Health Care and the Prospective Pareto Principle*

Allan Gibbard

"Morality is made for man, not man for morality."[1] I interpret this aphorism as suggesting that questions of morality can most fundamentally be addressed by considering human benefits and human harms—those benefits and harms to which our accepting various alternative moral principles would tend to lead. This formula is vague, but I shall be concerned in this paper with one attempt to state clearly at least a part of what is involved.

I shall be examining issues of social justice in access to health care. Does justice, I shall ask, require that everyone be assured access to every kind of health care that can be expected to benefit him? If not, does it at least demand that everyone have equal access to health care, without regard to income or place of residence? Or does justice rather demand no more, and no less, than that everyone be assured a "decent minimum" of access to health care—and if that is so, how is it to be judged what constitutes that "decent minimum"?

In many realms of life, no doubt, satisfactory ethical judgments can be made without careful analyses of the fundamental bases of these judgments. That is unlikely to be the case, however, with questions of health policy. When applied to those questions, whatever "moral good sense" we may develop in the ordinary course of life is likely to be inadequate. The effects of health policy are immensely complex, and so we cannot simply take in the nature and the effects of a set of policies at a glance and focus our moral good sense on them. It is, of course, difficult and often impossible to establish reliably what the effects of a proposed policy will be, but even when we can, it remains to be said which features of the policy and its effects are desirable, which are undesirable, and how the desirable and undesirable aspects balance from an ethical point of view. The effects of a policy will involve many people

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1. This aphorism has been a theme in the moral philosophy of William Frankena, *Ethics* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), p. 37. The allusion is to Mark 2:27.

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in profound ways. Any adequate description of these effects will be statistical, whereas commonsense moral judgment has been trained on simpler circumstances more vividly presented.[2] To make well-founded moral judgments on the basis of sophisticated analyses of the effects of policy, we shall need sophisticated ethical theory: we shall need to work out explicitly the kinds of ethical considerations we think should govern and the weights these considerations should have.

How, then, can we address fundamental ethical questions involved in issues of health care policy? What I shall do in this paper is not to take up this general question—which is, after all, the central, controversial question of moral philosophy. I shall rather examine an attempt to skirt this question and yet to answer many of the ethical questions central to health care policy. I shall start with the aphorism, "Morality is made for man and not man for morality," and consider an attempt to work out a part of the content of that aphorism. The aphorism invites us to address ethical questions by considering human benefits and harms. The principle I shall examine—called the "prospective Pareto principle" or the "ex ante Pareto principle"—applies to situations in which, in a sense to be explained, all considerations of benefit and harm can be resolved so as to "speak with one voice."

Begin with a more modest principle, the "simple Pareto principle," as a standard for evaluating policies.[3] A given person may be benefited by a given policy in some ways and harmed by it in other ways. We may speak, though, of how he is affected *on balance* by the policy—of whether, *on balance*, he is benefited or harmed. Now if some people benefit on balance from a policy and some, on balance, are harmed by it, that may raise difficult issues of welfare and equity. Suppose, though, that no one is harmed on balance and at least some are benefited. Then assessment of the policy is especially unproblematical. If ethical questions are to be addressed in terms of benefits and harms, then, it would seem, a policy that benefits someone on balance and that harms no one on balance is a good policy, from an ethical point of view. That, in rough form, is the simple Pareto principle.

2. The pallid effects of statistical information on cognitive judgment are treated extensively in Richard Nisbett and Lee Ross, *Human Inference: Strategies and Shortcomings of Social Judgment* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980).

3. The simple Pareto principle (or simply, the "Pareto principle") is due to Vilfredo Pareto, *Manuel d'économie politique* (Paris: Girard & Briere, 1909). Pareto developed an elaborate theory of the basis for impartial moral judgments, but the "Pareto principle" is now ubiquitous in theoretical welfare economics, quite divorced from its original context. What I am calling the "ex ante Pareto principle" may be due to Kenneth J. Arrow, "Le Rôle de valeurs boursière pour la répartition la meilleure de risques," *Econometrie* (Paris: Centre nationale de la recherche scientifique, 1953), and the "straightforward applications" of it, except in the respects to be noted, are of a kind fairly standard in writings of theoretical welfare economists.

Turn now to the "prospective" or "ex ante" Pareto principle. Think of life as a gamble, or rather a series of choices among gambles. We do not know when or in what ways we shall be ill, and when we are ill, we do not know for sure what various kinds of medical care will do for us. At the same time, we have some rough ideas of our chances and what we can do to affect them. Now government policy helps to determine which "gambles" are open to us to choose. If, for instance, there is compulsory medical insurance, then a person cannot choose to save his premium and risk the consequences. We can speak, then, of the *prospects* a person has under a policy—the gambles with which he would be faced or which he would choose to face if that policy were adopted. Now some prospects are more desirable than others; most people, for instance, would find the prospect of playing Russian roulette less desirable than the prospect of losing five dollars. Policy choices affect the distribution of prospects: if we tax the rich to provide medical care for the poor, that betters the prospects of the poor and worsens the prospects of the rich (further economic ramifications aside). In this case, we might say, there are opposed prospective interests.

The ex ante Pareto principle is an ethical principle that applies only to those special cases where there are no opposed interests in prospect. It is thus quite narrow in its scope and covers only those cases that seem least problematical, morally speaking. The principle says, in effect, that where prospective interests are unopposed, they should prevail. More precisely, let P and Q be alternative policies. Then, the principle says, if both (1) the prospects of at least one person are better under P than under Q, and (2) no one's prospects are better under Q than under P, then ethically speaking, P is better than Q.

An advantage of the ex ante Pareto principle is that it seems to make a very modest claim. It seems to say, in effect, that when in prospect there is reason to prefer P to Q and no reason to prefer Q to P, then P is preferable. The principle does rest on a conception of what, ethically speaking, constitutes a reason for preferring one policy to another: a consideration favors P over Q from a moral point of view only by tending to make someone's prospects better under P than under Q. That, however, should be acceptable to anyone who accepts that morality should serve humanity—that morality is made for man and not man for morality.

