treatment is a cost-effective use of MOH resources. Ordinarily, CQA will not find a treatment to be cost effective if it costs more than U.S.$50,000 per QALY. However, CQA has made exceptions in some situations. For example, CQA has recommended some drugs for use by small numbers of patients with very rare diseases, even though the cost per QALY for these drugs exceeds the usual threshold of $50,000. Such drugs are often referred to as *orphan drugs*. They cost a lot of money for each patient, but they are used by so few patients that they do not present a problem for MOH's budget. Nevertheless, the cost of providing orphan drugs can present budgetary problems for LHAs.

Recently, CQA recommended the use of a new orphan drug (drug no. 1), which has a cost per QALY of $75,000. The LHA in the town of Littlehaven notified the people in its area that it would begin providing that orphan drug to patients as prescribed by their physicians. However, the Littlehaven LHA also announced that in order to pay for drug no. 1 within the limit of its fixed annual budget, it would no longer provide an existing drug (drug no. 2) to patients in its area. Drug no. 2 has been used by many patients in Littlehaven for years but has never been evaluated for cost effectiveness by CQA. Therefore, the cost per QALY for drug no. 2 is unknown.

Several patients who have been taking drug no. 2 have formed the Littlehaven Patient Advocacy Group in order to protest the LHA's action in refusing to provide drug no. 2. These patients argue that it is unfair to deny them access to an existing drug, which has been used for many years and which CQA has not had the opportunity to evaluate, in order to provide a very expensive orphan drug to a small number of patients.

This advocacy group has been joined by another group of patients, people who want the Littlehaven LHA to provide drug no. 3. Drug no. 3 has a cost per QALY of $60,000, which exceeds the usual threshold of $50,000. Therefore CQA found drug no. 3 not cost effective. However, drug no. 3 is more cost effective than drug no. 1 (the orphan drug), which has a cost per QALY of $75,000. This group of patients argues that it is unfair to provide drug no. 1 though the national health system while refusing to provide drug no. 3. However, drug no. 3 could be used by a large number of patients and could have more budgetary impact than drug no.1.

Please analyze the ethical issues presented by this scenario. Apply the perspectives of patients who are current or potential users of drugs 1, 2, and 3, as well as the perspectives of MOH, the Littlehaven LHA, and the taxpayers of Arborea.

CHAPTER NINE

ETHICAL ISSUES OF HEALTH INSURANCE AND HEALTH SYSTEM REFORM

LEARNING OBJECTIVES

- Acquire proficiency in analyzing the ethical issues in raising money for health services and designing a fair health insurance system.
- Understand and be able to explain the meaning of fairness in the context of health financing, and be able to evaluate which method of financing is the most fair.
- Learn how to analyze the ethical issues raised by employment-based insurance coverage.
- Understand and demonstrate an appreciation of the fundamental values on which the health systems of various countries are based.
- Demonstrate the ability to evaluate the trade-offs that people in various countries have made—or need to make—in the process of health system reform, in light of the fundamental values of their health system and their society.

FROM an ethical perspective, which method of raising money for health services is the most fair? Health services can be financed in several different ways, such as private insurance, government insurance, social or community systems, and payment out of pocket at the point of service. The World Health Organization (WHO) has considered the fairness of various methods of financing, and developed a framework to evaluate the fairness in financial contribution to the health system of a particular country. This chapter begins by describing WHO's concept of fairness in health system financing and by analyzing WHO's framework for evaluating the level of fairness in any given country. Then the chapter compares the fairness of the health financing system in the United States to that of other countries, such as Canada, the United Kingdom, and Germany. In all countries—developing, transitional, and high-income—designing a fair health insurance system requires trade-offs, and those trade-offs have ethical implications.

An activity at the end of this chapter provides an opportunity to evaluate the most ethical way to establish a new system of health insurance for a developing country that has a finite sum of money for this purpose. Finally, the chapter analyzes the fundamental values on which various countries have based their health systems, including the important value of solidarity found in countries of Western Europe and local communities in Africa.

ETHICAL ISSUES IN FINANCING HEALTH SERVICES AND DESIGNING INSURANCE SYSTEMS

Financing refers to the methods of raising money for health services (Roberts and others, 2008, pp. 26, 153). A variety of mechanisms exist to finance health services, such as general taxation, employee health insurance or other private coverage, social insurance, community-based health insurance, and payment out of pocket at the point of service (Roberts and others, p. 153). As an ethical matter, which system of financing health services is the most fair? The answer to that question requires consideration of the meaning of fairness in the context of health financing.

The World Health Organization considers fairness in financing to be one of the three objectives of every health system (2000, p. 25). In its World Health Report 2000, WHO described this concept as follows:

> *Fair financing* in health systems means that the risks each household faces due to the costs of the health system are distributed according to ability to pay rather than to the risk of illness . . . A health system in which individuals or households are sometimes forced into poverty through their purchase of needed care, or forced to do without it because of the cost, is unfair . . . .
>
> Paying for health care can be unfair in two different ways. It can expose families to large *unexpected* expenses . . . Or it can impose *regressive* payments, in which those least able to contribute pay proportionately more than the better-off . . . .
>
> . . . [F]inancial fairness is best served by more, as well as by more progressive, prepayment in place of out-of-pocket expenditure . . . . [T]he ideal is largely to disconnect a household's financial contribution to the health system from its health risks, and separate it almost entirely from the use of needed services [World Health Organization, 2000, pp. 35–36, emphasis in original].

