1988

THE ALLOCATION OF HEALTH CARE RESOURCES IN THE UNITED STATES: THE DILEMMA OF EFFICIENCY AND EQUITY

Imagine, if you will, that we all are on a desert island, struggling to survive. Most of us cluster into a village, but a few set out for remote parts of the island, where the fishing is perhaps better. There is little rain, so drinking water is a constant problem; there is just marginally enough to keep us alive. Suddenly a rescue mission flies overhead. Using remote sensing technology, they assess our situation. They depart, then return with a large crate which they parachute to the island. We open the crate and find a tank truck filled with pure water and a message that the water is for all the people on the island. How shall we distribute the water?

There are 100 people on the island; 1,000 gallons in the tank. Specify whatever distribution you think equitable. You can favor 10 gallons per person, or more for those who work more, or most for those in positions of authority, or more (or less) for the aged or ill---you must decide how to allocate this precious resource. But now, having apparently solved your rationing dilemma, you discover that the tank has a steam engine! In order to move it around at all, you have to use water. And a new conflict---that between efficiency and equity ----becomes plain. Assuming that each gallon of water is as valuable to each person as any other gallon, the most efficient thing to do is not to use the engine at all. Let water go to those who come for it--to the able bodied who live nearby. The weak, the ill, the aged, the distant will get none, and more utility will be effected by this use of the water than by wasting some of it on the delivery truck. It would be hard to argue that justice is served, however, especially in view of the fact that the water was sent to all the people on the island; it appears that equity costs something. (1)

In a rather more complex and immediate way, our society is faced with a somewhat similar dilemma: We have a large and diverse population which requires maintenance of health and treatment of illness, the capability of providing the best and most comprehensive health care in history, and limited economic means with which to provide that care. Furthermore, our health care industry has become monumentally expensive. Over 10% of our nation's gross national product, more than $300 billion a year, is now spent on health care; faced as we have been with economic hard times, the perceived need for increased military capability, and myriad other societal problems, Americans are rallying together, banners flying and trumpets tooting, in an all-out campaign to somehow battle the monster of health-related spending to its knees.

Why are we in this fix? How did we get here? Until the first part of this century, improvements in health were largely those produced by improved sanitation, diet, working conditions, and the like. Medical treatment could provide ease or relief, but rarely a cure. Then came an intermediate period when advances in treating acute illness, advances such as antibiotics and insulin and sterile surgical technique, could really make large differences in prolonging life or restoring health. At that point the successes of medicine

were not unduly costly, and we could afford a notion of a general right of everyone to whatever modalities were available. Having conquered the infectious diseases, medical science has undertaken the degenerative diseaes, the malignant neoplasms, and the diseases of unknown cause; and the ratio between expense and benefit has become exponentially more unfavorable. (2)

In addition to the evolution of improved standards and capabilities of medical care, a variety of other factors play a part in producing our high cost of health care: the fee-for-service system which offers economic incentives to doctors and hospitals for over-utilization of services; the legal system and climate which encourages rampant malpractice claims and directly leads, through fear of liability, to the over-utilization of "protective medicine"; health insurance coverage so complete that consumers have been unconcerned about expense; the bureaucratic inefficiency of government regulation; the costly technological explosion of devices and procedures; the markedly improved access into the health care system afforded by Medicare, Medicaid, and widespread employee health insurance; the progressive increase in the numbers of elderly people in our society, who have greater health problems and require more frequent, intense, and costly medical care; the tremendous expenses of terminal care and intensive care units; the survival and prolongation of life of individuals having chronic diseases and handicaps--ranging from diabetics to babies with severe birth defects; and the self-destructive life-style choices of smoking, alcoholism, overeating, and sedentary inactivity.

If we as a society are unable financially to support all avenues that promote better health for our population, and if, in fact, there are resources we would like to use but find that they are in limited supply, we must face the issue of allocation. The basic <u>economic problem</u> is how these scarce resources may be most efficiently allocated, in the light of economic facts and predictions, in order to satisfy human needs and desires. The basic <u>ethical problem</u> is one of distributive justice: by what policies can we ensure justice in the distribution of available resources? In a responsible society both the <u>economic and ethical</u> problems must be addressed simultaneously. (3)

What we usually mean by "medical care"--the evaluation and treatment of patients' illnesses in terms of medical examinations; medical, surgical, or dental treatment; hospital services; and intensive care units--may be called "crisis-oriented medical care". We must remember that our total health care budget must pay for much more than just crisis-oriented medical care; in our pursuit of national health we must also work toward the prevention of disease, the maintenance of environmental quality, and the extension of knowledge and technology through biomedical research. The decisions of how much is to be expended on health-related programs and of how this total budget is to be distributed among these programs are <u>macroallocation</u> decisions; such decisions are made by the federal and state governments, health organizations, and private foundations.