Now although the ex ante Pareto principle seems to commit us only to what is most unquestionable in ethical theory, it turns out to have extensive implications for health care policy—as I shall explain in later sections of this paper. It follows from the principle that, except under special circumstances, there is no moral right to equal availability of health care, unless there is a moral right to full economic equality in general. It follows that, if a treatment is sufficiently expensive, it should be withheld, even if it is the most effective treatment for a grave ailment. More carefully put, what I shall be showing is that, if the principle is

granted, then good cases can be made for these conclusions. In the final section, I shall briefly inquire whether the straightforward applications of the principle that I sketch leave out important considerations and whether their conclusions discredit the ex ante Pareto principle.

THE SIMPLE PARETO PRINCIPLE AND ITS SPARSE IMPLICATIONS

The ex ante Pareto principle, as I have said, is an extension of the simple (or ex post) Pareto principle. The difference is that what the ex ante principle says of "prospects," the ex post principle says of "outcomes." Let *A* and *B* be two economic states. Then if, the principle says, someone is better-off in state *A* than in state *B* and no one is better-off in state *B* than in state *A*, then state *A* is, ethically speaking, better. The simple Pareto principle is especially weak, in that it tells us how to compare the worth of two economic states only in rare cases: those cases in which no individual interests are opposed to each other. Normally, we face choices with respect to which individual interests are opposed: between states with some people better-off in one and some better-off in the other. For these choices, the simple Pareto principle tells us nothing.

The simple Pareto principle merits further comment and elucidation. In the first place, the principle is sometimes expressed as a standard for evaluating changes, but that is misleading. If a change makes at least one person better-off and makes no one worse-off, it is said, then the change is an improvement, ethically speaking. What we need ethical principles for in matters of public policy, however, is to compare alternative policies for the same period—say, the effects of alternative tax schedules that might be enacted, or of alternative combinations of law and regulations affecting the organization of health care. An "economic state," in the sense of the principle, should be understood as an entire, detailed history—often the history of what would happen were some particular set of policies to be adopted.

In the second place, the principle is often put in terms of preferences: if someone prefers *A* to *B* and no one prefers *B* to *A*, then *A* is better than *B*. Here I have used the language "is better-off in *A* than in *B*" and not said anything about what constitutes being "better-off." I shall discuss this matter later, in connection with the more elaborate ex ante Pareto principle; here let it be noted that nothing I have said presupposes that a person is always better-off in whichever state he prefers.

In the third place, much has been made, in economists' use of the Pareto principle, of "Pareto optimality" or "Pareto efficiency," but even if the Pareto principle is valid, Pareto optimality is a weak recommendation from the ethical point of view. The relevant definitions can be put as follows. Let *A* and *B* be two "economic states": detailed possible histories. State *A* is said to be Pareto superior to state *B* if and only if at least one person is better-off in *A* than in *B* and no one is better-off in *B* than in *A*. The Pareto principle, then, is that if a state *A* is Pareto superior to a

state B, then A is better than B from an ethical point of view. Now an "economic state" may be technologically infeasible, in the sense that no matter what people decided to do, the sequence of events that constitutes that state would not come about. It is presumably technologically infeasible, for instance, for everyone in the world to attain the present median American standard of living by the year 1985. An economic state is defined as Pareto optimal if and only if it is technologically feasible and no technologically feasible state is Pareto superior to it. Now if the Pareto principle is a valid ethical principle, then Pareto optimality has some ethical implications: it follows from it that (1) any technologically feasible state that is best, ethically speaking, is Pareto optimal. For were such a state not Pareto optimal, that would mean, by definition, that some technologically feasible state were Pareto-superior to it, and hence better—this last by the Pareto principle. Equivalently, (2) any state that is not Pareto optimal fails to be a best technologically feasible state. These properties, though, give policymakers no ethical grounds for seeking Pareto optimality. The policymakers' choices are confined, at the very least, to states that are economically feasible: states that could be made actual by government policy. (Here I interpret "economics" as "political economy" in the original sense: as the political analog of the art of running a household, and hence the study of government economic policy and its effects.) Government cannot legislate universal sainthood or enlightened single-minded devotion to social justice on the part of all economic agents; it can do such things as adjusting tax incentives, affecting the money supply, promulgating and enforcing prohibitions, attempting directly to control wages and prices, establishing organizations to provide services, and the like and perhaps have a substantial influence on economic agents by means of moral suasion. Now since few technologically feasible states are economically feasible, the best economically feasible state may well not be the best technologically feasible state, and hence may well not be Pareto optimal.

The following would be fallacious inferences from the Pareto principle:

> *P-fallacy 1.*—At least one best economically feasible state is Pareto optimal.
>
> *P-fallacy 2.*—If a state A is Pareto optimal, and a state B is technologically feasible but not Pareto optimal, then A is better than B.

We have already seen why P-fallacy 1 would be a fallacious inference from the Pareto principle. To see that P-fallacy 2 would be so as well, note that the ethical standard given by utilitarianism is in accord with the Pareto principle. Suppose it is meaningful to speak quantitatively of how well-off a person is in a state; call that quantity his "welfare" in that state. Utilitarianism says that the value, ethically speaking, of a state is the sum of all individuals' welfares in that state. Utilitarianism, then, entails the Pareto principle, and hence the Pareto principle can entail

nothing at odds with utilitarianism. Now suppose, for the sake of simplicity, there are only two people, *i* and *j*, and that within the limits of technological feasibility, if *i*'s welfare is 10 units then *j*'s welfare can at most be 1 unit, whereas if *i*'s welfare is 7 units then *j*'s can be 6. Then welfare distributions 10,1 and 7,6 are both Pareto optimal (where "10,l," e.g., means 10 to *i* and 1 to *j*). According to utilitarianism, 6,6 is better than 10,1, since it gives total welfare of 12 as opposed to 11. Yet 6,6 is not Pareto optimal, since 7,6 is Pareto superior to it.

The simple Pareto principle, then, has few implications for government policy, taken by itself. It does not follow from the Pareto principle that governmental policy should be designed to achieve Pareto optimality, alone or among other goals. It does not follow from the Pareto principle that government should let matters be settled by a free market, or that freedom of contract should not be abridged—even if it can be shown that a free market can achieve Pareto optimality.

