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ARTICLES

RATIONING EXPENSIVE LIFESAVING MEDICAL TREATMENTS

MAXWELL J. MEHLMAN*

In the last fifteen years, medical technology has made significant and spectacular advances. Hemodialysis, coronary artery bypass graft surgery, CT scanners, and organ transplants are among the treatments now available to patients. In recent months, in fact, the media has reported the increased use of artificial hearts, heart transplants, and liver transplants. These technological advances, however, have been accompanied by troublesome legal and ethical issues. For example, someone must decide which patients will receive a medical resource when demand exceeds supply. Similarly, and more commonly, someone must decide whether the significant number of patients who cannot afford an available treatment should receive it despite the cost. In response to these troublesome issues, hospitals, doctors, and commentators have either proposed or implemented rationing systems based on criteria such as the social worth of the patient, likelihood of survival after the operation, and ability to pay.

In this Article, Professor Mehlman examines the possible systems for rationing expensive lifesaving medical technologies. First, he concludes that the costs of any rationing system probably exceed its benefits. Consequently, he rejects the rationing of expensive but available lifesaving medical technologies. Second, he argues that the increased availability of the technologies and the recent expansion of patient rights to sue will result in a substantial number of judicial challenges to rationing. Finally, he suggests detailed criteria to aid the courts in deciding whether a resource has been improperly rationed.

I. INTRODUCTION

Considerable attention has been focused recently on the enormous increases in health care costs in the United States. Health care expenditures totalled about $287 billion in 1981, compared with $42 billion in 1965.1 By 1983, they had risen to $355 billion.2 The share of the gross

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national product devoted to health care increased from 6\% in 1965 to 10.8\% in 1981.\(^3\)

Advances in medical technology are given much of the blame for the rising cost of health care. Twenty to 40\% of the increase in hospital care costs between 1966 and 1976 has been attributed to technology costs.\(^4\) A number of specific lifesaving treatments have been singled out as causes of this increase. The cost per patient for hemodialysis is now approximately $30,000 a year, and more than 50,000 patients received the treatments in 1981.\(^5\) Coronary artery bypass graft surgery costs approximately $10,000-20,000 per operation, and accounts for $2 billion a year or 1\% of the total annual U.S. health care budget.\(^6\) Intensive care units and CT scanners\(^8\) are additional examples of expensive medical technology.

3. **Securing Access to Health Care, supra note 1, at 184; Crozier, supra note 2, at 108.** The concern about rising health care costs is heightened by the fact that these increases in medical expenditures over the last 10 to 15 years have not produced a corresponding improvement in health status, at least in terms of survival rates for patients with the most prevalent diseases. See Altman \& Wallack, *Is Medical Technology the Culprit Behind Rising Health Care Costs? The Case For and Against,* in MEDICAL TECHNOLOGY, THE CULPRIT BEHIND HEALTH CARE COSTS 24, 25 (S. Altman \& R. Blendon eds. 1979) [hereinafter cited as MEDICAL TECHNOLOGY].

4. **See Sun Valley Forum on National Health, Report of the 1977 Symposium on Technology and the American Health Care System: Is Technology the Culprit in Rising Health Care Costs? [hereinafter cited as Sun Valley Report] in MEDICAL TECHNOLOGY, supra note 3, at 296.** This estimate is based on studies which do not factor in the savings resulting from averting the need for hospitalization as a result of technological advances, for example, savings from patients who can return to normal life, or at least to outpatient status. See Altman \& Wallack, *supra note 3, at 27, 35-36.*


6. **See Randall, Coronary Artery Bypass Surgery, 12 HASTINGS CENT. REP., Feb. 1982, at 13, 14.** According to Randall, this makes it "collectively ... the most costly operation performed in this country." Id.

7. **For a description of rationing necessitated by shortages of intensive care unit facilities, see Mulley, The Allocation of Resources for Medical Intensive Care, in 3 Securing Access to Health Care, supra note 1, at 300-01.** The shortage of intensive care unit (ICU) facilities is deliberate: hospitals generally provide sufficient facilities to accommodate only between 80\% and 90\% of potential patients. Id. at 300 ("Such a policy ... determines that 10-20\% of potential ICU admissions either will be rejected or will displace a patient presumably thought to be benefiting in some way from his position in the ICU"). In one eight-month period, 23 patients were denied admission to the intensive care unit at George Washington University Hospital, primarily because of a shortage of nurses. Id. at 301.

8. **The term "CT scanners" stands for computerized tomography scanners, a diagnostic device that makes a composite image of the interior of the body by x-raying the body from several positions and integrating the images by computer. See Willems, Banta, Lucas \& Taylor, The Computed Tomography (CT) Scanner, in MEDICAL TECHNOLOGY, supra note 3, at 116-17 [hereinafter cited as Willems]. The CT scanner was first introduced at the Mayo Clinic in 1973. Id. at 117. While they are now regarded as an important lifesaving device, not all hospitals have them, largely as a result of cost. See, e.g., Blake v. District of Columbia, No. 2623-80 (D.C. Super. Ct., June 30, 1981) (jury verdict in malpractice action brought by surviving spouse of patient against..."
The proliferation of these expensive medical treatments despite mounting health care costs has led to the suggestion that society may be unable to provide these treatments to all who might benefit. Many believe that some system of rationing—that is, deciding that only some treatments will be provided and only to some people—is necessary.

These issues are not entirely new: medicine always has grappled with the problem of scarce resources. The classic example is battlefield triage, or deciding which battle casualties to treat first when there are not enough corpsmen or field surgeons to attend to all the wounded at once. The triage problem also emerges in the event of natural or man-made catastrophes, where there may be many victims and limited medical resources.

The availability of some medical treatments has been restricted because of technical supply problems. During World War II, for example, insufficient amounts of penicillin were produced because there was no procedure to synthesize the drug. A similar supply problem arises from the lack of suitable donor organs for organ transplants. Donor organs must come from cadavers or, in the case of certain organs, from willing live donors, and usually must be matched to the recipient to reduce the risk of tissue rejection. Accordingly, there may well be in-
sufficient organs available for those in need. 13

Another set of conditions that sometimes limits the availability of medical treatments is the transition of a treatment from experimental to accepted status. After it is invented, a new therapeutic or diagnostic tool or technique is refined, and its advantages and drawbacks are communicated to and evaluated by the medical community. 14 During this period, the availability of the resource is often sharply restricted, in part by law. Experimental new drugs and medical devices, for example, are not widely available until they are approved for safety and effectiveness by the Food and Drug Administration, a process which usually takes years. 15 Furthermore, federal health care reimbursement programs and private insurance plans do not reimburse health care providers for experimental treatments, and this generally curtails their availability. 16


13. See generally R. Fox & J. Swazey, The Courage to Fail 325-33 (2d ed. 1978) (scarcity of bone marrow transplants for leukemia victims). While approximately 5,000 kidney and 100 heart transplants were performed in 1982, as many as 20,000 persons presently need one or the other transplant to survive. See Panel Cites Need for More Organ Donations, Wash. Post, June 10, 1983, at A1, col. 4. The need for donor organs presents special ethical and legal problems. For example, transplanting cadaver organs requires a difficult determination of when the donor is deemed dead for purposes of removing the organ. See e.g., Note, Compulsory Removal of Cadaver Organs, 69 Colum. L. Rev. 693 (1969). Transplanting organs or tissue from live donors raises the questions of whether the donor has consented to the procedure and the extent to which potential donors can be pressured or coerced into consenting. See, e.g., Head v. Colloton, 331 N.W.2d 870 (Iowa 1983) (leukemia victim has no right to have hospital reveal the identity of unwilling bone marrow transplant donor to the court or the victim’s attorney for purposes of pressuring donation).

14. The shortage of hemodialysis machines to treat victims of end-stage renal disease during the 1960’s has been attributed in part to physicians’ reluctance to acknowledge the therapeutic value of the treatment. See Rettig, The Policy Debate on Patient Care Financing for Victims of End-Stage Renal Disease, 40 Law & Contemp. Probs. 196, 204-08 (1976).


16. See, e.g., 42 U.S.C. § 1395y(a)(1)(A) (1982) (Medicare prohibits reimbursement for items or services “which are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member”). The Office of Technology Assessment in the Department of Health and Human Services issues periodic requests for com-
Experimental scarcity is illustrated by the case of heart transplants—both human and artificial. Although human heart transplants have been performed for over seventeen years, they are still widely regarded as experimental and are relatively rare. For example, the trustees of Massachusetts General Hospital decided not to initiate a heart transplant program in 1980 partially due to the procedure's experimental nature and especially due to tissue rejection problems. Artificial heart transplants similarly are experimental; headlines were made in 1983 when one man lived for 112 days with an implanted artificial heart.
Allocating medical treatments that are in short supply due to battlefield conditions, technical limitations on production and experimental constraints are difficult and ethically troublesome. Generally, however, the options are circumscribed by the available medical resources. The only question is who should receive them. Economists...

22. In the case of experimental scarcity, for example, the issue often is not who gets the benefit from being given the scarce resource, but who takes the risk. Potentially harmful experimental resources, or those without established therapeutic benefit, may be tested on human guinea pigs who are likely to be the less educated and poorer members of society. See J. Katz & A. Capron, Catastrophic Diseases: Who Decides What? 28 (1975). The problem with allocating experimentally scarce resources is assessing the risk versus the benefit to the patient, whereas with economic scarcity, the issue is assessing the cost versus the benefit to the patient. The former is illustrated by the example of artificial heart transplants, where the surgeon who pioneered the procedure in the United States, Dr. Denton Cooley, was sued for malpractice by the family of the recipient of the first artificial heart when he died only a few hours after surgery. See Karp v. Cooley, 493 F.2d 408 (5th Cir.), cert. denied, 419 U.S. 845 (1974). One of the claims against Dr. Cooley was that he had unlawfully experimented on his patient. The Fifth Circuit upheld a directed verdict for the surgeon on the grounds that the patient had given informed consent to the operation and that there was no evidence that the procedure was "other than therapeutic." Karp, 493 F.2d at 423. For a discussion of the ethical issues involved in implanting the first total artificial heart, see Woolley, Ethical Issues in the Implantation of the Total Artificial Heart, 310 New Eng. J. Med. 292-96 (1984).

23. What might first appear to be technological or experimental scarcity sometimes is caused by economic scarcity. For example, blood shortages, see G. Winslow, supra note 10, at 20-21, probably would be alleviated if a greater sum were paid for donations. Even donor organs might be considered economically rather than technologically scarce; while only so many are available at any particular time, consider the potential increase in the number available if a substantial reward were offered for donations. One physician recently was planning to set up a referral service for buying and selling transplant organs. See Va. Doctor Plans Company to Arrange Sale of Human Kidneys, Wash. Post, Sept. 19, 1983, at A9, col. 5. His proposal was criticized widely. On October 5, 1983, Rep. Albert Gore (D. Tenn.) introduced a bill entitled the National Organ Transplant Act which, among other things, would make the sale of human organs a felony punishable by a fine of up to $50,000 and imprisonment for up to five years. 129 Cong. Rec. H 8,076 (Oct. 5, 1983) (remarks of Rep. Gore). Sen. Tsongas (D. Mass.) similarly introduced a resolution condemning sales of human organs for profit. 129 Cong. Rec. S 14,698 (Oct. 26, 1983) (remarks of Sen. Tsongas).

Situations of experimental scarcity often are exacerbated by treatment costs; a new technique may not become therapeutically accepted until it is widely available, and it may not be widely available because of its cost. See J. Katz & A. Capron, supra note 22, at 168 ("Acceptance has often been equated in the literature with availability and thus the label 'experimental' has been attached to those procedures which are not yet available, although the lack of availability may reflect not only hesitation or ignorance on the part of most physicians about the value of the procedure but also the inability of the health care system to provide the procedure to all who are 'suitable' for it").

Furthermore, a resource may be labeled "experimental" to avoid the difficult allocation problems that arise if it has proven therapeutic benefit. At least one member of a group responsible for allocating hemodialysis machines during the 1960's rationalized his actions on this basis. See J. Katz & A. Capron, supra note 22, at 168. See also Federal Liver-Transplant Policy Said to Cause Children's Deaths, Wash. Post, April 28, 1983, at A22, col. 1 (criticizing federal policies categorizing heart and liver transplants as "experimental," thereby precluding federal reimbursement and depriving needy patients of life-saving treatments).
call this a "microallocation" problem.\textsuperscript{24}

The current debate on rationing focuses on a different type of constraint—cost. Unlike the shortage of penicillin during World War II, there presumably is no technological limit on the supply of the resource; nor is the availability of the treatment necessarily restricted because of uncertain therapeutic benefits. Instead, treatment limitations are proposed to save money.

Under both cost-based rationing and technical or experimental scarcity, microallocation decisions are needed to determine who receives treatment. However, cost-based rationing entails additional decisions on whether, and to what extent, to restrict the availability of treatment on grounds of cost. These are termed "macroallocation" decisions.\textsuperscript{25} They are based partially on a comparison of the cost of the treatment with the cost of other desirable medical and nonmedical resources. For example, medical resources which might be devoted to purchasing a new therapeutic or diagnostic device such as a dialyzer\textsuperscript{26} or CT scanner\textsuperscript{27} might instead be spent on hiring more hospital staff, providing additional intensive care units, or promoting preventive, early detection or rehabilitation programs.\textsuperscript{28} But should macroallocation decisions not also turn on the cost of treatment versus the cost of denying treatment? As this Article will show, formidable transaction costs are incurred in achieving certain microallocation outcomes. If these and other rationing costs exceed treatment costs, is rationing a rational method for controlling health care expenditures?

This question is avoided by those favoring rationing. They begin by assuming that sufficient medical resources cannot be provided, and that rationing therefore is unavoidable.\textsuperscript{29} But this is not the case. Assuming there is no technological or experimental barrier to providing additional medical resources, availability is a function of cost. Increasing the supply of these resources to avoid the need for rationing would require restrictions on the supply of other resources and might be extremely expensive, but whether it would be too expensive can only be determined if the costs of rationing are carefully assessed.

Surprisingly, the advocates of rationing acknowledge that microallocation decisions might be costly, and that society therefore might de-


\textsuperscript{25} \textit{Id.}

\textsuperscript{26} See infra 35-42 and accompanying text.

\textsuperscript{27} See supra note 8.

\textsuperscript{28} See \textit{Sun Valley Report}, supra note 4, at 293-94.

\textsuperscript{29} See, e.g., Blumstein, supra note 24, at 252; \textit{Institute of Medicine}, supra note 9, at 7-8; Note, \textit{Patient Selection for Artificial and Transplanted Organs}, 82 \textit{Harv. L. Rev.} 1322, 1328-29 (1969).
cide to provide more resources to avoid making them. But instead of properly regarding this as a macroallocation question, they view it as a form of blackmail and argue that it should be prevented by ignoring microallocation difficulties in making macroallocation decisions. This leaves open the possibility that rationing will produce a net social loss.

The possibility of net social loss from rationing, however, does not mean that all medical treatments must be provided on an unlimited basis. Some may be wasteful, and some may be rationed with few social costs. But some medical resources may be so costly to ration that they should not be targets of economizing.

Improper candidates for rationing perhaps can be identified by examining past cases of cost-based rationing. One example is the shortage in the 1930's of expensive artificial respirators, or "iron lungs," for treating polio. The need for rationing initially was overcome by voluntary contributions through the March of Dimes, and the problem eventually was solved by development of the preventive polio vaccine in the 1950's.

A more notorious example of cost-based rationing is the distribution of hemodialysis machines used to treat the victims of fatal end-stage renal disease in the 1960's and early 1970's. Early efforts to dialyze patients successfully were hampered by the need repeatedly to

30. See Blumstein, supra note 24, at 252.
31. Id. at 254. Blumstein states:

In situations ... where a hearing would determine the relative merits of competing claimants for scarce medical resources, hearing officers and decisionmakers should have their authority clearly confined to the microallocation choice. [One reason for this] is the risk that if macro reallocation is an option, then the incentives to consider resource limitations would disappear. Allocative constraints, necessitated by macroallocation decisions, can only be respected if the adjudicatory bodies have their authority limited to choosing beneficiaries for utilization of scarce medical resources. Otherwise, the identifiable lives involved in the hearing could all too easily implicate modifications in the macro decision, thereby avoiding the hard choices necessitated by resource scarcity (footnotes omitted).

32. See, e.g., Komaroff, The Doctor, the Hospital and the Definition of Proper Medical Practice in 3 Securing Access to Health Care, supra note 1, at 225-51 (discussing unnecessary diagnostic testing and other wasteful practices).
33. Candidates might be certain types of elective surgery, such as facelifts.
34. See Rationing Care Called Dilemma for the '80s, supra note 9, at 62.
35. Hemodialysis is the process of filtering impurities from the bloodstream. This normally is accomplished by the kidneys. Persons with end-stage renal disease can no longer adequately filter out impurities from their blood. Toxic substances build up in their bloodstream (a condition called uremia), eventually causing death. If the blood of end-stage renal disease victims is artificially cleansed or "dialyzed" several times a week, however, their deaths can be averted. See
puncture the patients’ arteries and veins to allow their blood to be
drawn and filtered.36 In 1960, however, Dr. Belding Scribner invented a
short tube or cannulae, one end of which remained permanently at­
tached to an artery and the other to a nearby vein; the cannulae had a
valve or “shunt” which could be hooked up to tubes from a dialyzer
machine, thus avoiding the need to repuncture the patient to draw
blood. This created an unprecedented demand for the machines, which
cost several thousand dollars each, in addition to the costs for the per­
sonnel and space needed to operate them.37 Hospitals had few, if any,
machines, and could provide them only to a limited number of pa­
tients.38 Various rationing systems were used,39 and thousands of pa­
tients died as a direct result of being unable to secure the costly
treatments.40

Eventually, the press dramatized the plight of the victims of the
disease, and the patients mounted a vigorous lobbying campaign.41
These efforts emphasized the costs of denying treatment, and led to pas­
sage of the Social Security Amendments of 1972 which alleviated the

36. See J. Katz & A. Capron, supra note 22, at 36-37.
37. See generally G. Winslow, supra note 10, at 12-13; Rettig, supra note 14, at 201-02.
38. At least one additional reason for the shortage of hemodialysis machines was the
opinion of many members of the medical community that the procedure was experimental rather
than therapeutic. See supra notes 14-21 and accompanying text; telephone interview with Ira
Greifer, M.D. (June 28, 1983). For a description of the effect of medical opinion on the transition
of hemodialysis from experimental to therapeutic status in the medical community, see Rettig,
supra note 14, at 204-08.
39. See infra notes 89-94, 113, 115-118, 125, 197, and accompanying text.
40. There are no reliable mortality estimates, at least partially because the deaths from
end-stage renal disease during this period often were attributed to heart failure or other complica­
tions, rather than to uremia. Telephone interview with Ira Greifer, M.D., supra note 38. However,
one account suggests that as many as 5,500 people died in 1970 alone because of the unavailability
of hemodialysis treatments. See For Li’s Kidney Patients—Survival is an Ordeal, Newsday, Nov.
1, 1971, reprinted in Hearings on National Health Insurance Proposals Before the House Committee on
Ways and Means, 92d Cong., 1st Sess. 1542-45 (1971) (Statement of Mrs. Shep Glazer) [hereinafter
referred to as Hearings on National Health Insurance].
A much higher estimate can be derived from Evans’ data comparing the demographics of
the population on dialysis in 1974, just after the end of the rationing crisis, and in 1980. See Evans,
supra note 5, at 488, 490. In 1974, approximately 700 blacks were on dialysis, compared with
17,500 in 1980. Since it is unlikely that end-stage renal disease suddenly struck large numbers of
blacks after 1974, it can be inferred that several thousand blacks per year died from lack of treat­
ment before 1974. Similarly, in 1980, over 22,000 women received dialysis compared with only
2,500 in 1974. Again, this suggests that thousands of women per year died from rationing prior to
1974.
41. See Alexander, They Decide Who Lives, Who Dies, 53 LIFE, Nov. 9, 1962, at 102-04;
Hearings on National Health Insurance, supra note 40; see generally Rettig, supra note 14.
shortage of dialysis by reimbursing most patients for treatments under Medicare.  

The dialysis experience may pinpoint one type of medical resource that should not be rationed to cut costs: lifesaving resources for those patients who desire them. Therefore, it especially is striking that the proponents of rationing focus on lifesaving resources as a primary target for rationing, believing their high cost to be a major contributor to the rising cost of health care.