WHO's framework for determining the fairness of financial contribution to a health system can be broken down into several principles, each of which can be used to evaluate the fairness of financing in particular countries. These principles are as follows:

1. Protection from the financial risks of illness should be universal, so that no individual or family is prevented from access to care or driven into poverty as a result of illness (World Health Organization, 2000, p. 35).
2. People should be protected from high, unexpected, and out-of-pocket costs at the point of service. Therefore, prepayment of costs by means of taxes or insurance is fairer than out-of-pocket payment (World Health Organization, 2000, pp. xviii, 35).
3. Payment for health services should be progressive rather than regressive. Therefore prepayment should be based on the ability to pay, instead of on the risk of illness or utilization of necessary services (World Health Organization 2000, pp. 35–36). As explained by Christopher Murray and Julio Frenk (2000), who developed the conceptual framework for the WHO report, poor people have less disposable income, in part because they must spend a larger percentage of their income on necessities like shelter and food (p. 720). If prepayment were to be based on the risk of illness, each individual would be charged a rate that reflects his or her individual risk, and no individual would be required to subsidize anyone else (Light, 1992, pp. 2506–2507). As Donald Light (1992) has pointed out, payment on the basis of risk may satisfy the libertarian principle that no person should be required to pay for any other person, but such "actuarial fairness is morally unfair, because it reduces access to life opportunities and increases suffering for those disadvantaged by risk, pain, and illness" (p. 2507). Thus WHO, and others, take the position

that prepayment should be based on the ability to pay, rather than on the risk of illness.

4. Fairness requires the pooling of risks, whereby healthy people subsidize sick people and rich people subsidize poor people (World Health Organization, 2000, p. xviii). **Risk pooling** refers to combining risks for individuals, which are uncertain and potentially unaffordable, into one risk for a large group, which is calculable and manageable (Gottret and Schieber, 2006, pp. 4–5).
5. Risk pools should be as large as possible, in order to minimize the risk to individuals and their families (World Health Organization, 2000, p. xviii). Prepayment on an individual basis, such as occurs in a medical savings account, does not ensure fairness of financing, because it does not spread the risk or subsidize the elderly or the sick (World Health Organization, 2000, p. 99).

In terms of the principles used by WHO, the health financing system of the United States is less fair than the systems of other industrialized countries, such as Canada and the United Kingdom, for several reasons. First, the U.S. system of health financing is not universal, although the U.S. government is undertaking some reforms toward a long-term goal of universality. The U.S. system fails to provide universal protection and access to care, with more than 46 million people in the United States uninsured in 2009. Millions of people in the United States have been prevented from having access to care or have been driven into bankruptcy as a result of medical bills. Even those U.S. residents who have health insurance may need to pay high, unexpected costs out of pocket at the point of service because of high deductibles, copayments, and charges for noncovered services.

The U.S. system is based to a large extent on employment-based insurance coverage, which, under the principles used by WHO, is arguably less fair than tax-supported, national health insurance. In fact Victor Fuchs (2008) has argued that a tax-financed system, which is unrelated to employment status, is not only the most equitable method of providing universal coverage but is also the most efficient (p. 1751). Employment-based coverage is unfair to those people who are unemployed or who work for employers that do not provide health insurance for their employees. As the World Health Organization (2000) put it, employment-based systems limit coverage to "their privileged membership" (p. xviii). Nancy Jecker (1993) argued that the employment-based insurance system found in the United States is inherently unethical because of unjust discrimination in the distribution of jobs that provide insurance and because, even if jobs were distributed fairly, the reasons for distributing jobs are not valid reasons for distributing health care. Therefore, Jecker argued that rather than mandating all employers to offer health insurance for their employees, health reform efforts in the United States should be directed toward "uncoupling health insurance and jobs" (p. 671.)

In addition to being less inclusive than other health insurance systems, employment-based health insurance is also less portable, and it can be difficult for individuals to retain coverage after termination of employment. Employment-based coverage is also less uniform than the coverage of national health systems, because the benefits, coverage levels, and degree of cost sharing can vary considerably among employers. The financing of employment-based coverage is not transparent, as a direct tax for health care would be. Many workers mistakenly believe that most of the cost for their health insurance is borne by their employers, but actually that cost is borne, one way or another, by the workers (Fuchs, 2008, p. 1750). Moreover, employment-based coverage can encourage employers to discriminate against people who are less healthy when those employers are making decisions on hiring and promotion, and this kind of coverage raises serious risks of disclosing medical information to supervisors and coworkers.