The simple Pareto principle may have some more substantial implications in combination with the results of economic theory. In particular, the two "fundamental theorems of welfare economics" say things about the Pareto optimality of free markets under certain highly idealized conditions.[4] The first theorem says that, under those conditions, free competition is Pareto optimal. For the reasons given, that is of little ethical interest. The second theorem is much more significant: it says that, under the idealized conditions of the two theorems, any technologically feasible state can be ensured by free competition and an aptly chosen lump-sum distribution of initial endowments. That seems to say that any technologically feasible state is economically feasible. If that is so, then from that and the simple Pareto principle it follows that the best economically feasible state is Pareto optimal, and so the government should, among other things, try to ensure Pareto optimality.

There are two reasons, however, why that conclusion cannot be drawn from general facts about the world and the formal validity of the second fundamental theorem of welfare economics. First, the idealization of the theorem's assumptions is extreme, especially when there is a large degree of uncertainty. Second, even given the idealized assumptions of the theorem, the government, to achieve a particular "best" Pareto-optimal economic state, would have to be omniscient about the details of individual preferences and abilities. It may not be able to achieve anything close to the best technologically feasible outcome merely with general knowledge of the kinds of abilities and preferences people are likely to have.

THE EX ANTE PARETO PRINCIPLE

Issues in health care, it has often been noted, are characterized by extreme uncertainty as to the effects of the policy on particular individuals. No

4. See Hal Varian, "Distributive Justice, Welfare Economics and the Theory of Fairness," *Philosophy and Public Affairs* 4 (1975): 223–47.

one, including the person himself, knows what health care he will need and what that health care will do for him. It is this extreme uncertainty that makes the simple Pareto principle especially unhelpful as a guide to health care policy.

When, however, the Pareto principle is extended from "states" to the chancy prospects that people face in life, it turns out to be rich in its implications—as I shall indicate in the next three sections. The interests different people have are much less likely to be opposed to each other in prospect than in retrospect; that is why it is often crucial, for the sake of peace, to settle the "rules of the game" in advance of "playing it." Now even when extended to prospects, to be sure, the Pareto principle is far from providing a fundamental basis for answering every question in the ethics of health care. It is insufficient, even once the facts of economics, psychology, and medical science are known. Still, the principle will tell us important things about such issues as the ethics of cost-containment policy and the purported right to equal health care. The extended principle, then, needs to be examined seriously.

What the simple, ex post Pareto principle says about the outcomes of social policies as they affect various individuals, the ex ante Pareto principle says about the chancy prospects individuals face as a result of policy choices. A grossly oversimplified sketch of life will illustrate how policies may affect prospects. Suppose all that matters to us in a given month is whether we are well, sick, or dead and how much money we have. Suppose that whenever we are sick, we recover or die, and our chances of recovering depend on whether we receive health care or not. Suppose in particular that 10 percent of us get sick, and of those who do, 30 percent (the "resilient sick") recover whether or not they get medical care, 50 percent (the "doomed") die whether or not they get medical care, and the other 20 percent (the "critical") live if they get medical treatment and die if they do not. When a person gets sick, he does not know whether he is resilient, critical, or doomed. Now governmental policies may leave open two kinds of choices. (i) A person may have the choice, before he knows whether he is sick or well, of buying insurance. (ii) When a person gets sick, he may have the choice of whether to get treatment. Governmental policy, among other things, will determine what choices he has and what the alternatives will cost the individual. Table 1 shows the prospects for life that a person faces before learning whether he will be sick (1) if he commits himself at the outset to be treated if sick, or (2) if he commits himself not to be treated if sick.

Suppose, now, a person can choose whether to insure and whether to be treated if sick. Four policies are then open to him, as shown in table 2 (although the fourth policy has nothing to recommend it). Table 2 also shows the outcomes of these policies and their chances, if insurance costs $200 and treatment costs $1,000 for the uninsured. Outcomes are shown as amounts of money paid if alive; it is assumed that no one cares how much money he has if dead. Thus a person who would buy insurance

TABLE 1

PRIOR PROSPECTS FOR LIFE GIVEN ALTERNATIVE POLICIES

	PROBABILITIES OF INITIAL STATES AND OUTCOMES GIVEN INITIAL STATES				OUTCOME PROBABILITIES	
	Well (.90)	Resilient (.03)	Critical (.02)	Doomed (.05)	Alive	Dead
Treat if sick	Alive	Alive	Alive	Dead	.95	.05
Don't treat	Alive	Alive	Dead	Dead	.93	.07

NOTE.—The relevant probabilities are calculated from the outcomes of the two policies in the four possible cases.

and get treatment if sick faces a prospect: pay $200 with probability .95, die with probability .05. Suppose that, were insurance not available, competition would bring the price of treatment down to $600 but that the person would not seek treatment if sick and uninsured, even at that price. Then a policy of forbidding insurance in order to increase price competition would present the person with a prospect: pay nothing with probability .93, die with probability .07. On the other hand, for a person who would seek treatment even if it cost $600, a policy of forbidding insurance would yield a prospect: pay nothing with probability .90, pay $600 with probability .05, and die with probability .05.

In effect, then, a social policy assigns a prospect to each person, which we may call his "prospect under" that policy. The ex ante Pareto principle says this: given two policies P and Q, if each person's prospect under P is at least as desirable as his prospect under Q, and someone's prospect under P is more desirable than his prospect under Q, then P is, ethically speaking, a better policy than Q.