This Article examines the issues involved in rationing expensive lifesaving medical treatments (ELTs). The discussion will begin by examining the costs associated with rationing ELTs and the reasons for those costs. I will argue that these costs are likely to be so great that rationing ELTs is an inefficient method of controlling health care costs. The Article then will explore the potential responses of the legal system to lawsuits filed by patients denied lifesaving treatment on cost.

42. See Social Security Amendments of 1972, § 2991, 42 U.S.C. § 426(e)(3) (1976) (current version at 42 U.S.C. § 426-1 (1982)). Medicare was established in 1965 and originally covered victims of end-stage renal disease over 65 years old. The Social Security Amendments of 1972 extended coverage to victims of end-stage renal disease under age 65 in two ways. First, they extended Medicare hospital and supplemental medical insurance protection to kidney patients under 65 who were entitled to receive cash disability benefits under social security or railroad retirement plans. Second, the amendments characterized as disabled—and therefore entitled to Medicare coverage—all other patients under 65 who were covered by social security, or their spouses and dependants. See Rettig, supra note 14, at 198-99.


44. See supra note 31.

45. Childress calls them "scarce lifesaving medical resources" or "SLMR's." Childress, Who Shall Live When Not All Can Live?, in Valuing Life, Public Policy Dilemmas 203, 204 (S. Rhoads ed. 1980) [hereinafter cited as Valuing Life].
I will explain why the courts are unlikely to uphold any system of cost-based rationing and why certain types of legal challenges would be more successful than others. Finally, I will offer guidelines to aid the courts in deciding cases that may arise in this turbulent area.

II. THE COSTS OF RATIONING ELTs

Despite the popular conception that ELTs are a major contributor to the rising costs of health care, there is scant data on the subject. The cost of only certain federal lifesaving programs, such as the End-Stage Renal Disease Program under Medicare, is known. There are no available estimates of the total amount being spent on ELTs, of the impact of increases in available ELTs, or of the impact of ELT costs on health care costs generally. In fact, there is considerable debate over whether ELTs are a significant factor in rising health care costs.

Furthermore, no studies have assessed the economic benefits as well as the costs of ELTs. These benefits include, for example, direct savings in health care and related costs and indirect savings in the form of contributions from those who live and become economically productive.

Even assuming that ELTs are a major factor in the increased cost of health care, they may be cheaper than rationing. Although no less difficult to quantify than the costs of treatment, the costs of rationing ELTs probably are extremely high. Tangible costs include the economic consequences of the deaths of those denied treatment, such as lost earnings and the administrative expenses of a rationing program. Depending on the rationing method employed, the latter could be enormous; consider the administrative costs of an approach in which each patient is afforded an opportunity for a hearing, legal representation, and judicial review.

46. The total cost of the program was approximately $1.8 billion in fiscal 1982. See CBO TRANSPLANT REPORT, supra note 12, at 80-87.


48. Compare Altman & Wallack, supra note 3, at 27, 35-36 with Moloney & Rogers, Medical Technology—A Different View of the Contentious Debate Over Costs, 301 NEW ENG. J. MED. 1413, 1413-14 (1979) (The latter authors blame low-cost services such as laboratory tests rather than "big-ticket" lifesaving technology for increased health care costs).

49. Such benefits might include the savings from averting the need for continued care of terminal patients. See, e.g., Altman & Wallack, supra note 3, at 27. However, it might be objected that an ELT merely postpones rather than avoids the cost of terminal care, because those who recover as a result of the ELT will eventually die anyway, perhaps of another disease requiring substantial terminal care.


51. See infra notes 179-94 and accompanying text.
Rationing also would entail considerable intangible costs. First, there probably would be a serious, detrimental effect on the relationship between patients and those making rationing decisions. Physicians and hospital staff would be viewed as "gatekeepers" or executioners rather than as healers with a consequent erosion of physician-patient trust. The doctor's self-image would be affected, and both his training and the ethics of his profession would have to be modified to equip him to deal with his new roles. Furthermore, tremendous pressure would be placed on macroallocation decision-makers—such as hospital authorities, government officials and legislators—who would determine how many ELTs would be provided and generally who would get them. There would be bitter contests over how public and private funds would be allocated; imagine a choice between laying down new hospital carpeting and providing a patient with an ELT. Finally, there would be severe effects on patients and their families and friends. Rejection would create outrage, desperation, and eventually, of course, death. Selection could also produce serious psychological reactions. These effects would result from any ELT rationing, including cases of technological and experimental scarcity, but they are likely to be much more exaggerated when cost is ostensibly the only obstacle to survival.

52. See H. Aaron & W. Schwartz, supra note 9, at 104.
53. Some commentators favor the use of random systems such as lotteries to determine who receives ELTs on the assumption that they will maintain physician-patient trust. See, e.g., Willard, Scarcely Medical Resources and the Right to Refuse Selection by Artificial Chance, 5 J. Med. & Phil. 225, 225-26 (1980). It is difficult to see how rapport can be sustained when the patient's survival is treated as a matter of chance. See G. Calabresi & P. Bobbitt, Tragic Choices 134 (1978) ("The chance that lotteries give is a computer chance, not a human one").
54. See Mamana, Ethics and Technology: Crossroads in Decision Making, 35 Trustee, Jan. 1982, at 33-38; Mulley, supra note 7, at 301-02; Schwartz & Aaron, Rationing Hospital Care: Lessons From Britain, 310 New Eng. J. Med. 52, 53 (1984) ("Explicit limitation of medical resources puts physicians in a position that many of them find awkward. Neither the training nor the ethics of medicine prepare most physicians to make the required decisions in economic terms"). See also American Medical Association, Allocation of Health Resources, Op. 2.02, Current Opinions of the Judicial Council 2 (1982) [hereinafter cited as American Medical Association Opinions] ("A physician has a duty to do all that he can for the benefit of his individual patients without assuming total responsibility for equitable disbursement of society's limited health resources. To expect a physician in the context of his medical practice to administer governmental priorities in the allocation of scarce health resources is to create a conflict with the physician's primary responsibility to his patients that would be socially undesirable").
55. It has long been known that many people who survive disasters that claim lives suffer severe psychological reactions, known as "survivor syndrome." See G. Stern, The Buffalo Creek Disaster 101-03 (1976).
56. See supra notes 11-13 and accompanying text.
57. See supra notes 14-21 and accompanying text.
58. In contrast to experimental scarcity, no argument can be made that the denial of treatment on grounds of cost is for the patient's good. See supra note 22. Moreover, in contrast to true technological scarcity, a victim of cost-based rationing is denied treatment because his life is
Even though it is impossible to quantify rationing costs precisely, their magnitude can be estimated roughly by calculating the amount paid to avoid rationing. The most notable public program specifically created to avoid ELT rationing is Medicare's End-Stage Renal Disease Program. This program, discussed earlier, provides reimbursement under Medicare for life-sustaining hemodialysis treatments and kidney transplants for patients who would otherwise not qualify for Medicare benefits. It was adopted to prevent the deaths of patients who could not afford treatment, or who would have been denied treatment under various rationing systems. Currently, over 50,000 patients are kept alive by dialysis treatments paid for by Medicare. This End-Stage Renal Disease Program provides hard data on the amount currently being spent to avoid rationing of ELTs for one disease: in fiscal year 1982, the program costs were $1.8 billion.

not deemed to be worth the cost of saving it, rather than because there is no known way of providing enough of the treatment to go around.

This method of estimating the costs of rationing resembles the "willingness-to-pay" method for estimating the costs of illnesses. Under a willingness-to-pay approach, the cost of an illness is calculated by determining the amount that an individual would be willing to pay to avoid the illness. See Hodgson, supra note 50, at 156-60.

See supra note 42 and accompanying text.

See supra note 41.

See supra note 5, at 490.

CBO TRANSPLANT REPORT, supra note 12, at 80. As noted therein, this includes benefits provided for transplants as well as for dialysis.

It might be objected that this figure, which represents the total amount spent on the Medicare End-Stage Renal Disease Program, vastly overstates what society is willing to spend to avoid rationing. First, the program costs have been criticized as excessive. See e.g., INSTITUTE OF MEDICINE, supra note 9; Bovbjerg, Medicare's End Stage Renal Disease Program: How a More Competitive Approach Would Address Important Policy Issues, FEDERAL TRADE COMMISSION REPORT (Aug. 1983). These criticisms suggest that the program costs exceed the perceived costs of rationing ELTs for treatment of end-stage renal disease. Moreover, a substantial portion of the costs of the program can be attributed to inflation and to program-momentum rather than to any real desire to avoid rationing. Finally, many of the patients whose end-stage renal disease treatments are paid for by Medicare probably would obtain treatment by other means if Medicare coverage were terminated, so that the total cost of the program more accurately reflects the price we are willing to pay to avoid providing treatment to none rather than the cost of providing treatment only to some.

Accepting these objections, a more accurate measure of the perceived costs of rationing end-stage renal disease ELTs might be the cost estimates that were made when Congress enacted the program. These estimates generally were around $75 million for the first year, and about $250 million for the fourth year. See Rettig, supra note 14, at 224-26. (First year costs in fact were on the order of $150 million, with fourth year costs around $360 million. Id. at 201, Table II. The differences in projected and actual costs have led to criticisms that Congress was poorly informed when it enacted the program. Id. at 225-27.) However, these estimates are vulnerable to criticism as a measure of the rationing costs. For example, several key congressional proponents of the program believed that program costs would decline with advances in medical technology. Id. at 224. The original perceptions of the cost of rationing treatments over the long run might therefore have been lower than the first and fourth year projections suggest. Nevertheless, Congress was willing to spend hundreds of millions of dollars to make ELTs available to treat a single disease, and the
Another indication of congressional unwillingness to ration ELTs is its recent mandate that liver transplants be provided to dependents of active duty servicemen and military retirees. This occurred following dramatic media coverage of the efforts of an Army captain to obtain a liver transplant for his 31-month old daughter, though liver transplants continue to be regarded by many as experimental rather than proven lifesaving procedures.

Apart from federal programs aimed specifically at providing lifesaving resources to all in need, many government health care plans reduce the impact of high priced lifesaving medical care for the poor and the elderly. For example, Medicare reimburses health care providers for all reasonable and necessary items or services for eligible patients, generally the elderly. Medicaid, through a combination of federal and state funding, provides health care to certain groups of the poor and the disabled. Need-based medical care is one of the benefits enjoyed by servicemen and their dependents. In addition, several states have enacted laws requiring health care facilities to provide emergency care...

impetus for Congress' action largely came from a desire to avoid the economic, political, social and personal costs of ELT rationing.

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65. Interview with Diane Lawrence, Staff Director, Office of Civilian Health and Medical Program of the Uniformed Services, Feb. 14, 1983. No policy has been established on whether to provide liver transplants to members of the armed services since the issue has not arisen, partially because a person with serious liver disease would not be accepted into the service. Id.


67. See 42 U.S.C. § 1395y(a)(1)(A) (1982). The phrase "reasonable and necessary" has been interpreted broadly to mean, in most cases, items and services that the attending physician certifies are required. See, e.g., Breeden v. Weinberger, 377 F. Supp. 734, 737 (M.D. La. 1974); Reading v. Richardson, 339 F. Supp. 295 (E.D. Mo. 1972); Securing Access to Health Care, supra note 1, at 150. In addition to the elderly, Medicare beneficiaries include victims of end-stage renal disease and certain disabled persons under the age of 65. See 42 U.S.C. § 426(c)(3) (1982) (End-Stage Renal Disease Program); 42 U.S.C. § 426(b) (1982) (disabled individuals under age 65).

68. Under federal law, states participating in Medicaid (all as of 1984) are required to extend coverage to the aged, blind, and disabled and to recipients of Aid to Families with Dependent Children. A number of states and the District of Columbia have expanded the number of those eligible for Medicaid to include other segments of the poor. See Connor, The Medicaid Program in Transition in 3 Securing Access to Health Care, supra note 1, app. at 83.


70. Dependents of active duty servicemen receive health care under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) pursuant to 10 U.S.C. §§ 1076 (1982), while certain dependents of veterans are covered under the Civilian Health and Medical Program of the Veterans Administration (CHAMPVA), 38 U.S.C. § 613 (1982).
to patients regardless of their ability to pay. Finally, there have been a number of other federal and state programs aimed at facilitating health care access for specific groups, such as the poor, the aged, and persons living in rural areas.

Again, some measure of rationing costs can be obtained from the costs of these programs. The Medicare budget for fiscal year 1982, for example, was over $50 billion. There are no breakdowns of how much of the budgets of these programs are attributable to expenditures for ELTs; these programs are neither explicitly nor primarily designed to avoid ELT rationing. Nevertheless, at least a portion of the costs of these programs reflects the price paid to avoid rationing ELTs.

The cost of ELT rationing is so high for two reasons. First, these resources save lives under the most compelling circumstances: where a specific individual's life is at stake. Second, there is no suitable system for deciding who should receive treatment. These factors are discussed more fully in the following sections.

A. The Lifesaving Imperative

ELTs are a particular kind of lifesaving resource: they save specific individuals who are in immediate peril, such as Mrs. Smith who requires a kidney dialysis to stay alive, or Johnny Jones who requires a particular drug. Therefore, the lives saved by ELTs are called "identifi-

71. See N.Y. PUB. HEALTH LAW § 2805-b (McKinney 1977); ILL. ANN. STAT. ch. 111 1/2, § 86 (Smith-Hurd 1977).
72. For a summary of these programs, see SECURING ACCESS TO HEALTH CARE, supra note 1, at 115-82. One such program was the so-called Hill-Burton program, which was in effect from 1946 until 1974. Under Hill-Burton, federal funds were provided to states for construction of new hospital facilities in return, inter alia, for a commitment by the states to provide a reasonable volume of hospital services to persons unable to pay therefore. Hospital Survey and Construction Act, Pub. L. No. 79-725, § 2, 60 Stat. 1041 (1946).
73. See U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, HEALTH-UNITED STATES AND PREVENTION PROFILE 198 (1983) [hereinafter referred to as HEALTH].
74. None of these programs expressly prohibit rationing. Thus, for example, the Medicare standard requiring reimbursement for "reasonable and necessary" care theoretically might be interpreted to permit an ELT to be denied a particular patient if, in that patient's case, treatment were deemed "unreasonable" or "unnecessary." No court has ruled on this issue, although Justice Stevens, dissenting in Harris v. McRae, 448 U.S. 297, 355 (1980), stated: "There are some especially costly forms of treatment that may reasonably be excluded from the [Medicaid] program in order to preserve the assets in the pool and extend its benefits to the maximum number of needy persons. Fiscal considerations may compel certain difficult choices in order to improve the protection afforded to the entire benefitted class."
Id. at 355. Under Justice Stevens' formulation, a costly treatment could not be provided to only some Medicaid patients "to preserve the assets in the pool" because this would not protect "the entire benefitted class" (emphasis added).
Other examples of identifiable lives are persons lost at sea, trapped miners, and downed balloonists. In all these cases, an event has occurred—such as a disease or accident—that has placed a specific person’s life in jeopardy, and a lifesaving opportunity—or an opportunity to employ a lifesaving resource—has arisen. In contrast, other lifesaving resources save “statistical” lives. When a decision is made on whether to provide a resource—for example, whether to install airbags in new cars—it is impossible to say who will be involved in an accident. The most that can be said about a specific individual is a set of probabilities: the probability that he will be involved in a potentially fatal situation; the probability that he will die without the lifesaving resource if he becomes involved; and so forth. Hence the term “statistical” lives. Other examples of statistical lifesaving resources include automobile seatbelts and workplace safety standards.

Central to an appreciation of the cost of rationing ELTs is one further distinction between statistical and identifiable lives: identifiable lives traditionally are regarded as worth saving at virtually any cost.

75. One of the main lobbying tactics by end-stage renal disease victims to secure passage of the Social Security Amendments of 1972 was to portray themselves as “identifiable” lives. See Rettig, supra note 14, at 220 (“A New York City resident testified and was dialyzed before the House Ways and Means Committee in November 1971, a demonstration which apparently contributed to the willingness of Representative Wilbur Mills to support a kidney disease amendment to Medicare”).

76. As long as a specific person is involved, an identifiable life also can be at stake even if the person’s identity is unknown, as in automobile accidents where it is not known who is in the car.

77. For a discussion of identifiable versus statistical lives, see Fried, The Value of Life, 82 Harv. L. Rev. 1415 (1969); Havighurst & Blumstein, Coping With Quality/Cost Trade-Offs In Medical Care: The Role of PSROs, 70 Nw. U. L. Rev. 6, 21-25 (1975).

78. Whether an identifiable or a statistical life is at stake in deciding to allocate an ELT depends on one’s vantage point. To a government official deciding whether or not to provide a particular ELT under Medicare, the potential ELT recipients on the whole appear to be statistical; while the official may be acquainted with particular patients who need the resource, his decision will primarily affect as-yet unspecified individuals in the future. To the health care professionals who treat these future patients, however, the patients will be identifiable. The patients also will be identifiable to a judge who reviews a decision to deny the ELT to a specific patient. See infra notes 236-48, 255 and accompanying text.

What distinguishes resources such as ELTs from statistical lifesaving resources is that there is always a point at which to intervene with an ELT to save an identifiable life. With a statistical resource (such as an airbag) on the other hand, there will never be an opportunity to save an identifiable life. At the point a statistical life is placed at a high and immediate risk of death—or becomes “identifiable”—it is too late to provide a statistical resource. For example, it is too late to install an airbag after a crash occurs, and it is too late to install fire stairs once a building has caught on fire.

Enormous sums are spent to rescue downed balloonists, mountain climbers, trapped miners, and the like. Therefore, identifiable lives at risk seem to trigger a "lifesaving imperative." On the other hand, a far more detached cost-benefit approach is taken toward saving statistical lives. Society seems much more willing to permit statistical deaths.

A number of explanations have been suggested for the lifesaving imperative that attaches to saving identifiable lives. Some theories point to our emotional reaction to visible tragedy and to our preference for focusing on present rather than future problems. Other rationales are more abstract, such as Professor Fried's identification of the unique suffering of the victim who knows he is going to die. Whatever the reasons, the power of this imperative is undeniable. It is so compelling that heroic efforts are made to rescue even persons like mountain climbers who deliberately have placed themselves in jeopardy. In fact, many people spend great sums of money and even risk their lives to save strangers.

The sacrifice and expense evoked by the lifesaving imperative is a measure not only of what society is willing to pay to save an identifiable life but also of what it would cost to abandon such a life by rationing ELTs. "To the extent that our lives and institutions depend on the notion that life is beyond price, . . . a refusal to save lives is horribly costly." While little of this cost represents money that would actually

80. Occasionally, the government will spend substantial funds even in advance of a specific rescue in recognition of society's willingness to spend money to save identifiable lives when a tragedy occurs. For example, the U.S. government in April 1983 launched a $54 million satellite to facilitate rescues at sea. The satellite, however, malfunctioned shortly after launch. See U.S. Launches a Satellite to Find Planes and Ships, N.Y. Times, Mar. 29, 1983, at A14, col. 6.


82. See Glover, Causing Deaths and Saving Lives, in VALUING LIFE, supra note 45, at 246 (difficult to ignore televised interview with family of trapped miner); Havighurst, supra note 31, at 141 n.81 (rescued rower generally gives more dramatic and moving interview than a better protected motorist).

83. See Glover, supra note 82, at 246.

84. See Fried, supra note 77, at 143-37.

85. See Havighurst, supra note 31, at 141 ("Our treating identified victims differently from statistical victims should not be dismissed as a simple case of hypocrisy or as a mistake in valuing lives, for it is in large part a ritual homage paid to the sanctity of human life and to our collective commitment to maintain it" [footnote omitted]).

86. This argues against a rationing scheme that penalizes those who in some sense are responsible for their own illnesses, such as cigarette smokers who develop lung cancer. See infra notes 156-57 and accompanying text.

be spent as a result of rationing, this does not reduce the cost any more than the fact that a rescuer pays with his life rather than with his pocketbook.

Despite the lifesaving imperative, however, society might be willing to ration ELTs if rationing costs could be reduced sufficiently. The next section discusses the potential rationing methods that might be employed to reduce rationing costs to an acceptable level.