The U.S system of employment-based insurance coverage is also regressive. First, an individual employee's share of contributions for health insurance is not based on his or her level of income. Therefore, low-wage workers are required to pay the same amount as workers or managers who earn much more money, even though that amount represents a larger percentage of the low-wage worker's earnings and a larger percentage of disposable income. This system violates the principle of **vertical equity**, which requires fair treatment for groups of people with different levels of income (Roberts and others, 2008, p. 103).

In addition, U.S. federal tax laws make the system of health financing even more regressive. The U.S. government provides a significant tax break to those employees who receive health benefits from their employers (Carey and others, 2009, pp. 25–26). As a general rule, employees must pay income tax on the compensation that they receive from their employers. Wages and salaries are considered to be part of an employee's taxable income. However, an employer's contribution for an employee's health insurance is not considered part of the employee's taxable income. This tax break is unfair in many ways because it does not benefit all taxpayers or all employees equally (Emanuel and Fuchs, 2005, pp. 1255, 1257). It gives the most tax advantages to those employees who have the most expensive insurance benefits or the highest incomes, or both. This violates the principle of vertical equity by treating high-income workers more favorably than low-income workers (Carey and others, 2009, p. 27). This tax break provides no advantages whatsoever to those employees who receive no health insurance from their employers. Therefore, this system also violates the principle of **horizontal equity** by providing differential treatment for people with the same level of income (Roberts and others, 2008, p. 104; Carey and others, 2009, p. 27). Meanwhile other taxpayers are forced to pay more taxes than they would otherwise, in order to make up for the revenue not collected by the government.

The employment-based insurance system in the United States also violates WHO's principle that risk pooling should be as broad as possible. As discussed previously, fairness requires the pooling of risks so that healthy people subsidize sick people and rich people subsidize poor people. Risk pools should be as large as possible, in order to minimize the risk to specific individuals. To the contrary, employer-based coverage is an attempt to limit each company's risk pool to people associated with that company, such as current employees, retirees, and their dependents.

Many employers in the United States complain about the high and rapidly increasing costs for their employee health plans. Some employers would like to be relieved of the obligation to pay the cost for their employees' health insurance, and some say that they would like someone else, such as the government, to pay for those costs. However, many U.S. employers prefer the current system, under which they are primarily responsible for their own employees, retirees, and dependents, to a system of national health insurance, under which they could be required to pay higher taxes in support of a broader risk pool. To some extent this attitude reflects the uncertainty about the relative costs to employers of shifting from an employment-based system to a tax-supported system, as well as employers' concern about relinquishing control of the health insurance system while continuing to be largely responsible for its costs (Galvin, 2008). Under the current U.S. system, employers in the private sector have substantial flexibility to design their own employee benefit plans, determine the levels of benefits and cost sharing, and change their plans prospectively, quite possibly to the detriment of their employees.

Moreover, the reluctance of many employers to support a national health system may also reflect a desire to limit their risk pool to people who are likely to be healthier on average than other groups of people. That is, a company's employees, retirees, and dependents may be healthier than the population at large. That parochial attitude may be understandable from a purely financial perspective. However, it is questionable from an ethical perspective because it bases the entire system of health financing on selfish efforts to keep other people out of one's risk pool. It would be fairer to include everyone in the society in the same risk pool, including people who are poor, elderly, disabled, chronically ill, unemployed, or working for other companies.

Some supporters of the U.S. system argue that private health insurance is more likely to encourage the development and use of new medical technology and drugs, whereas systems of national health insurance might try to control health care costs by limiting the use of expensive new treatments and not providing incentives for their development. However, access to new technologies and drugs in a system of private health insurance can be extremely inequitable and unfair.

For all of these reasons, from the standpoint of the WHO principles, the U.S. system of employment-based health insurance, which is both regressive and inequitable, is less fair than methods of health financing used by other industrialized countries. Of course, fairness is not the only ethical value to consider. Under the ethical theory of principlism, one might argue that the U.S. system of employer-based coverage promotes the ethical duty of autonomy, by maximizing the choices for employers and employees. However, other ways of preserving choice are available, even in systems that provide universal coverage. For example, the social insurance system of Germany provides universal coverage but permits individuals to choose among competing, nonprofit sickness funds (European Observatory on Health Systems and Policies, 2004, p. 4). Moreover, under the theory of principlism, any gain in autonomy under the U.S. system of insurance is outweighed by the system's unfairness as well as its failure to promote beneficence. The U.S. system also fails to treat each individual as an end in himself or herself, as required by Kantian ethics, and it is not a system that we could wish to be universally applied to the distribution of other things on which we are similarly dependent. Perhaps most telling, the U.S. system of employer-based health insurance fails even the test of utilitarianism. The United States outspends other industrialized countries but ranks poorly on some important measures of health (Davis, 2008), and thereby fails to provide the greatest good for the greatest number of people.

According to Julio Frenk and Octavio Gómez-Dantés (2009), discussions in Mexico about the ethical deficiencies of that country's previous health system had helped to build consensus for reform (p. 1406). It is to be hoped that people in the United States and other countries can learn from their example.

Designing a fair health insurance system requires trade-offs, not only in high-income countries but also in developing and transitional countries. The activity at the end of this chapter provides an opportunity to consider the most ethical way to employ a finite sum of money in establishing a new system of health insurance for a developing country.