The principle, so put, will need some elucidation and interpretation. First, what is it for one prospect to be "more desirable" for a person than is an alternative prospect? A standard economist's answer is that the more desirable prospect is the one the person would choose if given the choice. That answer seems unsatisfactory for at least three reasons. In the first place, what a person would choose indicates desirability only if the person is imagined to be choosing in full light of all the available information. A choice, to be a reliable indicator of desirability, must be made with full realization of what it would be like to live out the various alternatives at issue and what the probabilities in question really mean. Now if we want ethical guidance on the details of health policy, we shall need to deal with a multitude of complex issues, and no one can reasonably be expected to think all these issues out for himself. Few people, no doubt, have looked seriously into such expensive treatments as renal dialysis and learned what their chances of needing it are and what it would be like to undergo the treatment or to need it and to be unable to afford it. Judgments of probabilities and desirabilities in these matters require expertise. In the second place, a person may prefer one alternative to another not because he thinks it makes his own prospects more desirable

TABLE 2

PRIOR PROSPECTS FOR LIFE AND WEALTH GIVEN ALTERNATIVE POLICIES

Strategies	PROBABILITIES OF OUTCOMES				OUTCOMES GIVEN INITIAL STATES			
	0	−$200	−$1,000	Dead	Well (.90)	Resilient (.03)	Critical (.02)	Doomed (.05)
Don't insure, but treat.....	.90	...	.05	.05	0	−$1,000	−$1,000	Dead
Don't insure, don't treat.....	.93	...	...	.07	0	0	Dead	Dead
Insure and treat.....	...	.95	...	.05	−$200	−$200	−$200	Dead
Insure but don't treat.....	...	.93	...	.07	−$200	−$200	Dead	Dead

but because he thinks it makes the prospects of many others more desirable, and he is either altruistic or guided by moral principles that he accepts. In that case, what he prefers will not be a reliable guide to what he thinks offers the best prospects to himself. In the third place, a person may choose among prospects for himself not only on the basis of how desirable he finds those prospects, but also on the basis of how desirable he finds the risk of being responsible for bad outcomes. People apparently find it much worse to be responsible for suffering a loss than to suffer the same loss unavoidably.[5] When that affects a person's choices among risky prospects, then what the choices reveal is at most which prospect the person prefers to *choose*, not which prospect he prefers to face if he is not responsible for the choice.

Here I shall treat the desirability of a prospect for a person simply as something that we understand. Desirability is a matter of preferability from a prudential point of view: a point of view concerned solely with how intrinsically rewarding it is to the person himself to lead the life he does. If we can reduce ethical questions to questions of prudence or self-interest, then we shall have made progress: it seems easier to judge what kind of life is most worth experiencing than to judge the ethical questions that most trouble us. The ease, of course, is only relative; it may be even easier simply to observe what people choose. If I am right, though, it is not what a person chooses that matters most directly for ethics, but what is prospectively best for him.

According to the ex ante Pareto principle, then, we may settle at least some questions of social ethics as follows. Given a choice between two policies, we ask for each affected person, What prospects for an intrinsically rewarding life does each policy present him? Which policy is the better one, simply in terms of how desirable it leaves his prospects in life? If the answer is the same for each person, then the policy that gives each person a better prospect is Pareto superior ex ante, and hence, according to the ex ante Pareto principle, the better policy ethically speaking. If the answer differs from person to person, the ex ante Pareto principle offers no moral guidance.

APPLICATIONS: EXTRAORDINARILY EXPENSIVE TREATMENTS

What constitutes just or equitable access to health care? There is an answer that is sometimes accepted as so obvious as to need no comment. What justice requires, it is often supposed, is that every person have available to him the best health care that could possibly be provided, given the current state of medical knowledge.

Now if the ex ante Pareto principle is valid, then justice cannot demand so much—or so I shall argue in this section. In this and the following two sections, I should stress, I shall not be asking whether the

5. I owe this to Amos Tversky.

ex ante Pareto principle indeed is valid. That will come later. Rather, I shall be examining the kinds of ethical conclusions that can be drawn from the principle, on the assumption that it is valid. The "conclusions" here will not follow deductively from the principle taken alone; they are "conclusions," rather, in that they follow from the principle in combination with what, I take it, we know about the human condition in a society like ours: a moderately wealthy society, capable of high medical technology.

Does justice or equity, then, require that everyone receive the finest medical care that money can buy? In so unqualified a form, the claim seems thoughtless. In the first place, it might be technologically infeasible to provide everyone with the best medical care that could be provided to anyone. Resources may be too scarce. If a kind of treatment draws extensively on scarce resources, then although it may be that the resources of a society are sufficient for such treatment to be provided to a few, the resources of that society, or indeed of the world, are insufficient for the treatment to be provided to all. Equity cannot require the impossible, and if the demands of equity are demands on governmental policy alone, then they cannot require what is economically infeasible.

A more modest version of the demand that all receive the best is this: if it is economically feasible for all to receive the best care known to medical science, then equity demands that such care be provided to all. In this formulation, the principle is quite narrow, in that it says nothing about what equity demands when "the best-known treatment for all" is economically infeasible. Before we examine the demand even in this narrow version, though, a further revision is needed. Some health care addresses conditions that are not serious: conditions that do not threaten life and do not threaten to be debilitating. That all must receive the best-feasible health care seems most plausible in questions of life or death, or questions of serious impairment. Can we at least say this: if it is economically feasible for all to receive the best care known to medical science, then at least when life itself is at stake, or life free of serious, long-term debilitation, equity demands that all receive the best care known to medical science.

I take "equity" here simply to mean acceptability from an ethical point of view. A virtue of the ex ante Pareto principle is that it transforms some questions of equity into questions of prudence under conditions of risk: questions of equity in retrospect become questions of unanimous prudence in prospect.

Now there is a limit to what it is rational to pay to avoid risks of catastrophe. When one crosses a busy street, one runs a small risk of death or crippling injury, usually for a small gain—but if one crosses prudently, the small likely gain, all of us seem to think, outweighs the risk of catastrophe. Suppose, then, that certain life-saving medical treatments are extraordinarily expensive. If a person faced a private choice of whether to insure against the need for such treatment, his choice would be, in effect, one of whether to accept the risk of needing expensive

medical treatment and not being insured for it, for the small benefit of saving on the insurance premium to buy something else. If the treatment is sufficiently expensive and the chances of needing it are small, then the prospect of going uninsured may be the more desirable one, prudentially speaking. That may be so, for the same reason as the prospect of crossing a street is often more desirable than the alternatives, despite a small risk to life and limb. Just as there is a limit to what it is rational to pay, on prudential grounds, to avoid other risks, there is a limit to how much it would be rational for an individual to pay for a guarantee of whatever expensive, vital health care he might turn out to need.