B. Methods of Rationing

1. Social Worth Allocation

Under social worth allocation, ELTs would be given only to those patients who meet certain social performance criteria. These criteria could focus on past performance, so that the resource might be given only to those persons who had made valuable social contributions, such as respected artists, scientists, politicians or businessmen. Conversely, persons who had engaged in undesirable behavior, such as criminals, would be disqualified and allowed to die. Alternatively, allocation could be based on expected performance; the resource could be allocated to those expected to make valuable social contributions, but not to persons whose future activities were likely to be of little social value. ELTs also might be allocated on the basis of both past and future performance; a famous scientist who intended to remain active might be preferred over one who had retired. 88

A social worth approach might be employed for every patient seeking an ELT. 89 During the 1960's, for example, some hemodialysis machines were allocated on this basis. Considerable public outcry resulted. Attention focused on the Seattle Artificial Kidney Center, which selected patients for hemodialysis on the basis of, among other things, "... age and sex of patient; marital status and number of dependents; income; net worth; emotional stability, with particular regard to the patient's capacity to accept treatment; educational background; the nature of occupation; past performance and future potential; the names of people who could serve as references." 90 The Center's allocation deci-

88. Allocation according to future performance might be said to maximize social utility, whereas allocation according to past performance could be said to have achieved social justice. See Rescher, The Allocation of Exotic Medical Life-Saving Therapy, in VALUING LIFE, supra note 45, at 230-31. Both types of allocation are utilitarian; however, an approach based on achieving social justice reinforces socially useful behavior in the future. See G. WINSLOW, supra note 10, at 84-85.

89. It has been argued that ELTs must be allocated on the basis of past and future performance in order to be ethical. See Rescher, supra note 88, at 231.

90. Alexander, supra note 41. See also Rettig, supra note 14, at 203 n.23. One physician has recommended conducting opinion surveys to develop an "Index of Human Social Value" to be
sion-makers became known, understandably, as the "Seattle God Committee."91 They were criticized for preferring patients who had been scout leaders and Sunday school teachers.92 In the words of one pair of commentators, their policies ruled out "creative nonconformists, who rub the bourgeoisie the wrong way but who historically have contributed so much to the making of America. The Pacific Northwest is no place for a Henry David Thoreau with bad kidneys."93

Rather than being employed in all cases, social worth criteria might be applied only in exceptional cases to make sure that ELTs were given to especially deserving persons or were denied to those who were especially undesirable. According to one report, for example, hemodialysis treatments during the late 1960's specifically were denied to a prostitute, a drug peddler, and a psychotic who had escaped from a prison hospital.94

Allocating ELTs on a social worth basis is unquestionably appealing, at least in extreme cases. It is difficult to imagine denying an ELT to a head of state, especially if the ELT were allocated instead to a convicted murderer.95 Even in less extreme cases, it is compelling to think of saving the life of someone who has been helpful to others or who has exhibited other virtues.96 However, a social worth approach to allocating ELTs encounters several serious obstacles. First, especially as less differentiated or extreme cases are considered, it is difficult to make comparative judgments between social traits: we lack a rating scale of desert.97 All might agree that a brilliant cancer researcher ought to be preferred over a delict, but should the cancer researcher be preferred

employed in allocating ELTs. Shatin, Medical Care and the Social Worth of a Man, 36 Am. J. Orthopsychiatry 96, 98 (1966). He suggests that the following values be included in the index, although not necessarily in order of relative importance:

“(1) The economic productivity of the person when well; (2) Age and productive years left; (3) Marital and family status and responsibility; (4) Responsibility for the welfare of others; (5) Medical prognosis and outlook for full recovery; (6) Children, friends, social and community relationships; (7) Society's need for his services; (8) Considerations based on potential contributions to society; (9) History of antisocial behavior; (10) Contribution to the cultural stream of humanity and all the areas of human endeavor: arts, sciences, humanities, economics, governance.”

Id. at 99.

91. See G. CALABRESI & P. BOBBITT, supra note 53, at 187.
93. Sanders & Dukeminier, supra note 92, at 378.
94. See Note, supra note 11, at 654.
95. The problem of extreme cases is discussed below in connection with egalitarian allocation approaches. See infra notes 155-57 and accompanying text.
96. However, social worth based on past performance would be of little help in allocating ELTs to newborns, who have no social track record. See Childress, supra note 10, at 547-61.
97. See supra note 90 for a suggestion that such a scale be created by opinion poll.
over a politician, or a philosopher? Is a famous novelist more deserving than a famous poet? These distinctions become even less manageable if future rather than only past behavior is the basis for the allocation decision, since then we not only have to compare relative merit, but also must predict future performance. Suppose a promising talent is chosen over a n’er-do-well, and the talent is never realized? On the other hand, how often is it said of a person who accomplishes something: who would have expected it of him?

So far, only value-laden social traits such as relative social worth have been discussed in the context of social worth allocation. But similar conceptual problems arise even when seemingly value-neutral attributes are considered. An example is age comparisons. A preference for youth might be desirable because it would maximize the length, and not simply the number, of lives saved. But older persons may be of greater benefit to society by virtue of their experience. Moreover, an upper limit on the age of those eligible to receive ELTs—unless set so high that it had little rationing utility—could result in the death of some elderly high achievers whom all might wish to save.

In addition to raising the foregoing practical problems, social worth allocation probably is socially unacceptable. First, those making microallocation decisions have a strong tendency to prefer patients with whom they identify; if the decision-makers are well-educated and well-to-do professionals, an allocation system in which the patient’s social worth were a factor would be likely to prefer patients with high socio-economic status. Minority groups and the underprivileged might be underrepresented.

98. Nor can these dilemmas be avoided by establishing minimum standards for receiving an ELT rather than relying on comparative judgments between patients, at least so long as social utility is the primary allocation criterion. For example, if we decided to pay for 10 hemodialysis machines and there were 11 patients, we cannot decide ahead of time to give the machines to the 10 who had never been convicted of a crime of moral turpitude, since the 11th person may be similarly unblemished. Obviously, if we know in advance that only 10 of the 11 patients fulfill a certain criterion and choose to allocate machines on that basis, we are comparing their social worth against the social worth of the 11th and thus engaging in comparative rather than standards-based allocation.

99. During the hemodialysis treatment shortage of the 1960’s, machines routinely were denied to persons under or over certain ages because they allegedly were unsuited medically. See Note, supra note 11, at 643-45. Age-based rationing may be an important option since the increasing age of the U.S. population makes the elderly the potential recipients of an increasingly greater proportion of medical resources, and pressures may build to deny ELTs routinely to persons over a certain age.

100. See Note, supra note 11, at 665.

101. Grandma Moses, it will be recalled, did not begin painting until she was 78 years old. See 7 ENCYCLOPEDIA BRITANNICA Grandma Moses 46 (15th ed. 1974) (Micropedia).

102. See Note, supra note 11, at 662.

103. See Note, supra note 29, at 1329-30.
Again, this is illustrated by the example of the allocation of hemodialysis treatments. In the 1960's, machines often were allocated to patients on the basis of social worth. Following the passage of the 1972 Social Security Amendments, however, treatment was available regardless of social utility considerations to virtually all patients who needed it. The resulting change in a number of the social and demographic characteristics of the patients receiving hemodialysis is striking. In 1967, only 7% of the patients receiving hemodialysis were black; by 1978, the percentage of blacks had increased to 34.9%. Over this same period, the percentage of women receiving hemodialysis more than doubled; by 1978, women comprised approximately half of the treatment population. Only 5% of the patients in 1967 were separated, divorced or widowed, in contrast to 25% in 1978. Finally, the percentage of patients with prior high school education or less was only 10% in 1967; in 1978, the figure had climbed to almost 30%.

Reliance on social worth factors also is repugnant to those who believe that all human life is worthwhile. Social worth allocation is attacked because it contravenes the basic principle of human equality, and degrades the human spirit. While these objections may seem weak in comparison to the harsh demands of medical cost containment, there clearly would be strong public opposition on "humanitarian" grounds—including opposition from organizations such as the Ameri-

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104. See supra notes 90-94 and accompanying text.
105. See supra note 42 and accompanying text.
106. Percentage of Hemodialysis Patient Populations in 1967 and 1978 with Certain Social and Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>1967</th>
<th>1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>75</td>
<td>49.2</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>50.8</td>
</tr>
<tr>
<td>White</td>
<td>91</td>
<td>63.7</td>
</tr>
<tr>
<td>Black</td>
<td>7</td>
<td>34.9</td>
</tr>
<tr>
<td>Junior high school education or less</td>
<td>10</td>
<td>28.7</td>
</tr>
<tr>
<td>Separated, divorced or widowed</td>
<td>5</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Based on data in Evans, supra note 5, at 488.
107. See G. Winslow, supra note 10, at 81-83.
108. See e.g., Valuing Life, supra note 45, at 210 ("Ultimately it dulls and perhaps even eliminates the sense of the person's transcendence, his dignity as a person which cannot be reduced to his past or future contribution to society").
can Medical Association\textsuperscript{109}—to allocating ELTs on a social worth basis.\textsuperscript{110}

\textsuperscript{109} See American Medical Association Opinions, \textit{supra} note 54, at 2:

"Limited health care resources should be allocated efficiently and on the basis of fair, acceptable, and humanitarian criteria. Priority should be given to persons who are most likely to be treated successfully or have long term benefit. Social worth is not an appropriate criterion.

Utility or relative worth to society should not determine whether an individual is accepted as a donor or recipient of tissue for transplantation, selected for human experimentation, or denied or given preference in receiving scarce health care treatment or resources."

\textit{Id.}

\textsuperscript{110} A related issue is whether allocation based on social utility would be lawful (assuming that rationing, regardless of the method used, is not per se unlawful, \textit{see infra} notes 221-54 and accompanying text). A number of statutes apparently preclude social worth comparisons between patients. The federal End-Stage Renal Disease Program, for example, extends Medicare coverage to "every individual" who meets certain eligibility requirements (principally, being covered under the Social Security program) and who is medically determined to have the disease. \textit{See} 42 U.S.C. § 426-l(a) (1982). \textit{See also} 42 U.S.C. § 1395y(a)(1) (1982) (Medicare reimbursement for all "reasonable and necessary" items or services provided to eligible individuals); 38 U.S.C. §§ 601-28 (1982) (no restrictions in services to be provided veterans for service-related injuries or disease.)

In situations not covered under a specific statutory or regulatory provision, a social worth approach might be barred by the \textit{United States Constitution}, depending on the factual context in which the allocation took place, and on the specific substantive bases for the allocation decision.

In the constitutional analysis, the first issue would be whether the allocation was made by the government or by private individuals or entities. If the action were deemed to be private, then it would not be subject to constitutional constraints. \textit{See} Blum v. Yaretsky, 457 U.S. 991, 1002 (1982) (fourteenth amendment does not control purely private conduct, such as a decision by nursing home to transfer Medicaid patients to lower level of care).

A more difficult question is presented by rationing by ostensibly private health care institutions that are subject to government regulation or that receive government funds. There has been considerable debate in the courts, for example, on whether receipt of government funds makes otherwise private hospitals subject to the fifth and fourteenth amendments. \textit{See, e.g.}, Modaber v. Culpepper Memorial Hosp., 674 F.2d 1023 (4th Cir. 1982) (receipt of Medicare, Medicaid and Hill-Burton [federal construction] funds does not make hospital actions state actions); Newsom v. Vanderbilt Univ., 653 F.2d 1100 (6th Cir. 1981) (same).\textit{ But see} Davis v. Ball Memorial Hosp., 640 F.2d 30, 43 (7th Cir. 1980) (indigent patients have enforceable interest under due process clause in compliance by private hospital with Hill-Burton requirements for allocating care to indigents). In Blum v. Yaretsky, 457 U.S. 991 (1982), the Supreme Court stated that actions by such institutions are only attributable to the state when three conditions are met: first, the state must in some sense be responsible for the specific action. \textit{Id.} at 1004 (citing Jackson v. Metropolitan Edison Co., 419 U.S. 345 (1974)). Second, mere approval or acquiescence by the state in a private action is insufficient to establish state action; the state must exercise coercive power or provide significant overt or covert encouragement. \textit{Id.} at 1004-05. Finally, the action must be in an area that is exclusively the prerogative of the state. \textit{Id.} at 1005.

It is unlikely that a decision by a private hospital or physician to allocate an ELT on the basis of social utility would meet all three of these conditions. Even though the hospital or doctor may be receiving public funds, and may be subject to numerous government regulations, the allocation decision is unlikely to be regarded as one for which the state is responsible, or which the state has coerced or significantly encouraged. And even if the state brought about the allocation decision in some sense, for example, if it were made in order to comply with a government-mandated ceiling on hospital costs, \textit{see infra} note 220, it is doubtful that the provision of health care—even to needy individuals—would be regarded as the exclusive prerogative of the state. \textit{Cf.} Maher
2. MARKET MECHANISMS

Another possible way to allocate ELTs is to allow the market to establish a price for them, and sell ELTs only to those who can afford

v. Roe, 432 U.S. 464, 469 (1977) ("The Constitution imposes no obligation on the States to pay . . . any of the medical expenses of indigents.").

On the other hand, if the allocation were made by a government-run health care facility such as a public or Veterans Administration hospital, or by a government employee in the scope of his employment, it would clearly be subject to constitutional requirements. The same is true if the rationing decision were made by a private facility or physician but was required by law or regulation. See Blum v. Yaretsky, 457 U.S. 991, 1004. In these cases, allocating ELTs on the basis of social utility considerations might run afoul of the equal protection requirements of the constitution.

Certain characteristics, if they form the basis of a governmental distinction between individuals, are regarded as "suspect classifications" which are strictly scrutinized by the courts and likely to be struck down. See, e.g., Graham v. Richardson, 403 U.S. 365, 375-76 (1971); Shapiro v. Thompson, 394 U.S. 618, 634 (1969). Additionally, the courts will subject to a high standard of scrutiny governmental actions which affect certain "fundamental interests," such as the right to interstate travel. See, e.g., Shapiro, 394 U.S. 618. Suspect classifications include distinctions based on race, see, e.g., Loving v. Virginia, 388 U.S. 1 (1967) (invalidating state law against interracial marriages); alienage, see e.g., In re Griffiths, 413 U.S. 717 (1973) (state cannot deny otherwise qualified alien admission to the bar); and religion, see, e.g., Niemotko v. Maryland, 340 U.S. 268 (1951) (access to public park may not be denied to Jehovah's Witnesses). If a governmental action under the guise of social utility denied a person an ELT on the basis of a suspect classification, the action would probably be invalidated by the courts. See, e.g., Cypress v. Newport News Gen. & Nonsectarian Hosp., 375 F.2d 648 (4th Cir. 1967) (racially segregated wards in publicly-supported hospital unconstitutional); Eaton v. Grubbs, 329 F.2d 710 (4th Cir. 1964) (racially segregated treatment facilities unconstitutional).

Indeed, under the Civil Rights Acts, 42 U.S.C. §§ 1981, 1983, 2000b, 2000e, (1982) even private discrimination in access to ELTs on overt grounds of race, color, religion or national origin might be impermissible. In Hall v. Bio-Medical Application, Inc., 671 F.2d 300 (8th Cir. 1982), for example, the plaintiff challenged the refusal of a private hemodialysis outpatient facility to treat him. The plaintiff, who was black, alleged that the facility's action was in part racially motivated, thereby violating 42 U.S.C. § 1981 (1982). In support, he introduced testimony of former employees of the facility that whites were given priority over blacks in the scheduling of treatments. Without discussing the testimony of these employees, the Eighth Circuit rejected the § 1981 claim, finding that the facility had terminated the plaintiff's treatments because of his disruptive behavior. Hall, 671 F.2d at 302.

A legislature or health care provider today is unlikely to allocate ELTs overtly on the basis of a suspect classification such as race. However, it is quite possible that allocation ostensibly on the basis of arguably nonsuspect social utility criteria, such as past or future performance, would result in a disproportionate allocation of the ELT along one or more suspect lines. As noted earlier, allocation of hemodialysis machines in the 1960's on the basis of various social utility and other considerations resulted in a disproportionate number of whites receiving treatment (91%) compared to blacks (7%). See supra note 106 and accompanying table. Yet there is no direct evidence that race actually was used as an allocation criterion. Consequently, a pivotal question is whether allocation decisions can be considered invalid when the net result is that one racial group receives the treatment far more often than another group.

In two cases, Arlington Heights v. Metropolitan Hous. Div. Corp., 429 U.S. 252 (1977) and Washington v. Davis, 426 U.S. 229 (1976), the Supreme Court suggested that the mere fact that one racial group is disadvantaged compared to another is not enough to invalidate action as ra-
them. Private and governmental health insurance may cover the bulk of payments under this approach, in which case only patients with inadequate insurance or personal financial resources would be denied treatment. Allocating ELTs on the basis of wealth might be regarded as

cially discriminatory; a discriminatory purpose must also be demonstrated. Arlington Heights, 429 U.S. at 264-68; Washington, 426 U.S. at 238-48. In Arlington Heights, the Court went on to identify different types of evidence that might demonstrate a discriminatory purpose, including whether there was a clear pattern of discrimination and the historical background of the action. Arlington Heights, 429 U.S. at 266-68. It is conceivable that the hemodialysis rationing decisions of the 1960's that produced racially-skewed results would—if challenged today—be invalidated as a violation of equal protection, but the plaintiff would clearly bear a heavy burden in establishing the existence of a discriminatory purpose.

Other than a classification based on suspect criteria, a social utility preference between patients in need of ELTs faces only limited judicial scrutiny. In general, courts only require that the classification be rationally related to a legitimate government purpose. See, e.g., Personnel Admn'r of Mass. v. Feeney, 442 U.S. 256, 273-74 (1979) (suggesting that a somewhat stricter standard would be applied in evaluating the constitutionality of sex-based classifications); Mass. Bd. of Retirement v. Murgia, 427 U.S. 307, 312-14 (1976) (upholding a state statute establishing a mandatory retirement age of 50 for state police on the basis that it promoted physical fitness in the police force). Allocating ELTs on the basis of social utility might be defended on the ground that social utility was a rational means to achieve the legitimate purpose of conserving scarce medical resources. While a court could reject this defense if it concluded that, perhaps because of the practical difficulties discussed earlier, see supra notes 88-101 and accompanying text, most patients cannot rationally be distinguished from one another on social utility grounds, it is noteworthy that, in recent times, courts have not invalidated classification schemes other than those based on suspect criteria. See Blumstein, Rationing Medical Resources: A Constitutional, Legal, and Policy Analysis, 59 Tex. L. Rev. 1345, 1382 (1981).

Finally, it is noteworthy that the Court in Murgia sustained an "irrebuttable presumption" that troopers over the age of 50 were physically unfit for the job. The Court noted that it was impossible for an individual officer to disprove the presumption through individual testing. Murgia, 427 U.S. at 316. Similarly, ELTs might be allocated on the basis of irrebuttable presumptions. For example, during the 1960's, hemodialysis machines routinely were denied to persons over and under certain ages. See Note, supra note 11, at 643-45. Irrebuttable presumptions are in fact a common decision-making approach in our society, especially when based on age (e.g., minimum drinking, driving, and voting ages). At one time the Court took the position that at least certain irrebuttable presumptions were unconstitutional as a violation of due process. See Cleveland Bd. of Educ. v. La Fleur, 414 U.S. 632 (1974) (invalidating mandatory pregnancy leave for teachers); Vlandis v. Kline, 412 U.S. 441 (1973) (invalidating preferential tuition rates for state residents). The Court soon reaffirmed the validity of such presumptions, however. See Weinberger v. Salfi, 422 U.S. 749 (1975) (permitting certain Social Security eligibility requirements based on duration-of-relationship). It is questionable whether the Court would resurrect the irrebuttable presumption doctrine to invalidate ELT allocations.

111. ELT costs are likely to exceed the amounts reimbursed under federal or private insurance programs, so that some personal expenditures would be necessary even for patients with insurance coverage. For example, Medicare only pays 80% of the charges for hemodialysis at a renal dialysis facility; the remaining 20% must be paid by the patient or through other insurance programs. See 42 U.S.C. § 1395rr(b)(2)(A) (1982); 48 Fed. Reg. 21,254, 21,255 (1983) (Final Rule on Prospective Reimbursement for Dialysis Services under Medicare End Stage Renal Disease Program). Moreover, patients receiving hemodialysis must be hooked up to a machine several times a week for a number of hours. Consequently, patients receiving treatments at a hospital or dialysis center, rather than at home, are often unable to hold a job. See Hearings on National Health Insurance, supra note 40, at 1538 (testimony of Shep Glazer).
another way of allocating them on the basis of social utility, on the theory that wealth—at least in the form of current remuneration—is a crude measure of how much society values a person’s activities or potential.\textsuperscript{112} As a measure of social utility, wealth offers substantial administrative advantages over other utilitarian allocation approaches: allocation criteria—in the form of prices—are relatively easy to establish, and distinctions between patients are simplified by being quantitative—in the form of how much money patients have—rather than qualitative.