These macroallocation decisions, which are currently made in the United States in unplanned, uncoordinated, fragmented fashion by a

variety of separate agencies, are of major significance. The macroallocation decision as to what proportion of our health care dollars will be spent on preventative medicine rather than crisis medicine requires a look at programs that might be more efficient and even cheaper but not as visible as the lives affected by crisis medicine intervention. Statistical lives are difficult to weigh against the apparently more real lives of living, presently suffering human beings. An example is the recent situation in Massachusetts, where costly heart transplant surgery has been provided at public expense while, at the same time, large cuts in aid to dependent childen have been made, threatening the welfare of larger numbers of poor children. The environmental quality concerns of control of air and water pollution coupled with assurance of heat and energy supply have tremendous impact on our present and future health. The role of health education in shaping our life-style choices regarding diet, excercise, smoking, and alcohol is critical: the fact that our nation's rate of deaths from heart attacks has decreased 35% over the past 18 years can be largely attributed to changes in diet, attention to excercise, and efforts to curtail smoking. Certain screening programs for the early detection of disease can be shown by cost-effectiveness analysis to be worth their expense. Biomedical research and technological development must be continued if we are to continue to improve our health care system and meet future challenges. Other macroallocation decisions must be made regarding the extent to which we can pay for the chronic institutional care of the aged or severely handicapped and for the institutional care of the terminally ill. The broad issues of how to allocate available funds among these programs must be approached openly and responsibly by us and by our government if we are to use our limited health-related resources efficiently and with foresight.

In employing available resources, determinations must be made as to which specific individuals shall receive them, and to what extent they shall receive them. In rationing these scarce resources, microallocation decisions, or second level decisions, are typically made by doctors and hospitals, but at times community committees and the government have been asked to make choices as to who should receive and who should not receive access to scarce medical resources. One example of such microallocation occurred in the early days of hemodialysis when a lay committee reviewed a group of medically and geographically approved candidates and from those selected (partly on the basis of such criteria as family situation, church affiliation, and social activities) who would have access to the hospital's kidney dialysis facility. The federal government, concerned with the well publicized ethical and moral dilemma posed by selecting patients for hemodialysis treatment while denying others access to treatment and therefore hastening their deaths, simply elected to provide funding for unlimited dialysis for <u>all</u> patients with renal failure. This strategy is misleading. By eliminating the scarcity of hemodialysis treatment, funding was shifted away from other areas and perhaps created other less dramatic but no less tragic scarcities elsewhere. There <u>are</u> limits, and the allocation decisions cannot be hidden or denied for long, even though any effort to openly face these rationing choices is certain to affect some people adversely and affront our humanitarian instincts. The microallocation-level decisions as to whom to provide with a limited

resource frequently pose the very real and tragic question: Who shall live when not all can live? (4)

What criteria should we as a society use to make our allocation decisions? Medicine following a disaster frequently uses a triage approach in the selection of those who will receive treatment. The injured are divided into three categories: those who have minor injuries and can wait to be treated, those who have major injuries for whom treatment would only delay death, and those who need immediate treatment in order to survive--this last category would be treated first. An example of selection on the basis of utility, or usefullness to society, was the choice made during the Northern African Campaign during World War II to use the limited supply of penicillin to treat those wounded in brothels rather than those wounded in battle in the belief that those treated for veneral disease would sooner be ready to return to battle and thus be of service to all.

Various criteria may be used in making macro- and microallocation decisions. A scarce resource may be provided: to no one if not to all; to each according to his or her means, with the price determined by the market; to each according to his or her social utility or worth as weighed by economic activity, community contributions, educational level, religious affiliation, or family status; to each according to entitlement or status as evaluated on past or likely future accomplishments; to each according to his or her medical acceptability and likelihood of receiving the most benefit from the resource; or to each according to his or her luck, as in a lottery or on a first-come, first-served basis. Any single criterion for allocation is imperfect. To totally withhold a resource if it cannot be distributed to all who need it makes the resource valueless. The prospect of allocating scarce resouces according to ability to pay brings to mind the wrenching spectacle of a rich man and a poor woman bidding against each other for life. (5) Problems also abound in any attempt to select on the basis of utility or social worth or status, in that such decisions fail to recognize the human dignity and transcendent value of every person, and in that any attempt to compare social worth depends on the biases of the judge. The allocation of a medical or health care resource may benefit many, but, because choices must be made, great suffering and even death may occur when some people cannot receive that needed service. We must examine the conflict between the values by which society determines the beneficiaries of distributions of scarcity and those humanistic moral values which prize all life and well being. (6)