In the first place, of course, some medical care is of no benefit to a person whatsoever: it is hard, for instance, to see why anyone should want to be kept alive if he should fall into an irreversible coma, and it would be unreasonable to sacrifice an iota for an assurance that one would be kept alive in that eventuality. Other assurances of expensive treatment may be worth something, but not as much as the assurances themselves would cost. A possible example is the assurance that kidney dialysis will be available if needed. It may be a better prospect—rationally to be preferred, that is, on prudential grounds—to enjoy what the premium will buy if one is healthy and risk needing the treatment and not being able to get it, than to live less well if healthy and get the treatment if one needs it.

Whether an assurance is worth its price is a matter of the risk of needing the treatment, the value of the treatment if it is needed, and the cost of the assurance. The social cost of the assurance will be a matter of the risk of the disease and the resources diverted to treatment from other uses to which they might be put. What the assurance costs a given person, in comparison to a specific alternative economic arrangement without that assurance, is a matter of how the social cost of the assurance is distributed. The import of the ex ante Pareto principle is this. Suppose a scheme is proposed for assuring and financing an expensive kind of medical care. Suppose the cost is distributed in such a way that each person, in advance of knowing whether he will need that kind of care, faces a worse prospect on balance given the scheme and his share of its cost than he would face without the scheme and keeping his share of the cost. Then it is better, ethically speaking, not to have the scheme. True, those who turn out to need the care are, as it turns out, substantially worse-off without the scheme than with it. On the other hand, the many who do not need the care are better-off having their share of the cost to spend on other things. These are the considerations that need to be weighed against each other, and the test by desirability of individual prospects show us how, from an ethical point of view, they balance out.

There must be a limit, then, to what we ought, from an ethical point of view, to be willing to pay for life-saving treatment. More precisely, if the ex ante Pareto principle is valid, then there are ways of allocating economic burdens that are so onerous that it would be better, ethically speaking, for no one to receive certain kinds of life-saving treatment,

that for the burdens to be imposed and for everyone to be assured of getting those treatments if in need of them. The ex ante Pareto principle gives a sufficient condition for an assurance of treatment not to be worth its cost.

Applying the principle requires both extensive knowledge and careful reflection. One must be broadly knowledgeable of what life can be like under various conditions, and one must engage in careful thought experiments about the risks worth taking in life. Are such thought experiments practicable? They are surely impossible to perform with any precision, but I think they can be of value. In the first place, I maintain, such thought experiments can reassure us on matters that seem obvious in health care policy, but that we might begin to doubt when we realize how insecurely based is much of received wisdom regarding health care. We can reassure ourselves that when effective treatments of debilitating or life-threatening ailments are known, the assurance that those treatments will be available if needed may be of great value. The shock of current medical costs may hide that from us. The proportion of gross national product devoted to health care has approximately doubled in recent decades, reaching nearly 10 percent. These facts in themselves, though, do not show that anything has gone wrong, and the ex ante Pareto principle can help us see why not. As medical treatment becomes more effective, and as expensive, effective treatments are discovered for serious conditions that were previously untreatable, it may become rational, from a prudential point of view, to pay more for assurances of medical treatment. That can easily be seen in an extreme case. If, at one time, there are no known effective treatments, it is then irrational to pay anything for the assurance of treatment. If, later, effective treatments are discovered, then there is clearly something that it is rational to pay for the assurance of receiving them if one needs them. There is no reason why further advances in medical knowledge should not further increase what it is rational to pay to ensure access to treatments one may need. The ex ante Pareto principle extends this conclusion to the society at large.

On the other hand, if the ex ante Pareto principle is valid, then there is no defense for a universal precept, "Where life is at stake, cost is no object." That precept may apply in specific circumstances, where the cost of the best treatment is moderate and the treatment is effective in saving life and restoring health. What counts as "moderate" cost for purposes here may indeed seem horrendously high. It may be, for all I have said, that there are now no serious ailments for which effective treatments are known, but for which the most effective known treatment is not worth the cost.[6] The ex ante Pareto principle and considerations of rational prudence tell us that the best-known treatment for a serious ailment *might* not be worth the cost, ethically speaking; I leave it open

6. In speaking of "the most effective known treatment," I do not mean to imply that treatments divide neatly into the known and the unknown. The likely effectiveness of a treatment is often a matter of controversy, and that complicates what should be said here.

whether at present there *is* any serious ailment the best-known treatment for which is not worth the cost.

APPLICATIONS: EQUAL ACCESS

In some circumstances, then, equitable access to health care will not be unlimited access, or even access to the most effective treatment, by everyone with a serious treatable ailment. What, then, does equity demand? An answer that needs to be considered is that equitable access is fully equal access. What might "fully equal access" mean? Clearly equity does not demand equality in the sense that everyone shall receive the same medical care, regardless of what ails him. The claim that equitable access is equal access is rather that the health care available to a person should depend on his medical condition alone. It should not, the claim is, depend on such factors as his income or where he lives. If we are to consider a treatment worth the cost for one person, then equity demands that we consider it worth the cost for anyone else whose medical condition is precisely the same.

If, however, the ex ante Pareto principle is valid, then equity cannot demand fully equal access to health care in all possible circumstances. The ex ante Pareto principle suggests that we can consider questions of social ethics in part as questions of rational prudence in the selection of costly insurance packages. Now from the standpoint of rational prudence, there is a trade-off between health insurance and other good things in life: if an individual must forgo other good things in life in order to ensure that he can obtain certain kinds of expensive health care should he need them, it may be rational for him to prefer not to do so. A health insurance package has a social cost: if it is to be honored, resources must be expended on health care that could be put to other uses. One test of an economic system and the access to health care that it provides is to ask whether the prospects of anyone could be improved, at no cost to the prospects of anyone else. Could the prospect he faces in life be made more desirable by giving him a more extensive package of health insurance, at his own cost? (The phrase "at his own cost" here means "and devoting fewer resources apart from health care to enhancing the prospective intrinsic reward of his life, in such a way that the prospects of others are left undiminished.") Alternatively, could his prospects be improved by reducing his health insurance and letting him recoup the difference in social cost? In either case, an alternative level of health insurance will be prospectively Pareto superior and hence better from an ethical standpoint. Thus with the prospects of everyone else held fixed, there will be a package of health insurance and other economic entitlements that is optimal from his prudential standpoint. If his package of economic entitlements is not prudentially optimal, then it is prospectively Pareto superior for him to have his optimal package, with everyone else's prospects left unchanged.