On the other hand, in the 1960’s, at least one hemodialysis center that allocated treatment on the basis of social utility considerations regarded wealth as a negative factor. It reasoned that the death of a wealthy person would not fall so heavily on his dependents.\textsuperscript{113} And wealth is not a very accurate measure of how highly a person is regarded by society; for example, many public officials would be undervalued unless intangible rewards, such as power and status, were also taken into account. Yet differentiating patients on the basis of measures such as power and status tends to create the same valuation problems as allocating ELTs on the basis of social utility in general: how is power quantified, for example, so that it can be compared with wealth? Finally, wealth is not even a crude measure of moral desert; the saintly are not likely to be rich, and philanthropists score high on virtue because of what they have given away, not because of what they have kept.

Moreover, at least a substantial segment of the population would regard allocating ELTs strictly on the basis of wealth as morally repugnant.\textsuperscript{114} This, in turn, might translate into political unacceptability. For example, during the 1960’s, wealth was a widely-used, if little acknowledged, basis for allocating hemodialysis treatments to victims of...
end-stage renal disease. Virtually any patient who could afford a dialysis machine (costing approximately $3,000) and the service charges of the treatments (as much as $300 each) could obtain hemodialysis. End-stage renal disease victims mounted a vigorous lobbying campaign in Congress, emphasizing the high costs of hemodialysis, which led to passage of the Social Security Amendments of 1972. Since then, most patients with end-stage renal disease have had the bulk of their hemodialysis treatment costs paid for by Medicare. As a result, patients who previously might have been unable to afford treatment are now able to survive.

The unpopularity of allocating ELTs on the basis of wealth is demonstrated by numerous government programs aimed at providing health care to those too poor to pay. Medicare and Medicaid embody this policy, as do recent congressional efforts to provide health insurance coverage to the temporarily unemployed. Considerable national attention also has been given to establishing a program of federal catastrophic health insurance. Furthermore, the President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research has issued a report calling for the nation to meet an ethical obligation of providing an adequate level of health care to all.

In view of the strong popular bias against allocating health resources on the basis of wealth, it is unlikely that a government facility or program would explicitly ration ELTs on the basis of ability to pay. Imagine the public reaction if, during World War II, the government had given penicillin only to those who had purchased the greatest

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115. Telephone interview with Ira Greifer, M.D., Medical Director, National Kidney Foundation, (June 28, 1983). If necessary, the patients sometimes paid a physician to purchase the machine. The physician could then make the machine available—at additional charge—to other patients.

116. See, e.g., Hearings on National Health Insurance, supra note 40, at 1524-46.

117. See supra note 42 and accompanying text.

118. In 1967, before passage of the legislation, only 9% of the hemodialysis population had incomes below the poverty level, and 47% had incomes below the median family income level. In 1978, however, 36% of the patients receiving hemodialysis were below the poverty level in income, while 71% had incomes below the median family income level. See Evans, supra note 5, at 989-90.


121. See SECURING ACCESS TO HEALTH CARE, supra note 1. The report did not focus on ELTs.
amount of war bonds.\textsuperscript{122} Implicit or private rationing on the basis of market mechanisms may proliferate for a time, but this type of ration-

\begin{footnotesize}
\textsuperscript{122} Even though it was technologically rather than merely economically scarce, penicillin is an apt example because of the degree of government involvement in its production and distribution during the war. See supra note 11 and accompanying text.

If a wealth-based allocation system nonetheless were adopted, it is uncertain whether it would be struck down on equal protection grounds. (The question of whether it would violate procedural due process requirements would depend on how the program were implemented. See infra notes 176-77 and accompanying text.) On the basis of James v. Valtierra, 402 U.S. 137 (1971) and Dandridge v. Williams, 397 U.S. 471 (1970), it might be concluded that wealth was not a suspect classification under equal protection doctrine. See G. GUNThER, CONSTITUTIONAL LAW 961-63 (10th ed. 1980). In San Antonio Indep. School Dist. v. Rodriguez, 411 U.S. 1 (1973) however, the Supreme Court distinguished the Texas school financing scheme upheld in that case from other wealth-based classifications that it had struck down in the past on the basis that persons or classes illegally discriminated against were completely unable to pay for a desired benefit, and as a result, were absolutely unable to obtain it. \textit{id.} at 20. The Court implied that, when these two conditions obtained, it would be inclined to view the wealth classification in question as suspect, at least if the classification resulted in deprivation of a "fundamental" right.

Allocation of an ELT by the government on the basis of wealth would fulfill Rodriguez's first two conditions: at least where the government controlled the availability of the resource, selling it to the highest bidder would utterly preclude less wealthy patients from obtaining it, and they would soon die. The question would then be whether the patients in that situation have a sufficiently fundamental interest or right at stake so that the state could not allocate ELTs on the basis of wealth absent a compelling state interest. See Shapiro v. Thompson, 394 U.S. 618, 634 (1969). It might seem self-evident that a patient's interest in remaining alive is fundamental. Cases addressing the issue of whether life-sustaining treatment may be withdrawn upon the request of a patient, his kin or guardian recognize that the state has a strong interest in preserving life. See, e.g., Superintendent of Belchertown v. Saikewicz, 373 Mass. 728, 370 N.E. 2d 417 (1977). However, the courts have not confronted this issue in the equal protection context, and recent pronouncements by the Supreme Court in due process cases cast some doubt on whether a fundamental interest in life would be recognized. See supra note 110. The Court almost certainly would deny that a patient had a constitutional right to an ELT in the sense that the state was obligated to provide it to all in need. Cf. Maher v. Roe, 432 U.S. 464, 469 (1977) ("The Constitution imposes no obligation on the States to pay . . . any of the medical expenses of indigents.").

If a wealth-based allocation of ELTs by the government nevertheless were scrutinized strictly by the courts, the government might have difficulty showing that the allocation scheme was necessary to fulfill a compelling state interest. In the penicillin example, the government might argue that allocation on the basis of who bought the most war bonds was necessary to fulfill the compelling interest of funding the war. However, the Supreme Court has determined that fiscal considerations ordinarily are not sufficient to sustain a suspect classification. See Shapiro, 394 U.S. at 632-33. Even though national survival might well be a compelling objective, it is questionable whether selling ELTs—as opposed to other forms of war financing—would be deemed necessary.

If the example were changed somewhat, the government's compelling interest argument might become stronger. Suppose the wealth-based allocation was defended on the ground that the state can refuse to give the resource to those who cannot afford it in order to maximize health care; if the state had to subsidize the poor, it might be argued, important preventive programs such as immunization might have to be shut down for lack of funds. See Note, supra note 29, at 1333-34. The compelling interest presumably would be the utilitarian objective of providing the greatest health care to the greatest number. But the government would still have difficulty demonstrating why a wealth-based ELT allocation scheme was necessary to provide funds for other programs, i.e., why the funds could not come from some other source, such as another part of the health care budget.
ing is also likely to lead to demands for government equalization of access.

3. MEDICAL CRITERIA

Several rationing approaches suggest allocating ELTs on the basis of medical criteria, determined by physicians or other health care professionals. In most cases the judgment of medical professionals will initially determine which patients are suitable candidates, or competitors, for ELTs.

Medical criteria might also be used to establish priorities of need. During the shortage of hemodialysis machines in the 1960's, for example, doctors usually gave machines first to those patients who were in immediate danger of death, all other factors being equal.

There can be little dispute that at least some exercise of medical judgment is appropriate in deciding how to allocate ELTs. In the most basic sense, the patient's disease must be correctly diagnosed. Moreover, it may make little sense to give a patient an ELT if the patient is clearly going to die in the short run as a result of another condition.

Allocation based on medical criteria becomes more difficult, however, if medical distinctions are employed as a rationing instrument. The health care professional then must establish a system of patient priorities, which entails a number of hard choices. It is difficult to determine, for example, whether the potential resource should be provided first to the worst-off case, to the patient likely to benefit the most from it, or to the patient who needs less of the resource—such as less recovery time in intensive care—so that more of the resource will be available for

123. See, e.g., Breeden v. Weinberger, 377 F. Supp. 734, 737 (M.D. La. 1974) ("... under the Medicare provisions of the Social Security Act, Congress intended that the responsibility for determining what services the patient requires rests primarily with the treating physician"); Mulley, supra note 7, at 300 ("There is no doubt that physicians are the key decision-makers on the demand side within the hospital").

124. One commentator defines this initial determination as deciding whether or not the patient has a "reasonable prospect of responding to treatment." VALUING LIFE, supra note 45, at 207. It is possible that the patient initially could decide to seek an ELT without consulting a physician, but, unless the resource were made available to all who wanted it rather than just to those who needed it, at some point a medical evaluation of the patient's suitability and need for the resource would be likely.

125. Telephone interview with Ira Greifer, M.D., Medical Director, National Kidney Foundation (June 28, 1983). The establishment of priorities for treatment based on medical need is the primary function of triage, the classic form of emergency medical resource allocation. See supra note 10 and accompanying text.

126. See infra notes 275-77 and accompanying text. A separate question is whether to allocate an ELT to a patient who is not expected to recover even minimal functionality. See infra note 278 and accompanying text.
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others. 127 Suppose patient A is 25 years old, and thus can expect another 45 years of life if he successfully receives the ELT, while patient B is 65. What if, due to complications, patient C will be confined to a wheelchair all his life even if he gets the resource, while patient D will be able to resume a completely normal routine? 128 In the foregoing case, what if patient C is a professional mountain climber? The initial appeal of allocating ELTs based on medical criteria diminishes when medical judgments must discriminate among patients competing for the same scarce resource; yet patient comparisons are at the heart of the ELT allocation dilemma.

Another problem with allocating ELTs on the basis of medical criteria is that there may be a difference of opinion among physicians about which patients should receive the ELTs. Patients considered ineligible by one doctor or group of doctors might find another doctor or group who would disagree; in an allocation system based on medical judgment, it is difficult to ascertain which opinion would determine whether the patient received the ELT. For example, in one study in the United Kingdom, 25 nephrologists were asked to pick 30 out of 40 patients, on the basis of ostensibly medical criteria, to be treated for kidney disease. Only 13 of the 40 patients were selected for treatment by all of the doctors, and no patient was rejected by all. 129 The problem of physician disagreement might be overcome by devising rigid, pre-established medical standards for allocating ELTs, but these standards might be too inflexible to accommodate the disease variations that might be encountered. 130

Additionally, there is the danger that, in the guise of allocating ELTs on the basis of medical criteria, physicians will select patients at least in part on the basis of unarticulated social worth comparisons. As discussed earlier, there is a tendency to prefer treating patients with whom one identifies. 131 Physicians therefore might allocate fewer ELTs

127. For a description of alternative utilitarian allocation approaches, see G. WINSLOW, supra note 10 at 63-86. Depending on how the priorities are set, a very different group of patients would receive the ELTs, with different success rates. A shift in the priority for admission to the hospital intensive care unit from the “most critical” patients to the “most salvageable,” for example, reduced the mortality rate at one hospital intensive care unit in the 1960’s from 80% to 20%, and at another hospital from 25-30% to 4-5%. See Note, supra note 11, at 655-56 & n.188.


129. See Parsons and Lock, Triage and The Patient with Renal Failure, 6 J. MED. ETHICS 173-76 (1980). One physician could not reject any of the patients on medical grounds and therefore did not complete the survey. Id. at 174.

130. For a proposal of a limited set of such standards, see infra notes 257-78 and accompanying text.

131. See supra note 102 and accompanying text.
to the poor, the elderly and the mentally and physically handicapped. While physicians might rationalize that their preferences are based on medical prognoses, they also are likely to reflect implicit—and perhaps socially unacceptable—assumptions about relative social worth.

4. EGALITARIAN APPROACHES

In contrast to the foregoing approaches, which compare patients on the basis of social worth, wealth or medical criteria, ELTs might be allocated instead on the basis of chance. The major premise underlying this approach is that, in terms of being entitled to receive an ELT, all persons should be regarded as equal. Hence this position is termed “egalitarian.”

A number of justifications have been offered in support of an egalitarian philosophy for allocating ELTs. Foremost is the notion that providing equal opportunity among contenders for ELTs preserves individual human dignity. The egalitarian view is defended further on the grounds that it: 1) avoids the practical and ethical problems created by selecting patients according to social worth; 2) prevents “favoritism, bias and influence”; 3) avoids the need for someone to make

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132. In connection with allocating intensive care, see Mulley, supra note 7, at 306: "We are led to the conclusion that physicians do discriminate in allocating intensive care resources. It appears that fewer resources are expended on the elderly, those with poorer prognoses, those with impaired functional status (particularly intellectual impairment), and those unable to fulfill their social roles. More resources are expended on those with a high probability of regaining full functional status and contributing to society.

133. Mindful of this danger, some commentators opposed to social worth allocation would attempt to place various limits on physician discretion. See, e.g., Valuing Life, supra note 45, at 208 (“Psychological and environmental factors should be kept to an absolute minimum and should be considered only when they are without doubt critically related to medical acceptability (e.g., the emotional inability to cope with the rigors of dialysis which might lead to suicide”); Katz, Process Design for Selection of Hemodialysis and Organ Transplant Recipients, 22 Buffalo L. Rev. 373, 392-415 (1973) (medical judgments must exclude consideration of race, sex, socioeconomic status, number of dependents, occupation, intelligence and psychological condition beyond minimum levels, geographic location, and age, if under 60).

134. See, e.g., G. Winslow, supra note 10, at 102; Valuing Life, supra note 45, at 212; Willard, supra note 53, at 225-26; see generally Sanders & Dukeminier, supra note 92. Calabresi and Bobbitt, however, object to random allocation by lot on the basis that it is dehumanizing. G. Calabresi & P. Bobbitt, supra note 53, at 134. (“The arbitrariness of the approach makes the losers feel helpless and depersonalized. The chance that lotteries give is a computer chance, not a human one.”)

135. See Willard, supra note 53, at 225-26; see also supra notes 88-110 and accompanying text.

difficult life-and-death choices; promotes physician-patient trust; 5) reduces the anxiety and stress of the patient and of those close to him; 6) avoids the destructive psychological effect of being rejected under a social worth approach; and finally 7) helps reduce the need for rationing since the wealthy and powerful might make additional resources available to lower the risk of not being selected.

Two allocation methods are advocated under the egalitarian approach: random allocation, such as by lottery, and first-come, first-served allocation.

a. Random allocation

One egalitarian method of allocating ELTs is to select patients at random, such as by drawing lots or by programming a computer to choose patients on a blind basis. Selection by chance is a classic solution to the problems of distributive justice. For example, in an early case addressing the analogous issue of how to choose which persons to jettison from an overcrowded life boat, U.S. v. Holmes, the circuit court recommended drawing lots as the fairest method. The Second and Fifth Circuits also have approved choice by lot as a constitutionally permissible method for allocating scarce public housing and liquor licenses.

137. See also Glover, Causing Deaths and Saving Lives, in Valuing Life, supra note 45, at 249-50.
139. Id.
140. See Glover, supra note 137, at 259-60.
142. One commentator recommends that a series of lotteries be used, each one narrowing the pool of potential recipients. See Katz, supra note 133, at 394-415. He proposes that lotteries be used in combination with patient selection based on limited medical criteria. Id.
144. Holmes, 26 F. Cas. at 367 ("[W]e can conceive of no mode so consonant both to humanity and to justice; and the occasion, we think, must be peculiar which will dispense with its exercise"). The Holmes case involved a seaman who threw passengers from a sinking longboat after their ship sunk. All non-crew male passengers in the longboat except two married men and one boy were drowned; however, all nine crewmen in the boat survived, including the defendant, who later was arrested and charged with manslaughter. The judge instructed the jury that the sailors were wrong in sacrificing passengers' lives to save their own, and the defendant was convicted and sentenced to serve six months in prison and pay a $20 fine, which later was remitted. Holmes, 26 F. Cas. at 369. The Holmes case raises the issue of whether a person may save his own life at the expense of another's, a question discussed infra in note 157.
145. See Holmes v. New York City Hous. Auth., 398 F.2d 262, 265 (2d Cir. 1968) (housing); Hornsby v. Allen, 330 F.2d 55, 56 (5th Cir. 1964) (liquor licenses). These cases also held that allocation on a first-come, first-served basis met due process requirements. See Holmes, 398 F.2d at 265; Hornsby, 330 F.2d at 56. For a discussion of the analogy between allocating ELTs and distributing licenses and welfare, see Katz, supra note 133, at 377.
b. FIFO

Another egalitarian method of allocating ELTs is to give the resource to patients on a first-come, first-serve basis, or "FIFO," after the accounting principle of "first-in, first-out."\footnote{146} In other words, the first available ELT would be given to the patient who had been waiting the longest time for it.

Some prefer FIFO over random allocation because it more closely resembles the practice generally used by hospitals and health care professionals to allocate scarce resources.\footnote{147} FIFO also is recommended on the ground that it lets the patient know more clearly the chances of getting the treatment. Under a FIFO system, the patient can be told immediately, for example, that he is tenth in line for a resource, whereas under a random allocation system the patient only would be able to calculate the odds of getting the treatment when the size of the patient pool had been established and the drawing was about to take place.\footnote{148}

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\footnote{146. FIFO is an accounting principle that values inventory on the basis that the oldest remaining items are the first to be sold. Thus, the cost of the newest remaining items of stock would be used to calculate inventory value. \textit{See} H. Finney \& H. Miller, \textit{Principles of Accounting} 192-93 (1963).}

\footnote{147. \textit{See} Note, \textit{supra} note 29, at 1341. FIFO is preferred over random allocation by the author of the 1969 \textit{Columbia Law Review} note, but the author gives no reasons for this preference. \textit{See} Note, \textit{supra} note 11, at 662-63. Apparently, the federal government has determined that hospitals operating under the "Hill-Burton" program may use FIFO allocation. \textit{See} 42 C.F.R. § 124.507(b) (1984) ("If the facility fails to adopt and publish a plan [for allocating care to indigents], it will be presumed to have adopted a plan under which it provides all services of the facility without charge to all persons unable to pay who first request such services, until its annual compliance level has been met for the fiscal year").}

\footnote{148. \textit{See} Note, \textit{supra} note 29, at 1342 (FIFO "seems salutary in enabling a sick person to estimate immediately his chances of selection, so that he can try to find an opening elsewhere if he probably will not be taken"). Note that the FIFO principle would operate even under a random allocation system, if a patient who is selected to receive the ELT is not at risk of being displaced by someone chosen in a later lottery. In other words, patients selected in earlier lotteries would be "first-come" in relation to patients in later lotteries. \textit{See} Valuing Life, \textit{supra} note 45, at 217. For a discussion of the displacement or "unplugging" issue, see infra notes 198-200 and accompanying text.}

One commentator claims that FIFO is preferable to random allocation because it avoids the delay required to assemble a pool of patients from which to select those who receive the resource. \textit{See} Willard, \textit{supra} note 53, at 226. But except when a pool is first assembled, this delay could be avoided under a random allocation system by holding the selection whenever a resource became available, with the pool comprised of whichever patients were waiting for the resource at the time.

Willard prefers FIFO over random allocation on the additional ground that FIFO is a process of "natural" as opposed to "artificial" chance. \textit{Id.} He also argues that random allocation creates a risk that the process will be rigged to favor a particular patient. (For example, under a supposedly random computer procedure, a computer operator might be bribed to program the computer to select a particular patient.) \textit{Id.} at 227. But there seems to be a similar risk with a FIFO
On the other hand, random allocation may be preferable to FIFO from a purely egalitarian standpoint. FIFO's preference for the first-come would tend to favor patients who obtained prompt medical attention, accurate diagnoses, referrals to the necessary specialists, and the like. These patients probably would be better off than those who showed up later in line.149

Regardless of whether random allocation or FIFO were used, the egalitarian approach is vulnerable to challenge on the ground that its basic premise—that all persons are equally entitled to ELTs—is untenable. First, even those who favor an egalitarian approach probably would concede that only those persons who were medically suited to receive the ELT should be eligible.150 But then some patients have much better prognoses than others; compare for example, an otherwise healthy 25-year old candidate for hemodialysis with a 75-year old terminal cancer patient who also is a candidate for hemodialysis. It is questionable whether these two patients are equally entitled to the ELT.151 Second, suppose that an egalitarian approach is employed only after patients have been screened on the basis of medical criteria. A host of additional allocation questions must now be addressed. Should the patients also be differentiated according to some system of medical priorities152 and, if so, how should those priorities be established? For example, should patients be placed nearer the head of the line depending on the severity of their condition, or depending on whether they are most easily saved by treatment?153 Should the objective be to save the most lives, the most number of years of life (an approach favoring the system; hospital employees might be induced to change the dates on hospital records to create a false priority for a particular patient. Willard also supports his preference for FIFO on the basis that random selection rewards vice by occasionally selecting a “bearer of socially disvalued qualities” to receive an ELT. Id. at 228. However, this also seems to be a problem with FIFO. For a discussion of the selection of nondeserving individuals through an egalitarian allocation approach, see infra note 157 and accompanying text.