FUNDAMENTAL VALUES OF HEALTH SYSTEMS

As economists frequently remind us, there is no such thing as a free lunch. Every country that has accomplished the goals of universal access to care and financial security for its people had to give up something. Most people in those countries firmly believe that the trade-off was worth it.

How can people decide what they and their society are willing to forgo? The way to make those decisions in a politically acceptable and morally defensible manner is to begin by identifying the fundamental values of a country's health care system (Priester, 1992, pp. 85–86, 105–106). As Frenk and Gómez-Dantés (2009) have explained, "every health system reflects value assumptions, which are expressed in the distribution of benefits and the organisation of its institutions" (p. 1406). After identifying those basic values, people will be able to judge whether particular proposals for reform are consistent with their values. Moreover, those values will guide people in making the difficult decisions about what they are willing to forgo.

In Mexico the health reform of 2003, which created a public insurance system, was based on specific values and on the principle that health care is a social right, rather than a privilege or a commodity (Frenk and Gómez-Dantés, 2009). Other countries that have succeeded in developing universal health systems, such as Canada and the United Kingdom, have also explicitly identified the values that form the basis for their respective systems. What did the people in those countries really care about as a society, and what were they willing to give up as the price of health reform?

The heath care system of Canada is based on five fundamental values, which are set forth in the Canada Health Act. These five principles are universality, public administration, comprehensiveness, portability, and accessibility (Jecker and Meslin, 1994, p.189). In order to obtain federal government funding for its health program, each province in Canada must meet specific criteria, including compliance with those five principles (European Observatory on Health Systems and Policies, 2005, pp. 2–3, 8). Canada has a single-payer system, in which universal health coverage is financed primarily by taxation. Under these circumstances the role of private insurance companies is strictly limited. Private health insurance that duplicates public coverage is prohibited, although Canadians may have private insurance for services that are not covered by the public plan. In effect Canadians have given up the option to choose basic insurance coverage from any organization other than the government, in exchange for universal insurance coverage and comprehensive financial security. Although Canadians gave up the individual freedom to choose their health

insurance plan and they accepted waiting lists for nonemergency services, they retained the freedom to choose their health care providers. The Canadian health insurance system operates on a single-payer model, but the health care delivery system is pluralistic. Most hospitals are not-for-profit organizations, and most doctors are in private medical practice. Generally, Canadians have the option to choose their health care providers, although some Canadians have complained about long waiting lists.

In the United Kingdom the government and the people support the values of a national health system that is funded by taxation and free at the point of service. About 12 percent of the population also has private health insurance, for avoiding queues, better amenities, and choice of specialist, but purchasing private insurance does not relieve those people of the obligation to pay taxes in support of the public health insurance system. On January 21, 2009, Prime Minister Gordon Brown signed a new constitution for the National Health Service (NHS). This new constitution sets forth the basic principles that guide the NHS, including provision of comprehensive service to all patients without discrimination, access on the basis of need rather than ability to pay, quality of services, respect for patient preferences, and accountability to the public (U.K. Department of Health, 2009). All patients in the United Kingdom have the right to services free of charge, unless specific exceptions have been authorized by Parliament. Patients have the right to choose their general practitioner (GP) practice, unless there is a reasonable basis for refusal. Patients do not have the right to see a particular doctor within their GP practice, but patients may express their preference and the GP practice must try to comply. Ordinarily, if patients want their care to be covered by the NHS, they are limited to choosing a GP practice within the NHS and must obtain their inpatient services at an NHS hospital, although the NHS may arrange for care to be provided by private hospitals or surgery centers in some situations.

Thus, people in the United Kingdom have given up some freedom to choose their health care providers in exchange for universal access to care and comprehensive services without regard to the ability to pay. Moreover, the NHS constitution explicitly recognizes that resources are limited, and that hard decisions need to be made in operating the system. "The NHS is committed to providing best value for taxpayers' money and the most effective, fair and sustainable use of finite resources" (U.K. Department of Health, 2009, p. 4). Under these circumstances, patients have the right to new drugs if those drugs have been prescribed by their doctor and if those drugs have been recommended by the National Institute for Health and Clinical Excellence (NICE), on the basis of its evaluation of cost effectiveness (p. 6). However, as discussed in Chapter Eight of this book, patients of the NHS might not receive a new treatment if NICE does not consider that treatment to be a cost-effective use of limited NHS resources.

In contrast to the systems in the United Kingdom and Canada, the health care system of the United States is based on very different fundamental values. However, this does not mean that the U.S. health care system lacks values. In a 1992 article, project director Reinhard Priester summarized the analysis of the "New Ethic" research project, cochaired by Sheila Leatherman and Arthur Caplan at the Center for Biomedical Ethics at the University of Minnesota, Minneapolis. As Priester explained, the U.S. health care system is based on the values of individualism and physician autonomy, with much less concern than other systems have for the values of universal access to care, social solidarity, and the good of the community as a whole (pp. 86–87, 91). The values of U.S. health care are based instead on the underlying values of U.S. society, including "strong faith in individualism, distrust of government and preference for private solutions to social problems, belief in American exceptionalism, a standard of abundance as the normal state of affairs, the power of technology, and the uniquely American frontier orientation" (p. 87). Thus, the United States allows individual physicians the freedom to choose their patients, and allows individual patients the freedom to choose expensive treatments of little marginal benefit, even though both these types of individual choice can result in denial of care to other patients and undermine efforts to achieve universal access to care (pp. 89–90, 103–104).