Now equity demands full equality of access to health care only if, under equitable economic arrangements, the same insurance package is

prudentially optimal for everyone. That is unlikely to be the case, at least if what is prudentially optimal is determined by trade-offs at the margin. In the first place, the same package of incremental health care benefits may cost more for one person than for another. It may cost more, for instance, to assure treatment of a given quality in a sparsely populated area than in a thickly populated area—more, as I shall say, "in the country" than "in the city." That will be because of economies of scale and transportation costs: if specialists and specialized equipment are dispersed in the country, they may be underemployed; whereas if patients from the country are brought to specialists in the city, their transportation will have its costs, both in patient time and in resources diverted to providing the transportation. It may be prudentially optimal, then, for those in the country to accept a less desirable package of health care benefits, in return for a more desirable package of other economic entitlements.

Take next income differences. Perhaps under equitable economic arrangements, incomes would differ only with need—but suppose not. With a low income, the marginal dollar is devoted to pressing needs; with a higher income, to less urgent needs: the marginal utility of income declines. If a package of incremental health benefits enhances the prospects of rich and poor to an equal degree, it may be worth its cost for the rich but not for the poor. It is hard to see why the prudentially optimal package of health benefits should be the same for all, under equitable economic arrangements, unless equity demands income strictly according to need in general.

Arguments of the kind I have given are often used to show that there need be no public policy specifically intended to ensure equity in access to health care. Rather, it is maintained, public policy should ensure equity in the distribution of income, and then "the market should decide" what package of health benefits each person shall receive. I do not regard such a conclusion as plausible, and it is certainly not a consequence of the ex ante Pareto principle. The market will "decide" efficiently only if it responds competitively, if there are a wide variety of insurance packages available, and if each person chooses prudently what package to buy. Inevitably, the market for health care departs grossly from conditions of perfect competition, and the desirability of alternative insurance packages, covering small risks of profound calamities, is not something we can expect each person to work out for himself with great prudence. Perhaps even so, we should accept the choices people make, so long as they are normally competent adults—but the choices among insurance packages would have to be made well before the age of reason, and perhaps before conception, for insurability itself to be equitably distributed. Insurance of life prospects is not something on which a person can make his own choices, for by the age of competence, it may be too late.

Nothing I have said refutes the claims that, in our current circumstances, a rough equality of access to health care is a demand of equity. In the first place, it may turn out that, although no system of equal access is ex ante Pareto efficient, the most equitable of economically feasible

social arrangements include equal access to health care. There may be no way, through general economic policy and economic arrangements, to adjust each person's access to health care to his prudential optimum—or no way that does not violate the demands of equity in other ways. In the second place, it might be that few medical decisions are marginal: that most treatments are either clearly "worth their cost" for everyone or "worth their cost" for no one (where whether something is "worth its cost" is reckoned from the prospective, prudential standpoint of whether it would be rational for a person to buy insurance to cover it). The question of whether equity of access means full equality of access for such special reasons will be touched on in the next section.

APPLICATIONS: A DECENT MINIMUM

If the ex ante Pareto principle is valid, then equity in access to health care may not mean access to the best health care feasible, and it may not mean fully equal access to health care. So I have argued in the last two sections. Now another widely held precept is that what equity requires is a "decent minimum." Everyone, it is suggested, is morally entitled at least to certain kinds of health care, and he may reasonably demand of his fellows that society be organized to assure him of those kinds of care if he needs them. Health care of other kinds he may buy or provide for with insurance, but there is no general moral entitlement for health care that goes beyond this "decent minimum."

How might it be argued that everyone is entitled to such a decent minimum of health care? Moreover, if that can be argued, by what criterion may we distinguish between care that is included in the decent minimum and care that is not? I think that plausible answers may be given, but they must be grounded on an ethical precept that supplements the ex ante Pareto principle. One precept that will do the job is the claim that everyone is entitled to a decent minimum of economic welfare in general. Suppose we are granted that, and suppose we have established what that decent economic minimum is. Then from economic considerations and considerations of rational prudence, it can be argued that there are certain kinds of health care that should be available to everyone who needs them.

The kinds of health care that constitute this decent minimum are those that it would be prudent for anyone, even at the decent economic minimum, to ensure for himself, if he himself had to bear the inclusive social cost of the assurance. The "inclusive social cost" here is a matter both of the resources prospectively needed to fulfill the assurances and of whatever losses in economic efficiency result from the system that is set in place to fulfill the assurances. It may be that resources can be transferred to assuring certain kinds of health care for those at the "decent economic minimum" only in a "leaky bucket"—only with some inefficiency—because, say, of the "moral hazard" in any insurance scheme.[7]

7. For a treatment of "moral hazard," see Hal Varian, *Microeconomic Analysis* (New York: W. W. Norton & Co., 1978).

Those losses in efficiency are counted in the "inclusive social cost" of a package of assurances. To say that, in economic state P, it would be prudent of a person who lacks certain assurances of access to health care to secure them, even if he had to pay the "inclusive social cost," is to say that there is an alternative economic state in which he has those assurances, in which his prospects are more desirable than in state P, and in which no one else's prospects are less desirable than in state P.