149. On the premise that the poor often lack primary care physicians and go straight to the hospital for their basic medical needs, however, they might garner an earlier position in line than more wealthy patients by avoiding the time it takes to be referred from primary care physician to specialist to hospital.

150. See, e.g., The Totally Implantable Artificial Heart, supra note 21, at 142-43 (discussing allocation on the basis of medical need and history of heart disease); supra note 133, at 392-415; Valuing Life, supra note 45, at 207.

151. See Childress, supra note 10, at 557 (allocation of intensive care to neonates “by randomization or queuing unless there are major differences in their probabilities of survival”). For a poignant discussion of the doctor’s dilemma in expending scarce medical resources on the terminally ill, see Hilfiker, Allowing the Debilitated to Die: Facing Our Ethical Choices, 308 New ENG. J. Med. 716-19 (1983).

152. Such an approach could not be employed with a random allocation system unless a hierarchy of patient selection pools were formed corresponding to different levels of medical necessity.

153. See supra note 127 and accompanying text.
young), or the best quality of life (an approach that might favor, among others, those without handicaps or other medical debilities)? Although, if patients are supposed to be equally entitled to the ELT except for medically-related differences, how great is the danger that medical judgments will disguise social worth distinctions to be averted?

Even aside from medical distinctions among patients, it is difficult to accept the proposition that all persons are entitled equally to ELTs. Consider for example the following candidates:

1) The President of the United States in time of war;
2) A brilliant cancer researcher;
3) A convicted child rapist/killer awaiting execution;
4) A widow with ten children;
5) An unmarried, childless person;
6) A life-long heavy cigarette smoker who seeks treatment of lung cancer with a scarce cancer drug capable of treating other types of cancer;
7) A wealthy philanthropist willing, if given the ELT, to donate enough money to make one, ten, or a hundred more ELTs available; and
8) A wealthy philanthropist who already has donated enough money to make one, ten, or a hundred ELTs available.

A truly egalitarian allocation system would make no distinction among the persons on this list. In a lottery drawing, the President or a brilliant medical researcher would stand no better chance of being selected than anyone else, and a child rapist no less a chance of being selected. The fact that the child rapist was on death row would not affect his standing, presumably even if his execution were imminent. Although the death of a single parent would deprive his or her children of parental care and support, this would not give the parent a preference over a single, childless person. A philanthropist's offer to make additional ELTs available to save others would not give him selection priority, although if he already had consummated his pledge, he may have improved his odds because there would be more ELTs to be allocated among the same number of patients. The allocation system also would not distinguish between a patient who sought treatment for a

154. See supra note 128 and accompanying text.

155. For an elaborate plan for reducing social worth bias in an ELT allocation scheme based on medical and egalitarian selection processes, see Katz, supra note 133, at 392-415.

156. See, e.g., Inmate Refuses Surgery, Wash. Post, Apr. 5, 1983, at B7, col. 5 (man sentenced to die in electric chair for fatally beating elderly woman, refuses triple-bypass heart surgery a second time after it was recommended by doctors). In fact, under current constitutional interpretations, prison inmates are more entitled to ELTs than law-abiding citizens, since failure to receive the ELT would be regarded as unconstitutional cruel and unusual punishment. See, e.g., Youngberg v. Romeo, 457 U.S. 307 (1982); Estelle v. Gamble, 429 U.S. 97 (1976).
condition that he was in some sense responsible for, such as drug addiction or lung cancer caused by smoking, and a patient in need of treatment for a more involuntary affliction.

These and similar examples profoundly challenge the assumptions underlying a truly egalitarian system of allocating ELTs. At the least, the examples suggest that some outcomes of this system would be highly unacceptable to society.157

Recognizing that a pure egalitarian allocation system could yield undesirable results in extreme cases, commentators who nonetheless favor the overall approach attempt to avoid the more extreme cases that might arise. Most would make an exception, for example, for a head of state,158 although several suggest that this would only be called for in wartime.159 One commentator acknowledges the need to avoid the extreme cases, but admits that he knows of no practical method for doing so.160 Still another would permit exceptions, but only if they were so compelling that we would be willing to take resources away from persons who already had received them, such as disconnecting someone’s artificial heart.161 It is noteworthy that the exceptions discussed in the literature all are aimed at assuring that exceptionally im-

157. One commentator states that egalitarian allocation “would reward socially disvalued qualities by giving their bearers the same special medical care opportunities as those received by the bearer of socially valued qualities.” Shatin, supra note 90, at 100.

Additional problems would arise if the pool of potential ELT recipients included the person making the allocation decision. Cf. Annas, Allocation of Artificial Hearts in the Year 2002: Minerva v. National Health Agency, 3 AM. J. L. & MED. 59 (1977) (hypothetical Supreme Court decision upholding regulations for allocating artificial hearts, in which the five justices in majority had all received artificial hearts under the allocation regulations). This topic is related to the issue of justification: whether another’s life may be taken to save one’s own. See, e.g., Regina v. Dudley & Stephens, 14 Q.B.D. 273 (1884) (upholding jury conviction of three crewmen in lifeboat who killed and ate fourth crewman, a sick boy, to avoid starvation; the Crown commuted the death sentence to six months imprisonment); U.S. v. Holmes, 26 F. Cas. 360 (E.D. Pa. 1842) (No. 15,383) (crewman convicted of manslaughter for throwing male passengers overboard to prevent lifeboat from floundering); Fuller, The Case of the Speluncian Explorers, 62 HARV. L. REv. 616-45 (1949) (opinion in hypothetical case of explorers who, to save themselves, kill and eat one of their number, chosen by lot but unwilling to die). For a discussion of the relevance of justification in allocating ELTs, see Note, supra note 11, at 627-28.

158. See, e.g., G. WINSLOW, supra note 10, at 77-78. Winslow states that an exception for the President of the United States might be justified under the utilitarian principle of enabling a person to fulfill his responsibilities to dependents. Id. On this basis, however, an exception would presumably be in order for all family breadwinners, as well as for the single parent in the textual example; Note, supra note 11, at 663.

159. See, e.g., VALUING LIFE, supra note 45, at 217-18; Glover, supra note 137, at 252-53. Glover uses the example of Churchill in 1940, implying that an exception for the head of state in war time should be made only when it appears that the war is being lost.

160. See Glover, supra note 137, at 254.

161. See VALUING LIFE, supra note 45, at 217-18. This position conflicts with the assumption that a patient will not be forced to forfeit an ELT once it has been allocated to him. See, e.g., G. WINSLOW, supra note 10, at 147; infra notes 194-96 and accompanying text.
important persons receive an ELT rather than basing allocation strictly on chance or FIFO; they do not address the other extreme in which one might want to assure, for example, that a child rapist did not receive the resource over more deserving persons.

In any event, once exceptions to egalitarian allocation are permitted, it is difficult to draw the line at just the extreme cases. It may be imperative to allocate an ELT to the President of the United States in a wartime crisis, but then it may also be important to allocate ELTs to the Joint Chiefs of Staff, to scientists working on critical war projects (such as the atomic bomb during World War II), to talented field commanders, and so on. From this perspective, the distinctions between the President and the average man that appear to justify a preference for the President in an otherwise egalitarian system resolve themselves into differences of degree rather than kind; the President may be more worthy of the ELT than anyone else, but then the Joint Chiefs of Staff are more worthy than anyone else besides the President, and so on down the line past the brilliant cancer researchers to the child rapists. In short, once the principle is accepted that there should be differences in the degree of entitlement to ELTs, the system becomes one based on social utility comparisons, with all of the drawbacks discussed earlier. However, the alternative of a strict egalitarian approach seems equally untenable.

5. "ARESPONSIBLE" ALLOCATION

Instead of focusing on the outcome of rationing decisions, some commentators emphasize the process by which rationing decisions

162. See supra notes 88-110 and accompanying text.
163. To avoid the deaths of persons generally agreed to be worth saving, one alternative might be to allocate a certain number of ELTs in an egalitarian fashion, but allow those who were not selected in the initial allocation to compete for additional ELTs. All persons would have the same initial opportunity to obtain the resource through the egalitarian allocation process; presumably persons with high social utility qualifications would be allocated the additional resources, while those with negative qualifications would be allowed to die. One method of effectuating this approach would be through a modified market mechanism; a certain number of ELTs would be allocated randomly or on the FIFO principle, while others could be purchased by the wealthy and those who, by virtue of their social utility appeal, could raise enough money through friends, relatives and charity. Another method would resemble the hotel practice of saving a few rooms for unexpected V.I.P.'s: the bulk of available ELTs would be allocated on an egalitarian basis, while a few could be reserved for particularly worthy individuals. The former alternative has the drawbacks of wealth-based allocation. See supra notes 111-22 and accompanying text. The latter raises the question of whether to allow ELTs to go unused if somebody especially worthwhile fails to turn up, while other patients die. It also presents the problems of how to choose who gets the V.I.P. resources, problems similar to those created by social utility allocation. Both alternatives also share the deficiency that highly undesirable individuals may be chosen to receive the ELT in the initial random drawing. See supra note 156 and accompanying text.
should be made. One such viewpoint recommends that the allocation process be concealed from public view. On the principle of "do it but don't tell us," ELTs would be allocated inconspicuously by private rather than by public decision-making. In its most extreme form, selection standards would be unarticulated; no explanation of reasons would be announced; and the decision-makers would be publicly unaccountable for their actions—hence the term "responsible allocation."

In particular, government involvement would be avoided. In the absence of state action, allocation largely would be exempt from due process and equal protection requirements. This would remove much of the allocation process from judicial scrutiny.

The lack of government involvement in ELT allocation, it is argued, would help preserve the notion of the sanctity of human life: "There is the spectacle of government (under judicial mandate, no less) openly renouncing the widely held belief in the sanctity of human life, acknowledging for all to see that society is unwilling to expend the funds necessary to obviate the scarcity that causes the allocative problem." By maintaining the fiction that life is sacrosanct whatever the cost, responsible allocation also might reduce pressures on society to "overspend" on ELTs: "The possible result [of public allocation] would be a subtle form of institutional blackmail, inducing society to spend more resources in this area than it might otherwise choose."

164. See Blumstein, supra note 110, at 1400; Havighurst, supra note 31, at 142-45. Blumstein's article addresses rationing of all medical care, rather than ELTs in particular.

165. See G. Calabresi & P. Bobbitt, supra note 53, at 57; Havighurst, supra note 31, at 157 ("Not only would [a requirement of standards and stated findings] gravely interfere with medical practice, but it would also require both explicit ordering of sensitive priorities and overt interpersonal comparisons, which are bound to have significant demoralizing effects in an egalitarian democratic society" (footnote omitted)). Calabresi and Bobbitt discuss the advisability of having ELTs and similar allocation decisions, which they term "tragic choices," made by unaccountable decision-making bodies resembling juries. See G. Calabresi & P. Bobbitt, supra, at 53-79. But potential jurors are examined and may be challenged before trial to avoid bias, see, e.g., 28 U.S.C. § 1870 (1982); Fed. R. Crim. P. 24; the standards for juries to apply in reaching a verdict are carefully articulated through judges' instructions, see, e.g., Fed. R. Civil P. 51; Fed. R. Crim. P. 30; and their decisions are subject to preemption and reversal by the courts, see, e.g., Fed. R. Civil P. 50 (directed verdicts); Fed. R. Crim. P. 29 (judgments of acquittal); Fed. R. Civil P. 50 (judgments notwithstanding the verdict) and to appellate review.

166. For the discussion of state action, see supra note 110.

167. One commentator argues that adequate judicial supervision of private allocation processor can be accomplished through malpractice actions. See Blumstein, supra note 110, at 1395-99. For a discussion of the role of malpractice in allocating ELTs, see infra notes 203, 210-14, 218-35 and accompanying text.


169. Blumstein, supra note 24, at 252. The possibility that public, collective decision-making might make society aware of the need for additional lifesaving medical resources is cited by one
The responsible approach has drawn harsh criticism. 170 This criticism has not focused so much on whether allocation should be by governmental or private bodies; there may well be sound reasons for permitting allocation decisions to be made by private bodies. Rather, the criticism aims at the thesis that these decisions should be shielded from scrutiny and review. As the critics point out, this thesis cuts against the fundamental principle that important—let alone life-and-death—decisions should be made in a publicly accountable manner. 171 It invites abuse of discretion by decision-makers. 172 The lack of accountability and the appearance of bias, it will be recalled, in large part prompted the public outcry against the allocation of hemodialysis machines by responsible bodies in the 1960’s. 173 The hemodialysis experience also illustrates the naive assumption that ELT rationing can long remain hidden from the public eye.

Nor would a responsible rationing necessarily reduce rationing costs. First, it would not convert identifiable patient lives to “cheaper” statistical lives, because the lives at stake would remain identifiable. 174 Second, a responsible decision-making would concentrate the burden of the costs of rationing on a small group of decision-makers, such as the physicians or hospital committees, rather than permitting some of the responsibility, and hence the administrative costs, to be shared by others, such as judges or lawmakers.

Moreover, unless a number of well-established programs were dismantled, ELTs will continue to be allocated at least to some extent by governmental entities such as public or Veterans Administration hospitals, or according to Medicare and Medicaid regulations. And in these circumstances, a responsible decision-making may be prohibited by law. First, it might violate the Administrative Procedure Act’s provisions against arbitrary and capricious agency action. 175 Second, and more generally, it might contravene the constitutional guarantee of due pro-

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170. See J. KATZ & A. CAPRON, supra note 22, at 195.
172. See G. CALABRESI & P. BOBBIT, supra note 53, at 64.
173. See supra notes 90-93 and accompanying text.
174. See supra notes 75-87 and accompanying text.
cess,\textsuperscript{176} although the Burger Court has narrowed the scope of this constitutional protection considerably.\textsuperscript{177} Finally, there is an unlawful breach of the health professional's duty to obtain the patient's informed consent if the success of a responsible allocation depends on

\begin{quote}
\textsuperscript{176} See, e.g., Note, supra note 170, at 1736-39. The author of the note maintains that allocation by public hospitals, which at the time comprised 38% of all hospitals, and by private hospitals under some circumstances, constitutes state action such that allocation is subject to due process requirements. \textit{Id.} While receipt of federal funds under Medicare, Medicaid or Hill-Burton programs would not necessarily make private hospitals subject to constitutional limitations, see \textit{supra} cases discussed in notes 67-73 and accompanying text, decisions on which treatments should be reimbursed under Medicare and Medicaid, for example, must meet constitutional requirements, including due process. Cf. \textit{Maher v. Roe}, 432 U.S. 464, 469-70 (1977) ("The Constitution imposes no obligation on the States . . . to pay . . . any of the medical expenses of indigents. But when a State decides to alleviate some of the hardships of poverty by providing medical care, the manner in which it dispenses benefits is subject to constitutional limitations"); \textit{Administrative Procedure Act}, 5 U.S.C. \S\S 551-59, 701-06 (1976).

\textsuperscript{177} See \textit{Blumstein}, supra note 24, at 247. The fifth and fourteenth amendments prohibit state action which deprives a person of life, liberty and property without due process of law. U.S. Const. \textit{amends.} V, XIV, \S 1. In \textit{Board of Regents v. Roth}, 408 U.S. 564, 569 (1972), the Supreme Court held that a constitutionally protected interest must be established before due process is required. Insofar as "life" is explicitly cited in the due process clauses, it would seem evident that deprivation of life by the state—including the denying of ELTs under a government program—would be subject to due process constraints. In Paul v. Davis, 424 U.S. 693, 710-12 (1976), however, the Supreme Court held that only "liberty" or "property" interests that had been recognized by state law or guaranteed by explicit provisions of \textit{The Bill of Rights} were entitled to constitutional protection. More to the point, Justice Rehnquist, writing for the majority, observed that an innocent bystander mistakenly shot or negligently run over by police, although deprived of life, would not necessarily have a claim for relief under 42 U.S.C. \S 1983, \textit{Paul}, 424 U.S. at 698. However, Justice Brennan, in his dissent, argued that Justice Rehnquist's comment must be limited to the issue of whether the accidental death of the bystander is the result of action "under color of" state law, which is a prerequisite to suit under section 1983: "There is simply no way in which the Court . . . could declare that the loss of a person's life is not an interest cognizable within the 'life' portion of the Due Process Clause." \textit{Paul}, 424 U.S. at 716-17 n.2 (Brennan, J., dissenting).

Justice Brennan's interpretation is somewhat supported by the Court's decision in \textit{Martinez v. California}, 444 U.S. 277 (1980). This was an action under 42 U.S.C. \S 1983, alleging a due process violation in the death of a woman who was murdered by a convict five months after he was paroled. The Court held that the connection between the parole board's release of the convict and the murder was too remote to constitute state action. \textit{Martinez}, 444 U.S. at 284-85. But the Court did not question the proposition that the victim's life was a cognizable interest under the due process clauses.

Insofar as \textit{Roth} suggests that interests recognized by state law are entitled to due process protection, it is noteworthy that several federal and state laws arguably recognize and protect a person's interest in obtaining an ELT, at least in some situations. See \textit{supra} notes 60-66, 71 and accompanying text. The Supreme Court abortion cases also implicitly recognize an interest in life. See \textit{Akron v. Akron Center for Reproductive Health}, 103 S. Ct. 2481, 2491-92 (1983) ("[A] state has an 'important and legitimate interest in protecting the potentiality of human life'"); \textit{Roe v. Wade}, 410 U.S. 113, 162 (1973) (same). However, the relevance of the abortion cases to ELT allocation problems is clouded by the competing interests of the mother, which are not necessarily "life" interests. See \textit{Akron}, 103 S. Ct. at 2492 ("[T]he State may proscribe abortions altogether, 'except when it is necessary to preserve the life or health of the mother'") (emphasis added); \textit{Roe}, 410 U.S. at 163-64 (same).
\end{quote}
concealing from patients the fact that an ELT is available but is being withheld. 178

6. "DUE PROCESS" ALLOCATION

In reaction to the foregoing problems, critics of responsible allocation argue that a number of procedural protections must be provided to patients in need of ELTs, 179 including impartial decision-makers; 180 some form of hearing; 181 representation of the patient; 182 a record of the proceedings; 183 written findings 184 based on established criteria; 185 and judicial review. 186

This "due process" approach, however, also raises serious practical and ethical problems. The need to allocate some ELTs quickly, especially in emergency situations, would restrict the extent to which procedural safeguards could be provided. Hearings would have to be limited in scope and length, and administrative and judicial review of

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178. See Canterbury v. Spence, 464 F.2d 772 (D.C. Cir.), cert. denied, 409 U.S. 1064 (1972). The informed consent doctrine obligates the physician to inform his patient adequately concerning the patient's course of treatment. The issue of liability generally arises when patients complain that they were harmed as a result of receiving treatment that they did not consent to because of a lack of adequate information. However, the doctrine also covers harm resulting from failure to inform the patient that treatment was available and to explain the consequences of not being treated. As Judge Robinson stated in Canterbury: "The topics importantly demanding a communication of information are the inherent and potential hazards of the proposed treatment, the alternatives to that treatment, if any, and the results likely if the patient remains untreated." Id. 464 F.2d at 787-88 (emphasis added). In Truman v. Thomas, 27 Cal. 3d 285, 611 P.2d 902, 165 Cal. Rptr. 308 (1980), for example, the California Supreme Court reversed a judgment in favor of a physician whose patient died of cervical cancer after not being given a pap smear. The court held that the physician failed to inform his patient of the risks of not being tested. Id. 27 Cal. 3d at 292-93, 611 P.2d at 906, 165 Cal. Rptr. at 312. Of particular interest is the physician's testimony that the patient declined the pap smear because it was too costly for her. Id. 27 Cal. 3d at 290, 611 P.2d at 904, 165 Cal. Rptr. at 310. This suggests that cost considerations will not support a lack of informed consent.