In addition to having a unique view about the paramount importance of individual choice, the United States has a unique attitude about the poor. First, U.S. culture distinguishes between the so-called worthy poor, who deserve to be helped, and other poor people who are supposedly less deserving of aid. As Priester (1992) explained, "The concept of the worthy poor derives from the peculiarly American notion that for many poor people, poverty is somehow deserved" (p. 89, footnote omitted). Generally, persons who have major disabilities or are over sixty-five years of age are considered to be more *worthy* of assistance than able-bodied adults who are unemployed. Thus, federal and state governments in the United States operate medical assistance programs for the poor, called Medicaid, but keep those programs separate from the public health insurance program for people who are elderly or disabled, called Medicare. The U.S. approach to the problem of poverty has been described as a "poor law system" that attempts to alleviate the effects of poverty, as opposed to a "welfare system" that provides a guarantee of necessary services to every member of the community (Jecker and Meslin, 1994, pp. 190–191). Another unique aspect of the U.S. attitude toward the poor relates to the ethical duty of charity. Doctors and hospitals in the United States acknowledge their ethical obligation to provide charity care, and many

do indeed provide substantial volumes of free or discounted services. However, health care providers generally have the autonomy to determine for themselves the amount of free or discounted services they will supply, as well as the specific recipients of their charity (Priester, 1992, p. 89), although most U.S. hospitals are required to provide services in a medical emergency regardless of the patient's ability to pay. Some health care professionals who treat elderly patients under the Medicare program refuse to treat poor patients under Medicaid, in part because Medicaid pays extremely low rates for treatment of poor people.

To address these problems and promote reform, Priester and the other members of the "New Ethic" research project proposed a new framework of health care values for the United States (Priester, 1992, p. 92). Their framework contains five essential values: access, quality, efficiency, respect, and patient advocacy. It also contains several instrumental values that can promote those essential values. Most important, the project group developed a set of ordering rules for resolving potential conflicts between and among the different values. All five of the essential values should be pursued as much as possible, but any conflicts should be resolved in favor of promoting the value of fair access to care. Instrumental values may be superseded by any one of the essential values. Significantly, provider autonomy is considered an instrumental value and therefore can be superseded by the need to increase fair access to care, such as by requiring health care professionals to treat a sufficient number of underserved patients (pp. 92, 103–104). This proposed framework of values, with its ordering rules, is an important step toward health reform in the United States. In particular it could help to promote discussion and clarification of what people in the United States care about the most, and what they may be willing to give up as the unavoidable price of reform.

As Priester (1992) noted, the U.S. health system does not place a high priority on the value of social solidarity (p. 91). **Solidarity** refers to the feeling of unity that is generated by having a fair health system, one that includes everyone in the community regardless of wealth or social status and that gives people a feeling of ownership and an opportunity to participate (Priester, pp. 99–100). In contrast to the situation in the United States, solidarity is a fundamental value in the national health system of the United Kingdom (Priester, p. 99), as well as in the social health insurance systems of several industrialized countries in Western Europe (Saltman and DuBois, 2004, p. 27).

The value of solidarity is not limited to nationwide health systems or to health systems in industrialized countries. Solidarity is also an important value in systems of **community-based health insurance**, such as local systems of risk pooling in resource-poor developing countries. Community-based financing systems are local prepayment mechanisms through which villages or other small communities pool their risks of health care costs. Depending on the local circumstances, community-based insurance can be an attractive alternative for financing health care services, especially where national governments are unable to raise sufficient funds by means of taxation (Roberts and others, 2008, pp. 176–178).

Scholars from Burkina Faso and Germany have explained that community-based health insurance systems must be based on the values of solidarity and reciprocity. Moreover, in Burkina Faso and other African countries the fundamental values of solidarity and reciprocity are not imported or imposed from other countries but rather are part of the traditional culture and society (Sommerfeld and others, 2002, pp. 149, 160). The following excerpt from an article by these scholars explains the relationship between community-based health insurance and traditional, local values of reciprocity and solidarity.

EXCERPT FROM "INFORMAL RISK-SHARING ARRANGEMENTS (IRSAs) IN RURAL BURKINA FASO: LESSONS FOR THE DEVELOPMENT OF COMMUNITY-BASED INSURANCE (CBI)"

BY JOHANNES SOMMERFELD AND OTHERS

Introduction

In recent years, community-based health insurance (CBI) has been propagated as an option to extend access to health care of poor rural populations in countries lacking formal insurance markets. In contemporary Burkina Faso, a landlocked country in the West African Sahel, low access to health care is a serious impediment to the effectiveness of modern health care intervention. In Kossi Province, the site of the present study, there are only 0.3 visits per capita and per year to modern health services. The financial costs involved in seeking such care and their timing at the time of need have been identified as major factors contributing to low access.