A decent minimum of health care, then, consists of those kinds of health care which it would be prudent for anyone, even at the decent economic minimum, to insure himself for, if he could buy any package of health insurance he chose at its inclusive social cost. Call this "essential" health care. Now we have been assuming that, in the best economically feasible state, everyone is assured at least a decent economic minimum of a certain level. It follows from this, the definition of "essential health care" in terms of this decent economic minimum, and the ex ante Pareto principle, that in the best economically feasible state, everyone is assured of essential health care. For suppose otherwise, and consider a person who is not assured essential health care. From the definitions of 'essential health care' and 'inclusive social cost' it follows that there is an economically feasible alternative state, in which he is assured essential health care, which state is Pareto superior ex ante. By the ex ante Pareto principle, this state is better. We have seen, then, that in the best economically feasible state, everyone is assured essential health care, for otherwise there would be an economically feasible state that was better.

Essential health care is the health care it would be prudent for anyone assured a decent economic minimum of income to ensure for himself, if he could buy any conceivable health insurance package he chose, at its inclusive social cost. Can this abstract formula be filled out? Filling it out would require ascertaining the level of the decent economic minimum. So far, we have only assumed that there is a moral entitlement to some decent economic minimum or other but said nothing about how high this minimum is. To say anything further, we would have to procede either from "intuitions" about what constitutes a decent economic minimum or from an ethical theory that stands behind the claims of universal entitlement to a decent economic minimum. With either procedure, considerations about the urgency of access to health care in ensuring desirable prospects in life would presumably play a role.

From the "intuitive" standpoint, I think we can say this. We know from our own lives that it is highly important to the desirability of a person's prospects in life that he have extensive assurances of access to health care he may need. Thus if the decent economic minimum is anything like what it is commonly supposed to be in our society, it will be prudent for a person at the decent economic minimum to buy an extensive package of health insurance at its inclusive social cost. A decent minimum of access to health care will be extensive.

The most widely held systematic moral theory, utilitarianism, seems to yield the same rough conclusion—with the advantage that the conclusion

could be made more precise, given more information on the costs and prospective benefits of various kinds of health care. Most utilitarians have claimed that the marginal utility of income (the increase in the intrinsic reward of a life that an extra dollar of income facilitates) declines as income increases. Thus with a fixed income to divide, greatest total intrinsic reward tends to come from roughly equal distribution. Inegalitarian economic incentives, however, can increase the total income to be distributed and so the best economic policy is a compromise between egalitarianism and a free market. Now the reason for the declining marginal utility of income is that a marginal dollar at a low income goes to meet urgent needs, whereas at a higher income, the most urgent needs have been met, and the marginal dollar goes to meet less urgent needs. Now it would seem that certain needs—in particular the needs for food and drink, for shelter, and for health care when sick—are so urgent that, if a system of economic incentives can ensure the satisfaction of those needs, then the cost in forgoing other expensive sources of intrinsic reward in life in order to ensure the fulfillment of these needs must be great, before it becomes worthwhile to forgo the satisfaction of these urgent needs in return for greater satisfaction of less urgent desires. This claim needs to be qualified in the case of medical care: the medical care that has promise of immensely contributing to intrinsic reward in life is care that is reasonably likely to make a difference between a long life well worth living and early death or a life ill worth living. In a reasonably prosperous society, a utilitarian decent minimum will include such care, even if the cost is high. If all effective treatment were of this kind, then barring expense that was truly extraordinary, the decent minimum would include all treatment that was advisable on purely medical grounds.

The difficult cases, apart from treatments that are truly stupendous in their cost, will be treatments that hold out some hope of extending and ameliorating lives worth living, but where the hope is minuscule or the life is but little worth living. These include heroic measures to extend the lives of people incurably infirm and marginal tests where the possibilities of detecting a serious, treatable condition are remote. Here, the ex ante Pareto principle suggests, we should apply a prudential test: would one's prospects in life be better if one had assurances that such treatment would be provided, or if, alternatively, one could spend the inclusive social cost of providing those assurances on something else? At the decent economic minimum in a society like ours, the answer may sometimes be that the resources in question should be devoted to enhancing the lives of the healthy.

ASSESSING THE PRINCIPLE: DOUBTS AND FURTHER REFLECTIONS

In the preceding three sections, I have simply assumed the ex ante Pareto principle and applied it in a rather straightforward manner to the economic considerations involved in access to health care. There are grounds,

though, for questioning the principle—or at least for questioning the rather direct way in which I have been applying it.

A first ground for doubt is simply that some of these straightforward applications of the ex ante Pareto principle seem to go against our moral intuitions. In particular, it seems immoral to "put a price on life" and withhold life-saving treatment when the cost is too great. To risk life is one thing; to give up saving a life is another, and our moral views about the two seem quite disparate. It is, after all, but a short step from the ex ante Pareto principle to a kind of utilitarianism, and arguments that utilitarianism is in conflict with common moral opinion are widely put forth as a decisive objection to utilitarianism. The slide from the ex ante Pareto principle to utilitarianism goes as follows. The ex ante Pareto principle deals in prospects. From what point, we may ask, are those prospects to be figured? There seems to be no reason to choose any time after conception; perhaps, then, we should take the time of conception itself. Or perhaps we should consider prospects as of an even earlier time: of a hypothetical time before anyone had any of his personal characteristics or any position in the world. Now at the hypothetical time, the prospects of everyone, given a set of economic arrangements, will be the same. Thus the Pareto principle ex ante omni gives a complete ordering of institutional arrangements that a society might have, by the desirability in prospect of being anybody in the society subject to those arrangements. To order alternative social arrangements in that way is simply to order them by average desirability of prospects—by average expected utility—and that is a form of utilitarianism.

Does that discredit the ex ante Pareto principle? Perhaps instead, it establishes a form of utilitarianism as ethically valid. That has indeed been argued.[8] Perhaps our antiutilitarian ethical intuitions are simply extensions of our widespread prudential irrationality in the face of risk. Proverbially, we want to lock the barn door after the horse has been stolen. We tend, psychological experiments show, to be unwilling to choose losses that are certain but small, even to avoid a substantial risk of great losses. The same gamble may be accepted or rejected, according as the payoffs are labeled as gains or losses: we will gamble with "losses" and play safe with "gains."[9] A military unit may well prefer an attack in which a number of people can be expected to die to a suicide mission by a single person selected by lot. If we cannot, in the end, conclude that these prudential tendencies are rational, that throws into doubt the tendencies in our ethical thinking that mirror them.