One of the consequences of not informing a patient that an ELT could save his life but was not being provided because of its cost is that the patient is precluded from seeking the ELT from another physician or hospital. This not only violates the informed consent doctrine but constitutes the intentional tort of abandonment. See, e.g., Spendlove v. Georges, 4 Utah 2d 392, 295 P.2d 336 (1956) (doctor liable for discharging patient prematurely without affording a reasonable opportunity to obtain alternative care); Hall v. Nagel, 139 Ohio St. 265, 39 N.E.2d 612 (1942); Annot., 57 A.L.R. 2d 432 (1958).

179. See Katz, supra note 133, at 392-415; Note, supra note 29, at 1336-42; Note, supra note 170, at 1746-49.

180. See Note, supra note 170, at 1747.

181. See id. at 1746; Note, supra note 29, at 1337.

182. See Note, supra note 170, at 1747-48; Note, supra note 29, at 1340.

183. See Note, supra note 170, at 1748-49; Note, supra note 29, at 1337.

184. See Note, supra note 170, at 1748-49; Note, supra note 29, at 1337.

185. See Katz, supra note 133, at 392-415; Note, supra note 170, at 1747.

186. See Katz, supra note 133, at 397-98; Note, supra note 29, at 1340-41.
individual cases could be afforded only if time permitted.\textsuperscript{187} Moreover, the diversity of the cases (patients of different ages, patients with different coexisting medical problems, patients seeking temporary relief versus an indefinite cure, etc.) might demand such expansive decision-making flexibility that it would be impossible to articulate or adhere to any meaningful pre-established allocation criteria.\textsuperscript{188}

An additional disadvantage with due process allocation is open competition among the patients.\textsuperscript{189} Confrontation of adversaries is a hallmark of due process,\textsuperscript{190} so that it might be expected that patients competing for the same resource would encounter one another and that the patients' legal representatives would have the right to cross-examine each other's witnesses. Because the patients would experience considerable stress and anxiety as a result of this process, these due process procedures probably would not be followed in the ELT context.\textsuperscript{191} Yet even under a modified adversarial process—such as one in which the decision-makers performed the role of devil's advocate—the stakes would be so high that bitter, destructive and prolonged proceedings could be expected.\textsuperscript{192}

Finally, any procedure that permitted patients to be assisted or represented by others would favor the wealthy, who could afford to hire top counsel and to spend substantial sums on preparing their argu-

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\item \textsuperscript{187} Recognizing the need for speedy decisions, some advocates of due process allocation admit that hearings should not be "unduly protracted," Note, supra note 170, at 1746, and that judicial review may not be available at all, see Note, supra note 29, at 1341. Time limits alone probably would make the elaborate decision-making process advocated by Katz, with administrative and judicial review at several stages, unworkable. See Katz, supra note 133, at 397-98.
\item \textsuperscript{188} One commentator, conceding that allocators would need substantial discretion in selecting allocation criteria, would allow decision-makers to ignore established criteria but would require a written explanation of any decision not made under the established criteria. Note, supra note 170, at 1747.
\item \textsuperscript{189} One set of commentators states that competition among patients would amount to "legalistic indecency." Havighurst, supra note 31, at 157.
\item \textsuperscript{191} See Note, supra note 170, at 1746 (to reduce anxiety, opportunity to confront witnesses should be afforded only at the discretion of decision-makers). While an opportunity to confront and to cross-examine witnesses is a traditional aspect of procedural due process, the Supreme Court has stated that due process requirements must remain flexible. See Greenholtz v. Nebraska Penal Inmates, 442 U.S. 1, 13 (1979); Mathews v. Eldridge, 424 U.S. 319, 334-35 (1976). Accordingly, limitations on the opportunity to confront witnesses would not necessarily be unconstitutional. Privacy considerations might also preclude such confrontations. See Note, supra note 170, at 1746-47 (hearings should be closed to protect privacy); cf. Head v. Colloton, 331 N.W.2d 870 (Iowa 1983) (revealing identity of unwilling bone marrow transplant donor to attorney for leukemia victim or to court would violate unwilling donor's right to privacy).
\item \textsuperscript{192} One commentator suggests that the hearing process could be collegial, with the patient's representative bound to disclose facts unfavorable to the patient. See Note, supra note 170, at 1748 n.69.
\end{itemize}
ments. To avoid this, patients instead might be denied representation, but they then would be forced to participate personally in the allocation proceedings or forego any opportunity to present their case. And as noted, direct involvement by the patients would be extremely stressful, in addition to being unfair to those who were too ill to participate effectively.

Accepting the foregoing objections, the advocates of the due process approach propose severe limitations on customary due process safeguards. The major proponent of due process in ELT allocation, for example, recommends that the decision-makers be given discretion to limit the length and scope of the hearing; require the patient to be represented by a non-legal advocate such as a social worker; preclude confrontation of witnesses; close the proceedings; and reach decisions without prior decision-making guidelines, so long as the actual basis of the decision is disclosed. Furthermore, judicial review would not necessarily be available.

These limitations might well give no more than an illusion of due process to arbitrary decision-making. More importantly, they reduce the ability of the rationing mechanism to legitimize the rationing outcome. Less-than-full procedural safeguards may suffice for some public decision-making but, as demonstrated by capital punishment and euthanasia cases, they are inadequate when it comes to decisions to cause or to allow preventable death. Finally, regardless of how complete the procedural protections afforded patients are, due process is only process; the choice of patients to receive treatment still must be based on some substantive criterion. If this criterion is not inherently fair, its implementation through "fair" procedures will not make it so.

7. NONALLOCATION

One further alternative might be to give ELTs to no one. The rationale would be that, if all cannot have them, and there is no satisfactory method of deciding who should have them, no one should have them. At first, the adoption of this proposal might seem unthinkable, since it

193. See the discussion of wealth-based ELT allocation supra notes 111-22 and accompanying text.
194. See Note, supra note 170, at 1746-49.
196. "The Court . . . has recognized that the qualitative difference of death from all other punishments requires a correspondingly greater degree of scrutiny of the capital sentencing determination. In ensuring that the death penalty is not meted out arbitrarily or capriciously, the Court's principal concern has been . . . with the procedure by which the State imposes the death sentence. . . ." California v. Ramos, 103 S.Ct. 3446, 3451 (1983) (footnote omitted) (emphasis in original). On euthanasia, see cases cited supra note 43.
entails a deliberate decision to abandon lives that could be saved. But this alternative actually was adopted by at least one hospital during the hemodialysis crisis of the 1960s: unable to provide free treatments to all in need, it discontinued its dialysis program rather than treat only those able to pay. The extreme action taken by this hospital reflects at least in part the harsh implications of rationing—in this case rationing on the basis of price—for health care providers.

8. UNPLUGGING

A final predicament would accompany any allocation system based on patient comparisons: If the ELT were one that the patient had to be maintained on to survive—such as an artificial heart—could it be taken away from one patient and given to a later-arriving patient who scored higher on the relevant comparative scales? Under a social utility approach based on past performance, for example, a patient who received an ELT because he once risked his life to save another’s might be subject to displacement by a patient who had saved a dozen lives. Similarly, in a system based on future performance, a person who later committed a crime, or a President defeated in the next election, might be deemed to forfeit the ELT. And in a system based on medical

197. See Note, supra note 11, at 653. The 1980 decision by the trustees of the Massachusetts General Hospital not to initiate a program to perform six heart transplants a year represents another instance of a nonallocation approach. See supra note 20 and accompanying text. The trustees’ decision was based on the cost of the procedure and on the recognition that six transplants a year would not have any real impact on the problem of heart disease. Leaf, supra note 20, at 1087-88.

A non-allocation approach has been advanced by Cahn to deal with the lifeboat-type situation in which some people must be thrown overboard or the boat will capsize and all will drown. His theory is that no one should be chosen to live or die, even if this means that all die. See E. CAHN, THE MORAL DECISION 71 (1955). The lifeboat situation differs from the problem of allocating ELTs in important respects, however. First, it presents an example of “technological” rather than “economic” scarcity; no amount of funds will increase the seaworthiness of the boat. Second, since the survivors presumably would have to kill to save themselves, they would be engaging in an act of commission rather than an act of omission. Rationing ELTs more closely resembles an act of omission, because the lack of medical intervention permits the patient’s disease to result in death (although a rationing scheme in which patients could be taken off of a life-sustaining resource, for example if they committed a crime or if a more deserving candidate appeared, would entail acts of commission; see infra notes 198-200 and accompanying text). For a discussion of omission versus commission in the context of allocating ELTs, see Note, supra note 11, at 625-28.

Cahn does not actually intend that all in the lifeboat should die; rather, he hopes that volunteers will throw themselves overboard so that the others may live. See E. CAHN, supra, at 71. In this way, those on the lifeboat would avoid having to kill, and the volunteers would be ennobled. But Cahn’s model has the paradoxical result that those morally most worthy of living—the selfless volunteers—would inevitably die, either by suicide or by drowning with the others.

198. See VALUING LIFE, supra note 45, at 217-18 (patient on life-sustaining ELT subject to replacement by President in time of war).

199. See supra note 88 and accompanying text.
judgment, the ELT might be switched from one patient to another who was medically more qualified (e.g., had a better long-term prognosis). Nothing inherent in the allocation approaches seems to preclude "un-plugging," yet it raises a number of difficult legal and ethical questions.  

III. THE JUDICIAL RESPONSE TO ELT RATIONING

As described in Section I, any method for rationing ELTs would possess such formidable shortcomings that it is at least questionable that the costs of rationing could be decreased below the cost of providing treatment to all in need. Nevertheless, cost containment concerns may lead to attempts to ration. In a number of circumstances, these efforts can be expected to be challenged in the courts. The following discussion therefore will explore the contexts in which litigation over cost-based rationing might arise, and will provide guidelines for judicial decision-making.

Initially, however, the thesis that judicial involvement in ELT rationing is likely to occur might be questioned because no known lawsuits were brought in connection with the rationing of dialysis treatments in the 1960's and early 1970's. It could have been expected that at least some ELT litigation would have occurred, as it is generally accepted that a large number of patients died as a result of not receiving treatment.  

Several factors, however, explain the lack of rationing cases during the dialysis crisis. First, patients or their survivors might not have been in a position to sue. Patients denied treatment tended to be older, poorer, less powerful and less well-educated than those who were dialyzed. Therefore, they were less likely to be aware of legal remedies, and less able to pursue them. In regard to the absence of malpractice suits, for instance, the poor seldom pursue malpractice remedies because the bar is reluctant to represent them due to the small size of their recoveries (in terms of lost earning capacity); because under state welfare laws, welfare recipients must turn over their recoveries to the state; and because the poor may have lower expectations of what constitutes

200. See G. Winslow, supra note 10, at 149 ("Once treatment had begun, legitimate expectations would be established, and no one would advocate having an artificial heart recipient enter each new lottery to see if the device should be retained or relinquished"). See also Note, supra note 11, at 624-27 (discussing whether replacing patient on ELT is murder).

201. See supra note 38.

proper medical care. Indeed, many who died from the lack of dialysis treatment probably did not receive any basic medical care and therefore never reached the point where they actually were rejected for dialysis.

Second, and no doubt in part because of their lack of education, patients denied dialysis for reasons of cost simply may have been unaware that their lives might have been saved. For example, they may not have known that dialysis existed, or they may have been given the misimpression that there were overriding medical reasons for not being given treatment.

Finally, assuming that well-informed patients actually investigated the possibility of suit, they may have been discouraged by the novelty of their legal argument and by the lack of favorable judicial precedents. During much of the dialysis crisis many physicians regarded the dialysis technique as experimental. Patients may have been counselled against bringing suit on the grounds that the courts were unlikely to regard dialysis as an established therapeutic procedure, and that judges were virtually certain to hold that a patient was not entitled by law to an experimental treatment. Prospective plaintiffs also may have been deterred by cases holding that physicians and hospitals were under no absolute duty to provide treatment to all in need.

While the victims of modern ELT rationing are likely to resemble those who were denied dialysis thirty years ago, and therefore are likely to be poorly situated to sue, the circumstances that would surround widespread ELT rationing today are significantly different. Recent trends in malpractice liability improve the chances of an outcome in the

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204. See generally Securing Access to Health Care, supra note 1, at 59-118.
205. Physicians in the United Kingdom, where the National Health Service rations ELTs, are reported to tell patients that there is nothing that can be done for them medically when they are in fact unlikely to receive treatment primarily because of cost. See H. Aaron & W. Schwartz, supra note 9, at 101. This practice arguably would violate informed consent requirements in the United States, see supra note 178 and accompanying text, but might be difficult to detect.
206. See supra note 38.
plaintiff's favor. For example, courts increasingly are willing to allow juries to find malpractice where a hospital refuses to admit a patient in an emergency;\(^{210}\) as a result, the defense that the patient had not been admitted to the hospital—which in some earlier cases insulated hospitals from liability for failure to treat\(^{211}\)—may be unavailable.\(^{212}\) Similarly, the courts have eroded earlier holdings that private hospitals—as opposed to public institutions—have no duty to provide lifesaving treatment.\(^{213}\) In addition, the failure of physicians to obtain informed consent from patients is becoming an increasingly successful cause of action\(^{214}\) that could be asserted against doctors who withheld from their patients adequate knowledge of the existence of a lifesaving treatment in order to facilitate rationing. Finally, the media recently have


\(^{212}\) It is unclear whether an ELT would be deemed emergency care in all cases such that a court would recognize a statutory or common law duty to provide treatment under that principle. The meaning of the term "emergency care" is not spelled out in state emergency care statutes, and it is not entirely clear from the case law. The most extensive case discussion, in Wilmington Gen. Hosp. v. Manlove, 54 Del. 15, 174 A.2d 135, 139 (1961), defines an emergency as a situation "obviously demanding immediate attention," but notes that the fact that a patient dies as a result of failing to receive emergency treatment is merely hindsight and is not dispositive. Id. at 140. Another court has defined an "emergency condition" as one in which a person is in "imminent physical danger." Payton v. Weaver, 131 Cal. App. 3d 38, 45-46, 182 Cal. Rptr. 225, 229 (1982).

\(^{213}\) See supra cases cited note 210.

focused on rationing as an intense, newsworthy topic, and are likely to publicize any widespread limitations on treatment. This media attention probably will alert and unite rationing victims, thereby facilitating concerted legal action.

In short, if ELT rationing became widespread in the future, it is reasonable to expect that at least some legal challenges would be made. The nature of these lawsuits would depend on how the rationing system was established. An explicit rationing scheme adopted by legislative action or by an administrative agency probably would be subject to constitutional challenge. While an equal protection challenge would almost certainly be unsuccessful unless the rationing program discriminated on the basis of a suspect classification, a rationing plan that did not afford patients rudimentary procedural safeguards might be vulnerable on due process grounds. A rationing program adopted by an administrative agency without legislative authorization might also be vulnerable on the ground that it violated the agency's enabling legislation or the Administrative Procedure Act. If the Department of Health and Human Services established an ELT rationing program under Medicare, for example, a court might invalidate the program on the ground that it was inconsistent with Medicare's congressional mandate to provide "reasonable and necessary" health care to eligible patients.

Due to the visibility and political unpopularity of an explicit government ELT rationing scheme, however, ELT rationing is bound to be implemented, if at all, less overtly. The most likely scenario is that rationing will take place on an ad hoc basis or pursuant to internal, nonpublic guidelines as health care providers accommodate public cost control pressures. This suggests that legal challenges to rationing


216. See supra note 110.

217. See supra note 177.

218. See supra note 175.

219. 42 U.S.C. § 1395y(a)(1) (1982). See supra note 67. While the term "reasonable" might be read to permit rationing on the basis that it would be unreasonable to furnish expensive ELTs to all Medicare-eligible patients in need, this would run counter to court decisions that what constitutes "reasonable" care is primarily up to the attending physician. See supra note 123.

220. Recently, for example, Congress revised the Medicare reimbursement system to impose prospective limits on the amounts the federal government will pay health care providers for treating Medicare patients. See Social Security Amendments of 1983, Pub. L. No. 98-21, §§ 601-07, 97 Stat. 149, 150-72 (1983). Previously, Medicare employed a retrospective cost-based reimbursement system which permitted health care providers to recover essentially whatever they spent in treating Medicare patients. The new system reimburses health care providers at a flat rate depend-
would take one of four forms: 1) tort actions; 2) injunctions; 3) criminal prosecutions; and 4) declaratory judgments.

A. Torts

In one type of legal challenge to rationing, the survivors or next-of-kin of a patient who died as a result of ELT rationing might sue the health care provider in tort. In view of recent trends in malpractice law, a judge or jury might well find that a failure by either a private or public institution to provide an ELT, resulting in the death of the patient, constituted an intentional tort (such as abandonment); negligence (failure to exercise due care); or tortious failure to obtain the

ing on the patient's diagnosis, regardless of the treatment the patient receives. Health care providers thus have an incentive to reduce the treatment they provide each patient, since they can pocket any difference between what they are reimbursed and what they actually spend. In short, the new system encourages cost-savings, including savings achieved by rationing ELTs and other resources. For a description of the new payment system and a comparison with the old cost-based approach, see Office of Technology Assessment, Congress of the United States, Diagnosis Related Groups (DRGs) and the Medicare Program: Implications for Medical Technology (1983) [hereinafter cited as OTA: DRGs]; Inglehart, Medicare Begins Prospective Payment of Hospitals, 308 New Eng. J. Med. 1428 (1983). See also Editorial, Diagnosis-Related Groups, Severity of Illness, and Equitable Reimbursement Under Medicare, 251 J. A.M.A. 645 (1984); Medicare's New Limits on Hospital Payments Force Wide Cost Cuts, Wall St. J., May 2, 1984, at 1, col. 1; U.S. Issues New Rate Rules Designed to Save Money on Medicare, Wash. Post, Sept. 1, 1983, at A3, col. 6.

221. See supra notes 210-213 and accompanying text.

222. Under the doctrine of abandonment, a doctor or hospital may be liable if a patient is detrimentally affected by being refused treatment or by being discharged prematurely. See Hall v. Nagel, 139 Ohio St. 265, 39 N.E.2d 612 (1942); Spendlove v. Georges, 4 Utah 2d 392, 295 P.2d 336 (1956); Annot., 57 A.L.R. 2d 432 (1958). Abandonment might seem an attractive legal theory to plaintiffs since the courts reject the defense that refusal to treat is justified by the patient's inability to pay. See Meiselman v. Crown Heights Hosp., 283 N.Y. 389, 34 N.E.2d 367 (1941) (hospital liable for injuries to plaintiff after discharging him prematurely due to inability to pay); Becker v. Janinski, 27 Abb. N. Cas. 45, 15 N.Y.S. 675 (1891) (jury instructed that physician owes indigent patient same degree of care required in case of rich patient); Ricks v. Budge, 9 I Utah 307, 64 P.2d 208 (1937) (physician refused to continue treatment when patient was unable to pay old bills). The courts likewise may refuse to allow the defendant to assert the costliness of an ELT as a justification for failing to provide lifesaving treatment.

223. The standard of care generally applicable to doctors and hospitals is to exercise that degree of care customarily exercised by members of their profession or by other, similar institutions. See W. Prosser, Handbook of the Law of Torts 162-64 (4th ed. 1971). This suggests that an attack on rationing based on negligence would be confined to the denial of ELTs that customarily were furnished patients. See, e.g., Hall v. Ferry, 235 F. Supp. 821, 826-27 (E.D. Va. 1964) (physician must adopt "those techniques which have become standard in his line of practice"). Newly introduced ELTs might not be deemed to be customarily provided, and therefore their denial would not be culpable. See infra notes 266-72 and accompanying text. A negligence standard based on custom also raises the more general question of whether cost-based rationing of ELTs could be attacked in a negligence action if rationing had become customary, even though it would be customary to furnish the treatment but for cost. Cf. Note, supra note 11, at 630 ("whenever there is an allocation problem there can be no malpractice problem").
patient's informed consent.\textsuperscript{224}

At least one recent malpractice action has been brought successfully against a hospital for failure to provide an ELT, \textit{Blake v. District of Columbia}.\textsuperscript{225} Mrs. Blake, complaining of headaches, was brought to the emergency room for D.C. General, the District of Columbia's public hospital, and died the following morning.\textsuperscript{226} Her husband sued the city, claiming that his wife's death resulted from the hospital's failure correctly to diagnose her ailment, which it had been unable to do because it lacked a CT scanner.\textsuperscript{227} The case was tried before a jury, which rendered a $240,000 verdict for Mr. Blake.\textsuperscript{228}

The lack of a CT scanner at D.C. General had resulted from cost-based rationing imposed by controls on the hospital's capital expenditures. Of the twelve major hospitals in the District of Columbia, only D.C. General did not have a CT scanner.\textsuperscript{229} The District's Health Planning and Development Agency had refused to allow the hospital to obtain a scanner in 1980 despite the fact that D.C. General had the busiest emergency room in the city.\textsuperscript{230} Not surprisingly, the hospital was permitted to lease a CT scanner following the jury verdict.\textsuperscript{231}

The standard of care based on customary practice has been rejected by a number of jurisdictions in favor of a standard based on accepted or expected practice. See, e.g., Darling v. Charleston Community Memorial Hosp., 33 Ill. 326, 211 N.E.2d 253 (1965), cert. denied, 383 U.S. 946 (1966); Blair v. Eblen, 461 S.W.2d 370 (Ky. 1970). In view of the anti-rationing ethics of the medical profession, see supra note 54, cost-based ELT rationing would be more difficult to defend in these jurisdictions.