The formal sector of the Burkinan economy comprises only 5% of the population. Social insurance for the formal sector has been limited until now to government employees, company employees and a few families living in relative economic prosperity. Some mutual health organizations, with varying success, have recently emerged without, however, providing coverage to a significant proportion of the rural population. . . .

Fee-for-service payment is still the predominant mode of health care financing of a large majority of the population in the non-formal sectors of the economy. The Burkinian Ministry of Health has opted to follow the Bamako Initiative, with the introduction of user fees. In the study area, user fees lead to a decrease in the utilization of formal health services: the percentage of those who reported an illness episode in the preceding month and sought care at the formal health facilities dropped from 25.6% in 1993 (before the introduction of fees) to 18.7% in 1994 and 11.7% in 1995.

Burkina Faso's Ministry of Health has recently called for promoting solidarity-based modes of health care financing to increase the financial accessibility of health services in order to overcome the limitations of the existing system. The objective was to increase access to services and not to generate resources for the government, since funds would be retained and managed at the community or district levels. In June 1999, a national seminar was held to foster the creation of mutual health organizations in Burkina Faso.

Social insurance schemes, regardless of their design, reflect the history and cultural notions of solidarity and reciprocity norms of societies in which they develop. A crucial question, therefore, is whether an insurance scheme developed in one society can be applied in another. In other words the question remains whether CBI schemes are socially and culturally feasible, tapping into established notions of solidarity and reciprocity, and adapted to informal sector economies in rural Africa.

There is now an increasing awareness that CBI schemes need to be grounded in national values of solidarity and reciprocity. One of the underlying questions is whether CBI schemes can be built upon existing risk sharing arrangements and notions of solidarity. Solidarity is a common feature of 'traditional' rural communities, who have always shared the economic risks of unpredictable and cost-intensive life-events, such as deaths, accidents and weddings. . . .

The present study was carried out in 1998–2000 in Kossi Province, in the North-Western part of Burkina Faso, as an integral part of a larger research project entitled 'The Scientific Basis of Community-Based Insurance,' conducted conjointly by the Nouna Center for Health Research (CRSN) and the Department of Tropical Hygiene and Public Health (ATHOEG) of Heidelberg University. The research intended to assess the scope and prevalence of existing IRSAs in rural Burkina Faso and to evaluate their potential role in CBI. The research was explicitly multi-disciplinary, bringing together the qualitative ethnographic interest of anthropology and the more quantifying research paradigm of economics.

Research Context

IRSAs in West Africa and Burkina Faso

Informal or 'traditional' risk sharing institutions and solidarity mechanisms in West Africa have, for a long time, attracted the curiosity of anthropologists and economists. Rural economies in West Africa have established a number of social and economic mechanisms in order to cope with the financial consequences of economic random shocks. A great number of traditional solidarity networks can be identified from the literature, e.g. clan relationships, burial societies, cooperative labour exchange pools, cooperative work groups, fire associations, sea rescue associations, special fund societies, Rotating Credit and Savings Associations (ROSCAs), beer societies, group borrowing schemes, credit cooperatives and regional associations....

Mutual Health Institutions and Insurance in Burkina Faso

Burkina Faso's mutual health movement is still in an embryonic stage. Recently, a number of mutual health institutions have emerged.... A new formal law governing mutual health institutions is currently being conceived. This development has been strongly supported by the international donor community....

Up until now, in Burkina Faso formal insurance institutions were limited to urban centres. In recent years, however, a number of commercial and state-owned insurance companies... have emerged, offering life, health and vehicle insurance and reinsurance. In addition, social security insurance is provided to salaried and state employees...

Results

A preliminary study of existing community-based risk sharing schemes in the project region identified a variety of community-based institutions involved in risk sharing. Forms of risk-sharing included credit saving funds, solidarity funds and rotating work assignments. Although none of these existing institutions constitutes by definition a health insurance scheme, assistance is provided to members through collective as well as individual donations, assisting hospitalized group members with loans for little or no interest....

Solidarity Networks Based on Kinship, Neighbourhood, Ethnicity or Profession

Individuals and groups of people linked by kinship or place of origin, by neighbourhood, ethnic group or profession belong to widespread social networks which generate and share resources in times of need, e.g. in the case of illness. Examples include financial solidarity within an extended family network, intra-community solidarity among families, neighbours and friends, and social funds among colleagues. For example, the catechists of the provincial parish have organized a solidarity fund which is deducted from their annual allowance and serves, among other purposes, to cover unforeseen medical expenditures....

Notions of Solidarity and Reciprocity

Solidarity in non-monetarized IRSAs is characterized by friendly social relationships among families, clans, friends, peers or neighbours that are mobilized for the purpose of assistance to an individual in times of need or distress. Solidarity is based on the assumption, a loan is a given... thus implying a certain expectation of reciprocity. Interestingly, the Djoula term for loan is djuru or string. Credit is considered a string or link based on an obligation between two individuals. The obligation is exclusively moral and rarely legally enforced. Sometimes, it is even relegated to the divine by saying to the debtor nyi to ni allah ye (I leave you with God).