8. See John Harsanyi, "Cardinal Utility in Welfare Economics and in the Theory of Risk-Taking," *Journal of Political Economy* 61 (1953): 434–35, and "Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparisons of Utility," *Journal of Political Economy* 63 (1955): 309–21.

9. See Daniel Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 47 (1979): 263–91.

"Moral intuition" alone, then, is weak ground for rejecting the ex ante Pareto principle, or even full utilitarianism. The utilitarian can explain the "intuition" as an effect of prudential tendencies that are manifestly irrational. If "intuitions" are to bear much weight, they must be accompanied by diagnoses of how the kinds of considerations that support the ex ante Pareto principle might lead us astray in our moral thinking. If our social ethics is to be "for man" and not man "for ethics," if our social ethic is to be more than a set of arbitrary taboos to which we feel attachment, then the human benefit in a morality that departs from the ex ante Pareto principle must be explained.

Here appeal might be made to a number of considerations. In the first place, there is a strong advantage, from the standpoint of human benefit, in a morality of simple precepts. Such a morality, if accepted, may well be more robust and influential than a morality of refined criteria, subtle in their application. For this reason, many philosophers who accept a roughly utilitarian rationale for ethics are drawn to "rule utilitarianism": evaluating rules by the benefits their acceptance would bring, but judging an individual action, not by the benefits it produces, but by whether it conforms to the rules, acceptance of which would bring greatest benefit.[10] The most beneficial rules may be simple rules that can grip us strongly. For example, doctors, nurses, technicians, and administrators who are devoted to the precept that life must be preserved, whatever the cost, may give better care, even by utilitarian standards, than they would if they tried to guide their actions by a cold economic calculus. The economic calculus may well not inspire the degree of heroism and devotion that it certifies as optimal. Simple, powerful ideals may thus evoke action more conducive to the general happiness than would a direct, calculating concern with the general happiness. Precepts that violate the ex ante Pareto principle may be justifiable on such rule utilitarian grounds.

In the second place, the power of an accepted social ethic for good—its power to enhance the intrinsic reward of the lives people lead—depends in part on its setting standards by which people can hold each other responsible. Direct applications of the Pareto principle lack this virtue, for the economic facts involved in any reasonable application of the principle are too complex for it to be evident when a person is faithfully applying the principle. These considerations yield a possible interpretation of the widespread apprehension that to apply such a principle directly to matters of life and death would be to "play God": to apply the principle directly would be to make judgments on matters of vast importance, without there being clear, easily applicable standards by which one can be held accountable for those judgments. Sometimes, to be sure, a person is placed in such a situation inevitably—in matters, for instance, of war and peace in a dangerous world. There are strong reasons,

10. For a version of rule utilitarianism, see Richard B. Brandt, *A Theory of the Good and the Right* (Oxford: Oxford University Press, 1979), chap. 15.

though, for preventing anyone from having such power when it is possible to do so.

In the third place, the considerations to which I have been appealing in direct applications of the ex ante Pareto principle have been quite narrow. I have been considering what a package of health insurance will do for the prospects of the person insured. I have not considered what offering health care, or withholding it, does to the quality of the interpersonal relations of those who provide or withhold it.

Feelings can justify actions, even when those feelings are irrationally based.[11] It may be irrational to lock the barn door after the horse has been stolen, but we feel better doing it, and the feeling itself, however irrational its basis, may justify the action. Now the knowledge that we shall care for each other in calamity, even if the cost be great, may strengthen our feelings of social fellowship. Perhaps it is in these feelings toward each other, and not only in direct benefits to our health, that we should expect to find ethical justification in matters of health policy. This point about feelings applies to the widespread fear of allowing anyone to "play God": not only may such power be dangerous, but it arouses deep fears. It would seem that, risks being equal, people fear deliberate harm from others much more than accidental harm. This may be irrational, but given the psychological fact (if it be a fact), an ethic that allows us to risk lives and treat the victims may bring us more intrinsic reward in life than a policy that results in fewer lost lives.

The gains and losses of providing and withholding treatment, then, apply not only to the person whose treatment is in question but to the rest of us as well in the ways we experience our lives in our society, and in our emotional ties to our fellows. Narrow economic loss—loss, that is, reckoned only in terms of effects on the life of the person whose treatment is in question—may be made up for in emotional gain. Not that this must invariably be so: whether it is, in any particular case, will depend in part on the economic cost. If an illusion that we regard life as priceless strengthens the bonds of social fellowship, then whether we should indulge that illusion may depend on how much it costs to do so. With the development of new, effective, extraordinarily expensive treatments, we may be increasing the economic cost of maintaining that illusion, and the cost of the illusion may begin to outweigh its benefits.

Does this mean that we must choose between two incompatible classes of goods: narrowly economic goods, on the one hand, and the goods of mutual respect, on the other? Must the economic cost of mutual respect keep increasing, as we develop increasingly expensive ways of expressing mutual respect, through heroic, life-preserving measures? I do not see why that should be so. We ought rather to remind ourselves that concern for each other, and respect for humanity in each other, does not require

11. For a theory of what it is for feelings to be "rational," see ibid., chap. 6.

a willingness to sacrifice more for each other than it would be rational for one of us to sacrifice for himself in prospect. If it is not worth the cost to anyone to ensure a kind of expensive treatment in a calamity, then we should not feel that we owe each other efforts that it is irrational for anyone to secure for himself. As the economic cost of older conceptions of humanity becomes higher, we need to shift our attachment to conceptions of humanity that are not so costly—just as when, over the past few centuries, a more demanding conception of what we owe each other has become possible to realize at a cost that is not inordinate, we have accepted conceptions of man's humanity to man that are, in certain respects, more demanding than those of our grandparents. Crudely put, what I am suggesting is this: that whereas cheap violations of narrow economic rationality may well be worth in sentiment what they cost, as violations become costly, we should refine the sentiments involved. To do so is a natural, if painful result of economic change, and it can often be desirable. One set of changes in our moral sentiments that may be called for by current technology is a refinement of our ways of thinking about risk and about what we owe each other in the way of extraordinarily expensive treatments.