\textsuperscript{224} See supra notes 178, 214.
\textsuperscript{227} For a description of CT scanners, see supra note 8.
\textsuperscript{228} See $240,000 Awarded in Hospital Failure to Transfer Patient, supra note 226, at B1; \textit{Down to Cases}, supra note 226, at 12.
\textsuperscript{229} See $240,000 Awarded in Hospital Failure to Transfer Patient, supra note 226, at B1 and B9.
\textsuperscript{230} D.C. General had 97,000 emergency room visits in 1979. See \textit{D.C. General to Receive Scanner}, City Hall News Times, Oct. 1981; \textit{Down to Cases}, supra note 226; $240,000 Awarded in Hospital Failure to Transfer Patient, supra note 226, at B9.
\textsuperscript{231} \textit{D.C. General to Receive Scanner}, supra note 230. Interestingly, a hospital spokesman commented that the savings generated by the scanner in eliminating the need for many exploratory surgical and other diagnostic procedures "will more than pay" for the cost of the machine. \textit{Id.}

Of particular interest in \textit{Blake} was the judge's instruction to the jury that the hospital could not be held liable for failing to have a CT scanner, but only for failing to transfer the decedent to a hospital that did. See $240,000 Awarded in Hospital Failure to Transfer Patient, supra note 226, at B1; \textit{Down to Cases}, supra note 226; telephone interview with Ronald A. Karp, Esquire, Washington, D.C., attorney for plaintiff (March 29, 1983). The problem with this instruction is that, by 1981, CT scanning had become standard medical procedure, and the lack of assured access by D.C. General patients to CT scanner diagnoses was itself negligent. The flaw in the judge's instruction would become clear if it were given in a subsequent case in which the patient was so sick that she could not be transferred. Under the \textit{Blake} instructions, the jury could not find for the plaintiff in that situation even though the consequences were identical to those in \textit{Blake}. 
Despite the Blake decision and the trend of malpractice cases in general, various factors militate against malpractice liability becoming a major roadblock to rationing. First, as noted earlier, the victims of rationing are likely to be relatively poor and uneducated. Their survivors may be unaware that the decedent's life could have been saved if he or she had been given an ELT and, even if they suspected it, they might have little access to legal remedies.

Moreover, malpractice actions complaining of ELT rationing may not be favored by the courts. Malpractice litigation generally has been criticized for generating excessive costs in the form of punitive damage awards, lawyers' fees and high insurance premiums, and it may be argued that these funds might be better devoted to increasing the supply, or reducing the costs, of ELTs.

Judicial disfavor with malpractice challenges to rationing would be reinforced because malpractice actions confront the courts with statistical rather than identifiable lives. The victims of ELT rationing are dead, and suits are brought for the benefit of their survivors. Hence, no identifiable lives (in terms of lifesaving potential) are directly at stake. While malpractice awards might deter future rationing, from the courts' perspective the lives that would be saved are unknown, unidentifiable lives at future risk. Since, as noted earlier, the impulse to save such statistical lives is relatively weak compared to the impulse to save

The jury instructions in Blake were criticized as follows in an editorial in the Wall Street Journal:

Any medical doctor familiar with CAT-scanners and emergency rooms and the fine points of head wounds would have been there explaining why it was crazy for the District's busiest emergency room not, in 1980, to have a CAT-scanner. The judge in the case ruled the jury couldn't find the hospital at fault because it lacked the equipment, only for failing to transfer Mrs. Blake to a hospital that did.

We don't wish to dispute the judge on the fine points of law. He may be right. But in one recent six-month period, eight persons died at D.C. General who might have been saved had the hospital a CAT-scanner. It seems to us that the real culprit here is a federal government that has forced upon states a system that prevents hospitals from buying the sort of equipment the doctors think the hospitals need. This was done supposedly to save money. It has cost lives. And now, thanks to Oliver Blake, it might start costing states money, which we hope will prove the straw that breaks the back of the whole notion that the way to cut medical costs is to second-guess the hardware in hospitals.

Down to Cases, supra note 222 at 12.

232. See supra notes 202-05.


234. See supra notes 75-87 and accompanying text.
identifiable lives, the courts may not feel compelled to permit malpractice judgments that increase the costs of ELTs.

B. Injunctions

An alternative form of action complaining of ELT rationing would be a suit for injunctive relief seeking to compel treatment or to prevent it from being withdrawn. As with malpractice actions, the incidence of such suits would be limited because the likely victims of rationing lack judicial access. Indeed, the disincentives to seek injunctive suits would be greater than with malpractice cases, because without the prospect of damage awards, litigation could not be financed by contingent fee arrangements. Another drawback to injunctive actions is that courts may not have enough time to intervene before the patient dies. Finally, an injunction tends to introduce the court into the health care delivery process; the court may shun the role of having to continue to monitor the patient’s case to ensure that its decree is being obeyed.

Nevertheless, injunctive actions have certain attractions. First, damages are not assessed, and therefore the process costs are likely to be lower than in malpractice cases. Aside from the cost of providing the ELT, the defendant must merely pay his or her litigation expenses, and does not face potentially large compensatory or punitive damages.

Second, and more significantly, a suit for injunctive relief would present the court with an extremely compelling opportunity to save an identifiable life. The case would be brought by or on behalf of a patient who faced imminent death absent judicial intervention. A failure to grant relief would be tantamount to a death sentence. Because judges are reluctant to authorize executions of persons convicted of heinous

235. Id.
236. See supra notes 202-205.
237. A solution to this problem would be patient organizations like the National Association of Patients on Dialysis or Transplants that could establish litigation funds and monitor provider practice to identify patients in need of legal protection.
238. For a general discussion of the advantages and disadvantages of injunctions, see Developments in the Law—Injunctions, 78 Harv. L. Rev. 994 (1965). The courts nevertheless seem willing to enjoin termination of life support to terminally or hopelessly ill patients, suggesting that their reluctance to assume a watchdog role can be overcome in compelling circumstances. See, e.g., In re Quinlan, 70 N.J. 10, 355 A.2d 647 (1976).
crimes, their sympathies are likely to be greater for an innocent victim of disease whose life can be saved by a stroke of the judge's pen.

A recent California case, Payton v. Weaver, illustrates this point. This was a suit alleging wrongful failure to provide hemodialysis to a 35-year old black female with end-stage renal disease who lived on Social Security, was addicted to drugs and had alcohol and other emotional problems. When the hospital terminated the plaintiff's hemodialysis treatments after numerous episodes in which she disrupted physicians, nurses, and other patients, she sought a writ of mandate that her treatments be resumed. The trial court refused to issue a permanent writ, but ordered the treatments continued pending appeal. The appellate court agreed with the trial judge that the plaintiff was not entitled to the treatments under California's emergency treatment law, since they were "continuing" rather than "emergency" treatments, and it was "unlikely that the Legislature intended to impose upon whatever health care facility such a patient chooses the unqualified obligation to provide continuing preventive care for the patient's lifetime." The court therefore refused to issue a permanent order that she be treated.

This refusal, however, did not end the matter for the court. First, the court stated that when a private hospital has an ELT, the hospital is sufficiently like a "public service enterprise" and it may not withhold the resource "arbitrarily, or without reasonable cause." Even in the case of a disruptive patient, the court noted, while no single hospital may be bound to provide the ELT, "it may be that there exists a collective responsibility on the part of the providers of scarce health resources in a community, enforceable through equity, to share the burden of difficult patients over time, through an appropriately devised contingency plan." Since this argument had not been made below, and the factual record was not adequate to permit judgment on this basis as a matter of law (questions such as whether the plaintiff had access to other hemodialysis facilities being unresolved), the court declined to rule for plaintiff on this ground. But the court nevertheless was unwilling to let the plaintiff die:

240. Of the 34 capital cases decided on the merits by the courts of appeals between 1976 and 1983 in which the prisoner appealed from a denial of habeas corpus relief, for example, the prisoner prevailed approximately 70% of the time. Barefoot v. Estelle, 103 S. Ct. 3383, 3405 (1983) (Marshall, J., dissenting).
244. Id. (emphasis omitted)
"What we have said on this point is analytically sufficient to dispose of Brenda's legal arguments, and thus to sustain the trial court's ruling, but the circumstances are such that we cannot responsibly avoid confronting the more fundamental question posed by Brenda's challenge. . . . what alternatives exist for assuring that Brenda does not die from lack of treatment. . . ."

The court then discussed the possibility of voluntary or involuntary conservatorships and psychiatric hospitalization, and continued the trial court's order mandating treatment while these alternatives were explored.

Significantly, the court did not address whether a patient's inability to pay, or the cost of the ELT, would constitute reasonable cause to deny treatment. The issue of payment did not arise in Payton, presumably because dialysis treatments are paid for under Medicare. However, the court's insistence that the plaintiff should not die for lack of treatment, and its willingness to spread the burden of disruptive patients over all providers, suggests that it would regard the cost as a collective responsibility that should not stand in the way of saving an identifiable life.

C. Criminal Prosecutions

A third legal context in which the rationing issue might arise is in a criminal prosecution for homicide brought against the physician or hospital administrator deemed responsible for the denial of treatment. The prospect of prosecuting conscientious men of medicine may not seem salutary. However, in one recent case, physicians were arrested for withdrawing life support from a hopelessly ill patient

247. Payton, 131 Cal. App. 3d at 50, 182 Cal. Rptr. at 231.
248. See supra note 42 and accompanying text.
249. A distinction between acts of commission and acts of omission sometimes has been drawn in the criminal law, suggesting that only the withdrawal and not the denial of treatment is murder. See Note, supra note 11, at 625-28. Numerous authorities have rejected this distinction. See, e.g., Albright v. State, 50 Ala. App. 480, 280 So. 2d 186 (1973); People v. Burden, 72 Cal. App. 3d 603, 140 Cal. Rptr. 282 (1977); Biddle v. Commonwealth, 206 Va. 14, 141 S.E.2d 710 (1965). If the physician or hospital is deemed to have a duty to provide treatment, failure to perform that duty by withholding treatment is as culpable as the act of withdrawing treatment. See Burden, 72 Cal. App. 3d at 616.
250. See In re Spring, 380 Mass. 629, 637, 405 N.E.2d 115, 121 (1980) ("Little need be said about criminal liability [for withdrawing life support at request of family]: there is precious little precedent, and what there is suggests that the doctor will be protected if he acts on a good faith judgment that is not grievously unreasonable by medical standards"). The hesitation to invoke criminal sanctions may be overcome by sufficiently egregious facts—for example, a death at a
whose family did not desire treatment to be continued.\textsuperscript{251} Criminal
prosecution would seem more likely when the patient or his family had
requested treatment, and when there was strong evidence that the pa­
tient would have survived if the ELT had been provided.

\textbf{D. Declaratory Judgments}

The fear of criminal liability has induced physicians and hospitals
to seek judicial imprimatur, in the form of a declaratory judgment,
before life support is withheld or withdrawn from hopelessly ill patients
who wish to die.\textsuperscript{252} Similar protective actions for declaratory relief
would be expected in cases of cost-based rationing; there, the courts
would be asked to determine whether an ELT lawfully could be denied
to a patient if the patient desired to live.\textsuperscript{253}

Declaratory judgment offers several advantages over other causes
of action in the ELT allocation area. First, the plaintiffs would be physi­
wealthy, for-profit institution of a patient denied an ELT solely because of his inability to pay,
where the hospital administrator ordered treatment withheld over the objection of physicians.

\textsuperscript{251} See Barber v. Superior Court of Cal., 147 Cal. App. 3d 1006, 195 Cal. Rptr. 484
(1983). In Barber, the appellate court issued a writ of prohibition dismissing a murder complaint
issued against two doctors who, at the request of the family, had withdrawn life-support equip­
ment and intravenous nourishment from a patient in an irreversible coma. The court reasoned that
the defendants could not be found guilty since they had no legal duty to provide treatment where
the benefit of treatment would be negligible in view of the patient's condition, and where the family
requested the cessation of care. \textit{Id.} 147 Cal. App. 3d at 1017-22. \textit{But cf.,} Application of President &
Directors of Georgetown College, 331 F.2d 1000, 1009 n.18 (D.C. Cir. 1964) ("Whether or not a
waiver signed by a patient \textit{in extremis} would protect the hospital from civil liability [for withdraw­
ing life support], it could not be relied on to prevent criminal prosecution").

\textsuperscript{252} See Application of President & Directors of Georgetown College, 331 F.2d 1000,
1009 n.18 (D.C. Cir. 1964); \textit{In re} Severns, 425 A.2d 156 (Del. Ch. 1980); \textit{In re} Spring, 380 Mass.
629, 405 N.E.2d 115 (1980); \textit{In re} Dinnerstein, 6 Mass. App. Ct. 466, 380 N.E.2d 134 (1978); \textit{In re}
Quinlan, 70 N.J. 10, 355 A.2d 647 (1976); \textit{In re} Storar, 52 N.Y.2d 363, 420 N.E.2d 64, 438

\textsuperscript{253} The courts differ on whether they should be consulted routinely before life support is
withdrawn. \textit{Compare In re} Quinlan, 70 N.J. 10, 50, 355 A.2d 647, 669 (1976) ("We consider that a
practice of applying to a court to confirm such decisions would generally be inappropriate, not
only because that would be a gratuitous encroachment upon the medical profession's field of com­
petence, but because it would be impossibly cumbersome") with \textit{In re} Spring, 380 Mass. 629, 639,
405 N.E.2d 115, 122 (1980) ("When a court is properly presented with the legal question, whether
treatment may be withheld, it must decide that question and not delegate it to some private person
or group") and Superintendent of Belchertown v. Saikewicz, 373 Mass. 728, 759, 370 N.E.2d 417,
435, 435 ("We do not view the judicial resolution of this most difficult and awesome question—
whether potentially life-prolonging treatment should be withheld from a person incapable of mak­
ing his own decision—as constituting a 'gratuitous encroachment' on the domain of medical ex­
pertise. Rather, such questions of life and death seem to us to require the process of detached but
passionate investigation and decision that forms the ideal on which the judicial branch of govern­
ment was created. Achieving this ideal is our responsibility and that of the lower court, and is not
to be entrusted to any other group purporting to represent the 'morality and conscience of our
society,' no matter how highly motivated or impressively constituted").
cians or hospitals, who have far greater access to the courts than rationing victims. The impetus for health care providers to protect themselves by seeking a judicial declaration would therefore offset the rationing victims' inability to sue, which limits the availability of tort and injunctive relief. Second, process costs would not be any higher for declaratory judgment actions than for suits for injunctive relief, and unlike injunctions, the court would not need to supervise compliance. In addition, and in contrast to malpractice actions, many declaratory judgments would involve identifiable lives. As noted above, courts are likely to scrutinize closely the denial of treatment to a patient who is personally before a court.

IV. GUIDELINES FOR JUDICIAL DECISION-MAKING

The preceding sections have described the most likely types of cases in which rationing controversies might be presented to the courts for review. Of course, the precise legal and factual questions facing the courts will vary from case to case and according to the type of action. In all cases, however, the courts will be called upon to decide certain key issues: 1) whether the medical resource is "lifesaving"; 2) whether the resource is denied for cost reasons, or on other grounds that might be more defensible; and, 3) if the court finds that the resource is truly lifesaving and that the resource is rationed primarily because of cost, whether the denial of the resource on grounds of cost is justified. These issues are explored to provide initial guidelines for judicial decision-making.

254. While a court might be asked to rule on a hospital rationing program in advance of a life-or-death situation with an actual patient, the more likely scenario is for the action to be brought to decide the fate of a specific individual.

255. See supra text accompanying note 240.

256. It might be argued that the courts are not well-suited to decide rationing cases, and should decline to do so where possible. For example, judges might be no less likely than medical professionals to prefer plaintiffs with whom they can identify. See supra notes 102-03 and accompanying text. The courts themselves have debated this question in the context of euthanasia cases, and the majority have concluded that the traditional detachment and truth-seeking ideals of the judiciary make it the most appropriate social institution for resolving the difficult questions presented. In any event, the courts are bound to be presented with rationing cases if rationing becomes widespread. See supra notes 201-19 and accompanying text. A likely form of action for such cases is emergency litigation in which the patient seeks a court order mandating that treatment be provided. See supra notes 236-48 and accompanying text. Under these circumstances, there is no way for a court to refuse to decide the case; dismissal of the complaint would itself be a decision to permit the patient to die. As noted earlier, this would be a difficult decision for the court to make in view of the identifiable nature of the patient's life. See supra notes 75-87, 240-48 and accompanying text.
A. Is the Resource Lifesaving?

Up to this point, I have not attempted to define in detail what is meant by a "lifesaving" medical resource. The discussion has proceeded on the assumption that it is a therapeutic medical intervention without which the patient will die imminently. But what is meant by therapeutic?

1. A MEDICAL RESOURCE IS NOT THERAPEUTIC UNLESS ITS BENEFITS TO THE SPECIFIC PATIENT IN QUESTION OUTWEIGH ITS RISKS TO THAT PATIENT

In order for the court to determine that a medical resource is lifesaving, it must establish via expert medical testimony that the benefit derived by the patient from the resource exceeds the risk. In general, the greater the benefit, the greater the risk that is acceptable.257

The benefit to be expected from a specific resource depends on the nature of the resource and on the patient's condition. On the one hand, a medical treatment may provide a complete cure. This result is approximated by a successful kidney transplant in a patient with end-stage renal disease.258 In other cases, a resource may be able to keep a patient alive indefinitely, but without eliminating the underlying disease or fully restoring the patient to health; here the amount of benefit varies according to the severity of the remaining impairment. Kidney dialysis does not cure end-stage renal disease, for example, but it does permit patients a substantial degree of life free of the encumbrances of their disease.259 On the other hand, a respirator can maintain certain vital func-

257. In Barber v. Superior Court of Cal., 147 Cal. App. 3d 1006, 195 Cal. Rptr. 484 (1983), the court expressed this equation as follows:

A more rational approach [to deciding which life-sustaining treatments must be provided and when] involves the determination of whether the proposed treatment is proportionate or disproportionate in terms of the benefits to be gained versus the burdens caused. Thus, even if a proposed course of treatment might be extremely painful or intrusive, it would still be proportionate treatment if the prognosis was for complete cure or significant improvement in the patient's condition. On the other hand, a treatment course which is only minimally painful or intrusive may nonetheless be considered disproportionate to the potential benefits if the prognosis is virtually hopeless for any significant improvement in condition.

Barber, 147 Cal. App. 3d at 1020.

258. The cure is incomplete in that the patient may have to take immunosuppressant drugs for the rest of his life. See Terasaki, Improving Success Rates of Kidney Transplantation, 250 J. A.M.A. 1065, 1068 (1983).

259. See Hearings on National Health Insurance, supra note 40, at 1538 (testimony of Shep Glazier) ("Kidney disease is unique because unlike other terminal diseases, for all practical purposes the hemodialysis patient can live a relatively normal life. As long as we get our treatments, we can continue to be productive members of society, pay our taxes, and circulate our money back into the economy of the country").
tions, but cannot restore consciousness to an irreversibly comatose patient.\textsuperscript{260}

Another element of benefit is the likelihood that the treatment will succeed. Few if any medical treatments have a one hundred percent chance of success. The greater the chance of success, the greater the benefit of the treatment.

It should be noted that the relevant benefit is \textit{medical benefit to the patient in question}. In order to prevent the sanctioning of social worth rationing,\textsuperscript{261} the benefit that might accrue to the patient's family or to society in general from providing the resource to the patient should not be considered as part of the court's analysis.