Solidarity

Solidarity in Times of Ill-Health...

In the case of sickness, asset sale is an important health financing strategy. Even the least privileged will own a chicken to sell. Relatives are the first resort in terms of financial arrangements. This resort is, in many cases, limited to providing immediate food support, i.e. delivering soup or fruit to the diseased patient. Giving money to buy medicines would be seen as meaning that a person does not have enough money to pay for his or her own needs.

Discussion and Conclusions

Solidarity is a crucial feature of the Burkinian social fabric in spite of a growing trend for individualism and monetarization. Without contributing to, and tapping into a varied set of solidarity mechanisms, the individual would face social and economic deprivation in the harsh economic and ecological conditions of the Sahel. Solidarity fulfills important functions. It allows people to situate themselves in extended social networks providing them with a sense of belonging and support. Deprived of social security as offered by the nation state, solidarity allows rural Burkinian farmers to participate in extended risk sharing networks that often transcend ethnic boundaries....

In any society, the "mutualization" of risk is the result of associative experiences of collectivities. In Burkina Faso, the associative movement (village production groups) . . . [has] experienced serious organizational and financial deficits. Whereas national agrarian politics in the 1980s favoured village-wide production groups, just recently the advantages of small structures have been rediscovered.

A great variety of risk sharing institutions exist in the study area. Our ethnographic data suggest that informal, non-monetarized, so-called 'traditional' risk sharing arrangements, contrary to assumptions in the literature, are very prevalent and evidently not prone to immediate disappearance. They transport important solidarity notions inherent in the Burkinian society. Our data suggest that not all of the solidarity expressed in traditional arrangements is based on the idea of mutual reciprocity. Some arrangements are even altruistic.

Increasing monetarization of the Burkinian non-formal economy brings with it a tendency for collective group work to rise in size and in importance. Monetarization brings about egoism, even at the level of the extended family. This tendency will most likely affect future institutionalized risk sharing schemes. Proximity is a crucial and essential structural element of African institutions. As there is widespread mistrust of anonymous and bureaucratic institutions, one can, however, posit that the more institutionalized groups there are, the less effective they risk becoming. The specificity of African societies . . . [needs] to be taken into account when promoting institutional development in rural African areas. Before new mutual health institutions can be successful, they need to be grounded in local values of solidarity and reciprocity.

To be functional, CBI schemes need to be tailored around a number of presuppositions. There needs to be, in the community, a collective interest in financial precautions to ward off income shocks due to illness. More than that, communities need to have a positive attitude towards precautionary approaches for future ill-health. In addition, there needs to be awareness that certain health problems warrant insurance which relates to common attitudes towards, and perceptions of, health risks. Shared norms of solidarity and reciprocity can largely increase the trust in a pooling scheme. Finally, the ability to pay (ATP) and willingness-to-pay (WTP) are necessary in order to create trust in service providers . . . .

New mutual health organizations in the rural Sahel face a number of challenges. The administrative set-up needs to fulfill popular expectations regarding leadership and transparency. New innovative ways to promote an administration based on proximity need to be conceived. Administrative skills, particularly, financial management skills, need to be strengthened. A benefit package based on issues of financial sustainability and popular expectation needs to be defined. Enrollment, modalities and the level of fee payment, membership administration and reimbursement procedures need to be developed and systematized. Potential sources for moral hazard need to be identified. The greatest challenge will be to bridge the need for proximity with the health care financing need to pool resources. One possibility to preserve the benefits of small size and proximity, yet avoiding the risks of bankruptcy inherent in small groups, would be to create a public re-insurance scheme covering high cost/low volume risks.

Finally, nation states are called upon to provide clear-cut legal frameworks for mutual health organizations. Burkina Faso needs to provide a legal framework for the rapidly emerging mutual health organizations. To be successful as stimulators of local development, CBI schemes need to enroll marginalized and disadvantaged populations into national development processes. In Burkina Faso, the law on community associations . . . provides sufficient legal framework to implement a community-based insurance scheme except that it does not provide any structure for social (i.e. public) re-insurance. The Burkinian government should assume two roles; providing a legal framework both for CBIs and reinsurance for small scale . . . [IRSAs] so that they can take on health care expenditures as additional item to share risks.

Source: Excerpted from "Informal Risk-Sharing Arrangements (IRSAs) in Rural Burkina Faso: Lessons for the Development of Community-Based Insurance (CBI)," by J. Sommerfeld and others, 2002. *International Journal of Health Planning and Management, 17*(2), 147–163 (citations, references, tables, and some text omitted). Copyright 2002 John Wiley & Sons, Ltd. Reprinted by permission.

SUMMARY

In some countries, people have accomplished the goals of universal access to care and financial security for every member of their community. In many other countries, however, people are still working toward these goals. Where these goals have been accomplished, people have identified the fundamental values of their health system and have made trade-offs that were consistent with those values. Countries that are still trying to reform their health systems also need to focus on their fundamental values and then use those values to decide on the trade-offs that they are willing to make.

This chapter analyzed the fundamental values on which different countries have based their health systems, including the value of solidarity in local African communities and in the nations of Western Europe. Finally, the chapter analyzed the meaning of fairness and evaluated the fairness of different methods of raising money for health services and designing a health insurance system.

KEY TERMS

- community-based health insurance
- financing
- horizontal equity
- risk pooling
- solidarity
- vertical equity

DISCUSSION QUESTIONS

1. Is prepayment of health costs, through taxes or insurance, fairer than payment out of pocket at the point of service? If so, why?
2. As a matter of fairness, should individuals be required to pay for health services on the basis of their actuarial risk of illness or, alternatively, on the basis of their ability to pay? Why?
3. Is an employment-based system of health insurance inherently less ethical than a system of tax-supported, national health insurance? Why or why not?
4. What are the fundamental values of each of these health systems: the system in Mexico, the system in Canada, the system in the United Kingdom, and the system in the United States?
5. How does community-based health insurance relate to traditional values in Burkina Faso and other countries?

ACTIVITY: ESTABLISHING A SYSTEM OF HEALTH COVERAGE IN A DEVELOPING COUNTRY

The developing country that we will call Yulatonga is a small island nation in the South Pacific with a population of 1 million. It is a very poor country. The average per capita income is $2,000 per year. Ten percent of the population (100,000 people) have an annual income at or below the Yulatonga government's poverty level of $1,000 per year. Some people are even poorer than that. Five percent of the population (50,000 people) have an annual income below 50 percent of the government's poverty level (that is, they have annual incomes below $500 per year).

Yulatonga does not have a national health insurance system, and 100 percent of the population is uninsured. The government does not have enough money to establish a national health insurance system, and it could not raise enough tax revenue to support that type of system. Similarly, it is not feasible to develop a social insurance system with employer and employee contributions, because only a small percentage of the population is employed in the formal sector. The health care system of Yulatonga includes several hospitals, but most residents cannot afford the services of those hospitals because they lack money and health insurance.

Recently, a nongovernmental organization (NGO) based in Switzerland agreed to give the government of Yulatonga $100 million per year for ten years for the purpose of establishing a system of health coverage. The money may not be used for any other purpose. If the government of Yulatonga does not use that money to establish a system of health coverage, the NGO will spend the money on expansion of its headquarters building in Switzerland.

If the government of Yulatonga accepts the money, the government will have flexibility to determine the details of the system. For example, the NGO will allow the government to determine which residents of Yulatonga will be eligible for coverage, the amount of that coverage, the scope of benefits, and the level of individual cost sharing.

The government of Yulatonga has decided to accept the money and has carefully considered the best way to apply $100 million per year to establish and maintain a system of health coverage. The government has no other resources for this purpose, and there is no source of additional funding. Therefore, the maximum amount that can be spent on this new system of coverage is $100 million per year. At the present time, government officials have narrowed down the possibilities to these three potential ways of using that money:

1. Provide comprehensive health coverage at no charge for the 50,000 poorest people in the country. (These are the people whose annual incomes are below $500 per year.) The government's annual cost to provide this comprehensive coverage would be $2,000 per person: 50,000 people × $2,000 per person = $100 million per year. This comprehensive (*first dollar*) coverage would not be subject to any deductibles and would not require any copayments from the individual.
2. Provide less comprehensive health coverage at no charge for all 100,000 people at or below the government's poverty level. (These are the people whose annual incomes are below $1,000 per year.) In other words, this alternative would cover more people than the first alternative, but it would provide less comprehensive coverage. The government's annual cost to provide this less comprehensive coverage would be $1,000 per person: 100,000 people × $1,000 per person = $100 million per year. Under this alternative, the coverage would be subject to an individual deductible of $300. After paying the deductible, eligible individuals would be responsible for copayments of 20 percent on their remaining health care bills.

3. Provide catastrophic health coverage at no charge for all 1 million residents of Yulatonga, regardless of their level of income. The government's annual cost to provide this catastrophic coverage would be $100 per person: 1,000,000 people × $100 per person = $100 million per year. This catastrophic coverage would have an individual deductible of $1,000 per year. This alternative would provide 100 percent coverage of all health care expenses after paying the individual deductible.

Please evaluate these three options and determine which one would be the most ethical for the government of Yulatonga to adopt. Be prepared to explain the reasons for your conclusion.

CHAPTER TEN

ETHICAL ISSUES IN THE MOVEMENT OF PATIENTS ACROSS NATIONAL BORDERS

LEARNING OBJECTIVES

- Be able to evaluate the ethical obligations to provide health care services to people who are undocumented aliens.
- Demonstrate the ability to analyze the ethical issues involved in treating patients who have limited proficiency in the language of the health care provider.
- Learn how to evaluate the ethical implications in the global phenomenon of medical tourism.
- Understand and be able to explain the additional ethical problems that arise when people from wealthy countries travel to developing countries to obtain organ transplants.