On the other side of the risk/benefit equation is the amount of risk that the treatment presents. Again, few if any medical treatments are completely without risk. The degree of risk depends on how great the chance that complications will arise, and how severe they would be.\textsuperscript{262} For example, a medical procedure might be so dangerous that there was a 50-50 chance that the patient would die sooner if treated than if not treated. Another type of risk that must be taken into account is the frequency and severity of side effects. Certain chemotherapeutic agents are highly toxic and produce extremely unpleasant reactions in many patients.\textsuperscript{263} Treatment with these agents legitimately might be foregone for reasons unrelated to their cost.

Precise assessment of the benefit or risk likely to result from a medical resource is a highly technical skill beyond the expertise of most judges and juries. In determining whether the benefits exceed the risks in rationing cases, however, the courts can rely on the opinions of medical experts without having to perform the risk/benefit analyses themselves.\textsuperscript{264}


\textsuperscript{261}. \textit{See} \textit{Barber v. Superior Court of Cal.}, 147 Cal. App. 3d 1006, 1020, 195 Cal. Rptr. 484, 491 (1983) ("... proportionate treatment is that which, in the view of the patient, has at least a reasonable chance of providing benefits to the patient, which benefits outweigh the burdens attendant to the treatment") (emphasis added). For a discussion of rationing on the basis of social worth, see \textit{supra} notes 88-110 and accompanying text.

\textsuperscript{262}. \textit{See} \textit{Barber v. Superior Court of Cal.}, 147 Cal. App. 3d 1006, 1020, 195 Cal. Rptr. 484, 491 (1983).

\textsuperscript{263}. The side effects from one of the most powerful anticancer drugs, cisplatin, include marked nausea and vomiting, cumulative renal toxicity, loss of hearing, and severe allergic-type (anaphylactic) reactions. \textit{Physicians' Desk Reference} 754-55 (J. Angel 38th ed. 1984). \textit{See} Superintendent of Belchertown v. Saikewicz, 373 Mass. 728, 732, 370 N.E.2d 417, 421 (in permitting chemotherapy to be withheld from institutionalized cancer victim, court notes that "toxic side effects of chemotherapy include pain and discomfort, depressed bone marrow, pronounced anemia, increased chance of infection, possible bladder irritation, and possible loss of hair").

\textsuperscript{264}. \textit{See}, e.g., \textit{Barber v. Superior Court of State of Cal.}, 147 Cal. App. 3d 1006, 1008, 195 Cal. Rptr. 484, 492 (1983) (describing expert testimony); \textit{In re} Spring, 373 Mass. 728, 732,
A second major characteristic of a lifesaving resource for the purposes of judicial decisionmaking in rationing cases is that the therapeutic value of the resource generally must be accepted by the medical profession. This criterion is analogous to the standard governing malpractice cases generally: malpractice is the failure to provide that degree of care generally provided by or expected from the medical profession.265 There are several reasons for this consensus-type requirement in rationing cases. First, as in malpractice, before a court imposes a sanctioned, legal duty on a health care provider to furnish an ELT, the court should be satisfied that it is not merely imposing the beliefs and practices of a minority of the medical profession on the majority.266 Second, the courts must consider the process whereby medical discoveries are diffused. Even after the therapeutic value of a new resource is demonstrated, its value may not be known to practitioners.267 It will ill-suit the courts in the context of rationing cases to assume the role of educating the medical profession on the latest developments in their field. Third, it is necessary to permit the risks and benefits of a new resource to be fully evaluated. An adverse effect, for example, often will be revealed only after a prolonged period of use.268 A judicial determi-
nation that a resource is lifesaving is bound to accelerate its use; this should not happen until its risks and benefits are properly appreciated. Finally, the requirement of acceptance of a medical resource frankly is intended to be a cost-based limitation on the scope of the courts' control over rationing. Medical experts undoubtedly can envision extremely elaborate and costly methods for saving lives. To take but one example, it hardly can be doubted that the presence of a fully-staffed, completely-equipped intensive care unit in every home would cut down significantly on deaths from household accidents and domestic quarrels; yet a court could hardly find that a family practitioner's failure to provide such a facility to his patients was culpable.

Inevitably, certain potentially lifesaving medical resources do not become widely accepted because of their cost. For example, manufacturers of proprietary treatments such as drugs and medical devices abandon fledgling products upon concluding that, if they were marketed, they would not produce an adequate investment return.\textsuperscript{269} Even though the effectiveness of expensive medical procedures such as liver transplants has been established, they continue to be regarded as experimental, and therefore are not covered under third-party payment plans. This is the case, it is charged, because the Health Care Finance Administration and private medical insurance companies do not want to pay for them.\textsuperscript{270} Given sufficient public outcry, specific cases of implicit rationing can be outlawed by the legislature; this is happening with liver transplants\textsuperscript{271} and with certain commercially unattractive drugs.\textsuperscript{272}

The refusal of the courts to impose a duty on health care providers to furnish resources that are not used widely because of their cost will admittedly permit some—perhaps a great deal—of wealth-based rationing, since the rich will purchase treatments that others are not able to afford. Given the limitations on the role of the judicial function in this society, however, the remedies for this type of rationing, if any, lie with the legislatures rather than with the courts.

\textsuperscript{269} It is expected that this would become more frequent as health care cost controls such as Medicare's DRG system take effect. See \textit{supra} note 220. Congress has enacted legislation, known as the Orphan Drug Act, to subsidize manufacturers of drugs that are commercially unattractive but that are needed by a segment of the population. See \textit{Orphan Drug Act}, Pub. L. No. 97-414, 96 Stat. 2049 (1983).

\textsuperscript{270} See \textit{supra} note 23.

\textsuperscript{271} See \textit{supra} notes 64-66 and accompanying text.

\textsuperscript{272} See \textit{supra} note 269.
B. Is the Denial of the Lifesaving Resource Based on Cost?

After the court determines that a medical resource is "lifesaving", it must decide whether the refusal to provide the resource is the result of cost or of other factors. As discussed earlier, medical resources sometimes cannot be provided to all in need because of scarcity largely unrelated to their cost. While the allocation of these resources entails difficult ethical and equitable decisions, the courts cannot as a practical matter order that unavailable resources be provided to every patient with a legitimate medical need. Similarly, in some cases, a resource may be withheld from a patient because it is believed that the benefits do not sufficiently outweigh the risks. For instance, a patient may decide to forego extremely painful treatments if the degree and likelihood of success is small.

In order to determine if the denial of the lifesaving resource is based on cost, the court should determine whether, under generally accepted medical practice, the resource would be provided to the patient but for its cost. If so, then the withholding of the resource is cost-based rationing. One appealing characteristic of this test is that it obviates the need for the plaintiff to produce evidence of the health care provider's intent in denying the resource, an evidentiary burden that could prove impossible. Instead, the plaintiffs can rely on expert testimony to establish that the treatment would be called for under generally accepted medical practice. The health care provider, of course, could produce rebuttal evidence that cost was not the actual basis for denying treatment.

C. Is the Denial of the Resource on Grounds of Cost Justified?

The final inquiry for the courts is whether the case presents circumstances that justify the denial of an ELT on the basis of its cost. Several possibilities can be suggested.

1. AN ELT CAN BE DENIED ON GROUNDS OF COST IF A CHEAPER ALTERNATIVE CAN BE PROVIDED THAT IS THERAPEUTICALLY EQUIVALENT

This guideline is designed to cover situations in which the patient desires a particular lifesaving resource but a cheaper lifesaving alternative is available. The alternative would have to present approximately the same risk/benefit ratio as the ELT. In these circumstances, the health care provider would be justified in substituting the cheaper alter-

273. See supra notes 10-21 and accompanying text.
native despite the patient's wishes, and a court should not impose a duty to supply the more expensive treatment.\(^{274}\)

2. AN ELT CAN BE DENIED ON GROUNDS OF COST TO A PATIENT IN THE FINAL STAGES OF A TERMINAL ILLNESS IF THE ELT WILL NOT INCREASE THE PATIENT'S LIFESPAN AND IS NOT REQUIRED FOR THE PATIENT'S COMFORT

In certain cases, a patient may be in the final stages of an irreversible disease and suffer a severe setback or be stricken with an additional life-threatening condition.\(^{275}\) Even if a treatment is available that would reverse the setback or remedy the new problem, a court should not order that it be provided (even if it is withheld on grounds of cost) as long as it would not increase the patient's lifespan. In this case, even though the benefits of treatment might outweigh the risks, the benefits

\(^{274}\) At present, the techniques of cost/effectiveness analysis are primitive. Serious limitations include the lack of cost and effectiveness data on medical resources, and the absence of any coordinated technology assessment capability. See OFFICE OF TECHNOLOGY ASSESSMENT, CONGRESS OF THE UNITED STATES, STRATEGIES FOR MEDICAL TECHNOLOGY ASSESSMENTS 91-102 (1982). In 1978, Congress authorized the establishment of the National Center for Health Care Technology Assessment within the Department of Health and Human Services (DHHS), but withdrew funding in 1981 following industry criticism that the activities of the center—particularly the identification of technologies in need of assessment—curtailed innovation. See Perry, The Brief Life of the National Center for Health Care Technology, 307 NEW ENG. J. MED. 1095 (1982). Since then, only limited assessment activities have been carried out by DHHS, which largely delegated the task to the small Office of Health Technology Assessment in the National Center for Health Services Research (which in 1983, had only four professionals). See Iglehart, Another Chance for Technology Assessment, 309 NEW ENG. J. MED. 509, 510 (1983).

Critics of legal remedies for rationing may raise the current limitations on technology assessment as an objection to judicial interference in health care allocation, arguing that the courts will lack adequate cost/effectiveness data on which to base their decisions. Yet, newly implemented cost containment programs such as prospective payment plans, whereby providers are reimbursed a preset amount per illness regardless of the treatments actually provided the patient, already require that cost/effectiveness determinations be made by physicians and hospitals. See Iglehart, supra, at 512. In response, a number of private organizations, including the American Medical Association, are engaging in their own technology assessment projects. See, e.g., Editorial, The American Medical Association's Diagnostic and Therapeutic Assessment Program, 250 J. A.M.A. 387 (1983). In addition, Congress is reconsidering the establishment of a major federal assessment office. See S.2504, 98th Cong., 2d Sess. (1984). Judicial oversight of rationing merely underscores the existing incentives to improve cost/effectiveness analytical techniques.

275. A terminal disease can be defined as one "in which, on the basis of the best available diagnostic criteria and in light of available therapies, a reasonable estimation can be made prospectively and with a high probability that a person will die within a relatively short time." Bayer, Callahan, Fletcher, Hodgson, Jennings, Monses, Sievert & Vetich, The Care of the Terminally Ill: Morality and Economics, 309 NEW ENG. J. MED. 1490, 1491 (1983). See also FOREGOING LIFE-SUSTAINING TREATMENT, supra note 43, at 26 (defining terminal patient as one "whose illness is likely to cause death within what is to that person a very short time").
would be negligible. An exception would be when the ELT is required for the patient's comfort during the remaining period of his illness. In that case, the court may order that the ELT be provided.

3. AN ELT CAN BE DENIED ON GROUNDS OF COST TO A PATIENT WHOSE QUALITY OF LIFE IS BELOW THAT OF MINIMAL COGNITIVE ABILITY

A patient who is irreversibly comatose or in a persistent vegetative state may be denied an ELT on grounds of cost. In these cases, the patient has no hope of recovering any significant cognitive functions, and the quality of his life can be presumed to be so minimal that no appreciable benefit would result from expensive lifesaving efforts.

276. "A physician has no duty to continue treatment, once it has proved to be ineffective." Barber v. Superior Court of Cal., 147 Cal. App. 3d 1006, 1018, 195 Cal. Rptr. 484, 491 (1983).


278. See In re Quinlan, 70 N.J. 10, 51, 355 A.2d 647, 669 (1976) ("the focal point of decision should be the prognosis as to the reasonable possibility of return to cognitive and sapient life, as distinguished from the forced continuance of that biological vegetative existence "). A patient in a persistent vegetative state is not completely "brain dead," as the court in Quinlan, quoting an expert medical witness, noted:

We have an internal vegetative regulation which controls body temperature which controls breathing, which controls to a considerable degree blood pressure, which controls to some degree heart rate, which controls chewing, swallowing and which controls sleeping and waking. We have a more highly developed brain which is uniquely human which controls our relation to the outside world, our capacity to talk, to see, to feel, to sing, to think. Brain death necessarily must mean the death of both of these functions of the brain, vegetative and the sapient. Therefore, the presence of any function which is regulated or governed or controlled by the deeper parts of the brain which in laymen's terms might be considered purely vegetative would mean that the brain is not biologically dead.

Id. 70 N.J. at 24, 355 A.2d at 654-55.

In a landmark article providing guidelines for physicians on when to withhold treatment from hopelessly ill patients, a group of medical experts has advised that brain dead patients and those in a persistent vegetative state can be denied all treatment. Wanzer, supra note 277, at 958. In connection with the latter type of patient, the authors state:

In this state the neocortex is largely and irreversibly destroyed, although some brainstem functions persist. When this neurologic condition has been established with a high degree of medical certainty and has been carefully documented, it is morally justifiable to withhold antibiotics and artificial nutrition and hydration, as well as other forms of life-sustaining treatment, allowing the patient to die.

Id. The authors imply that treatment may be withheld at the request of a competent, hopelessly ill patient. Id. They are silent on whether or not treatment may be withheld on the grounds of cost from a competent, hopelessly ill patient who desires the treatment. They also suggest that all care, except for that necessary for the patient's comfort, may be withheld from "severely and irreversibly demented patients" and "elderly patients with permanent mild impairment of competence," but are not clear on the extent to which the wishes of the patient or his family should govern. See id. at 958-59. This author believes that, in these two categories, lifesaving care should not be denied only on the grounds of cost if the patient or his family desire the treatment.
In the foregoing three situations, the costs of not providing ELTs would appear to be small. Beyond these three exceptions, cost-based rationing would encounter the serious objections described earlier in Section II, and the costs would seem to be prohibitively high. Accordingly, if the defendant cannot persuade the court that the patient's case falls into one of these three categories, the court should order the provision of lifesaving treatment or hold the proper defendants liable for failing to furnish this care. 279

V. CONCLUSION

The notion that the health care system has a legal duty to provide ELTs in certain circumstances despite their cost will strike some as an unacceptable handicap on medical cost containment. 280 It may also entail modifications in present cost containment programs. 281 If costs are

279. The question remains: who should pay for ELTs which the courts order to be provided? It seems unfair to force these costs to be borne entirely by the health care provider who happens to be treating the patient. If the patient has health insurance—either under a public (e.g. Medicare or Medicaid) or private (e.g. Blue Cross/Blue Shield or commercial) program—it is consistent with the objective of cost-spreading that the insurer ordinarily should pay. A problem arises when the insurer has contracted with the health care provider to limit payment—for example, under the federal DRG system, to limit hospital reimbursement to a fixed amount per patient according to diagnosis regardless of the treatment actually provided. See supra note 220. In these cases, court-ordered treatment should be reimbursed according to the special provisions in the provider-insurer agreement governing excessively costly care. For example, once a cost threshold is exceeded under the federal DRG system, the federal government will pay 60% of the cost of treatment beyond the amount reimbursed under the specific DRG. See Pub. L. No. 98-21, § 601(e), 97 Stat. 157 (1983); AMERICAN MEDICAL ASSOCIATION, DRG'S AND THE PROSPECTIVE PAYMENT SYSTEM: A GUIDE FOR PHYSICIANS 10 (1983). In the absence of such excessive cost provisions, or in the event the patient is uninsured, the cost of the ELT should still not be the sole responsibility of the health care provider, since this would tend to impose a disproportionate burden on those providers, such as public and teaching hospitals, that have relatively large indigent patient populations. See Davis & Rowland, Uninsured and Underserved: Inequities in Health Care in the U.S., in 3 SECURING ACCESS TO HEALTH CARE, supra note 1, at 74. A better approach would be to join all local health care providers of the same type (e.g. hospitals, ambulatory care facilities, etc.) as nominal defendants and to allocate the costs of the ELT among them. This follows the suggestions of the court in Peyton v. Weaver, 131 Cal. App. 3d 3d 38, 182 Cal. Rptr. 225, 230 (1982), for dealing with disruptive patients on a community-wide basis. A variation on this approach is being considered in Ohio, where a commission on health care costs has recommended to the governor that indigent care cost be apportioned among all hospitals. See GOVERNOR'S COMMISSION ON OHIO HEATH CARE COSTS, FINAL REPORT 68-78 (1984).

280. See INSTITUTE OF MEDICINE, supra note 9, at 7-8; Blumstein, supra note 24, at 252; Note, supra note 29, at 1328-29.

281. The new Medicare prospective payment program, discussed supra note 220, contains two features that encourage improper ELT rationing. One is the time frame for recalibrating payment rates. Under the Social Security Amendments of 1983, Pub. L. No. 98-21, 97 Stat. 65 (1983), the classifications and weighing factors that determine reimbursement for each specific diagnosis need not be adjusted more frequently than every four years. Pub. L. No. 98-21 § 601(e), 97 Stat. 157 (1983). This has the effect of discouraging the adoption of new “cost-raising” technologies, including ELTs. See OTA: DRGs, supra note 220, at 40-41. If such a technology were adopted by a
not sufficiently reduced by these current efforts, pressure will increase for relaxation of lifesaving constraints on rationing. The two patient populations likely to bear the brunt of this pressure are the elderly and those who have a low quality of life as a result of their illness. The rationing guidelines discussed above would not permit cost-inspired withholding of treatment merely because of the age of the patient or, except in extreme cases of patients with no cognitive functions, on the basis of the quality of the patient's life. The theory of this Article is that these and other discriminations would be so fraught with practical, political, social and ethical obstacles that their costs would exceed their economic benefits.

Yet control of costs is now a dominant theme in American health care. Major experiments are being undertaken at state and federal levels to introduce cost into the calculus of medical decision-making. To the hospital, the hospital would have to absorb the extra cost during the remainder of the four-year calibration period until the reimbursement allocated for the relevant diagnosis related group could be increased. The hospital would therefore have a disincentive to adopt the new technology, despite the fact that it would save lives.

The ostensible basis for the four-year calibration period is to permit hospitals a sufficient amount of time in which to reap the rewards of cost savings. If hospitals find a way of saving money within a particular diagnosis related group, they continue to be reimbursed at the established rate for the rest of the four-year period, and thus can pocket the difference until the next recalibration. If the payment rates were readjusted more frequently, however, they could be lowered sooner to reflect the cheaper treatment; this would reduce the amount of time during which a hospital would receive a cost-savings windfall, thereby reducing the hospital's incentive for lowering costs. In short, the present system creates a conflict between the need to provide adequate incentives for cost reduction and the need to insure the rapid adoption of new lifesaving technologies, even if they add to the costs per case.

The solution would seem to be to permit upward recalibration of reimbursement rates at any time, but to limit downward recalibration to a suitable frequency—say every four years. This would enable hospitals to request increases in rates to reflect the cost of new technologies at the same time that they continued to have an appropriate incentive to reduce unnecessary costs.

The second aspect of the DRG system that encourages rationing is that hospitals have a disincentive to treat older and poorer patients covered by Medicare and Medicaid; the reimbursement rates for these patients is fixed by law, whereas the hospital can charge other patients higher fees. See OTA: DRGs, supra note 220, at 27. This could not only lead to hospital refusals to admit Medicare and Medicaid patients, but also to reduced standards of care and greater rationing by hospitals that did admit them. The latter can perhaps be prevented by enforcing quality assurance standards within health care institutions. See generally Havighurst & Blumstein, Coping with Quality/Cost Trade-Offs in Medical Care: The Role of PSROs, 70 Nw. U. L. Rev. 6 (1975). The only totally effective method for preventing the former, however, is to employ an "all-payer" system whereby maximum hospital (and ultimately physician) charges are imposed for all patients. Several states have adopted this approach, although it entails considerable administrative expense and reduces competition. See generally Gingsburgh & Sloan, Hospital Cost Shifting, 310 New Eng. J. Med. 893 (1984).

The increase in the size of the elderly population is a major factor in the increased costs of health care, in view of the direct relationship between increasing age and poorer health. See HEALTH, supra note 73, at 67.

For a system for comparing treatments based on the quality of life permitted, see supra note 128.
lifesaving imperative has now been added the cost-saving imperative. The preceding model for judicial decision-making in the area of ELT rationing is one effort to accommodate the conflict between these objectives.