In a society of unlimited access to all possible medical resources, tough medical-ethical choices need never be made as the resource would be there to satisfy every need. Commonly, scarcity is not the result of any absolute lack of a resource but rather of the decision by society that it is not prepared to forgo other goods and services--such as military defense, education, law enforcement, government bureaucracy, and social services--in order to remove the scarcity. There are other benefits that society rightly chooses to provide; therefore, there cannot be unlimited health care resources. We have never been and will never be in the enviable position of having all we need to meet all medical needs. How then do we respond

growing populaton of elderly people, who are afflicted with more chronic diseases and who have a disproportionately great need for medical care. People over 65 years of age account for about 11% of our population, but demand about 30% of our health care resources. The Medicare program of federal health insurance for people who are over 65 or disabled is attempting to use hospitals instead of physicians to reduce utilization of hospital services, by limiting payments to hospitals to a set schedule based on the diagnoses of Medicare patients cared for. For example, each time a hospital cares for an admitted Medicare patient having cholecystitis, that hospital will now be paid 92% of a national average net charge for that diagnosis, regardless of how much or how little service was provided. This program, called DRG's (Diagnosis-Related Groups), presents tough economic demands on hospitals to be cost-efficient and rewards hospitals which can minimize costs. Inefficiencies presently certainly exist in hospitals, and some luxuries and frills can be trimmed, but future Medicare cost-containment changes in the DRG's will press increasing microallocation dilemmas on hospitals and conflict with hospitals' responsibility for service. For instance, what coronary-care unit facilities, diagnostic procedures, and rehabililitation services will Holland Hospital be able to afford to provide in the future to a 70-year-old patient with a possible heart attack? In the care of terminally ill patients, for whom 30-50% of all Medicare funds are now spent, how will hospitals determine utilization policies to avoid running up high charges?

In 1965 the structure of health care in the United States was changed by act of Congress; in addition to the institution of Medicare, Congress established the welfare program Medicaid to provide health care to the indigent. In doing so, a single, high-quality class of health care was essentially guaranteed for all citizens. The success of this effort to increase access to medical services for the poor has been undeniably dramatic; for example, the death rate for black newborns in this country has dropped an astounding 45% since the inception of Medicaid. However, as the cost of providing all the care we can to all who need it has outstripped our willing capacity to pay the bills, the nation's poor have been the first to feel the bite of rationing. It has been obvious that the Medicaid program has been wasteful due to fraud and bureaucratic inefficiency, and attempts to reform the existing program are escalating; but the aggressive cuts in human service funding over the past three years, coupled with cost-containment programs in Medicare and private insurance, threaten to invalidate our promise to provide a decent standard of care to the indigent.

At the same time that unemployment has enlarged the Medicaid-dependent population, federal support of Medicaid has been cut by about 4% each year for the last 3 years; increased responsibility for Medicaid funding has been shifted to state and local governments. Individual states have responded by establishing widely varying standards of eligibility and benefits, leaving increasing numbers of poor without any medical insurance. California has established a system in which Medicaid patients may only receive care at specified hospitals which have competetively bid for the business; the plan is an early catastrophe in terms of delivery of care. Illinois has established a maximum of $500 to be paid to any

hospital for any Medicaid admission; as you know, $500 is only a fraction of the cost of an average hospital admission. Hospitals, required by Medicare DRG's and private insurers to minimize charges, find themselves no longer able to afford to care for non-paying indigent patients because they can no longer spread the costs of indigent care among the paying patients. Private hospitals can and do simply refuse to accept non-paying or Medicaid patients, but public and medical school hospitals (especially those in urban areas), which have always cared for large numbers of Medicaid and "charity" patients, cannot escape the crunch, as increasing numbers of Medicaid and uninsured patients are "dumped" upon them. A health care system keyed on cost-efficiency without adequate provision to care for the non-paying and poorly-paying patient population is doomed to fail to provide a fair, reliable, decent standard of care to all.

I believe that, in order to improve the cost-efficiency of our health care system while minimizing its adverse consequences, the problem must be approached from several angles in a coordinated, planned manner. First, the present new Medicare program of DRG's must be tried and critically reviewed in its attempt to reduce hospital costs, and private sector programs attempting to govern health care utilization must be assessed. Second, an active role of physicians and nurses should be encouraged in assuring that unbridled economic efficiency will not come at the expense of fairness or quality of care; medical professionals must never allow themselves to view restriction of care as a desirable goal, but only as a tragic circumstance. Third, our legal climate of malpractice liability must be altered if any serious headway is to be made against the over-utilization of hopitalization and diagnostic testing. Fourth, public education regarding the tremendous importance of healthy eating habits, daily excercise, non-smoking, and moderatation or abstinence in drinking must be promoted. Fifth, we must increase our efforts to improve and preserve the quality of air and water supply; all our technological sophistication won't help of we ignore the most basic of public health principles. Sixth, we must continue to pay for the research development of improved therapies and technologies, in the interest of improved and more efficient health care in the future. Seventh, cost-shifting or surcharging must be allowed in hospitals to the extent necessary to provide for future equipment replacement and real capital needs. Eighth, alternate-site therapy should be encouraged for those functions of health care which may not always require expensive hospital or institutional settings, such as outpatient surgery, psychiatric care, chronic nursing care of the aged and handicapped, and care of the terminally ill. Finally, we must squarely face what I believe is the moral obligation of our society to guarantee and deliver a decent quality of health care to the poor of our country; this may well require something other than the Medicaid system, but it must be a program which pays real costs, not discounted costs, to providers if it is to work in a cost-efficient scheme of medical care.

Health care is in a financial crisis in this country; we simply do not have the financial resources to do all we can do and all we want to do for all patients. (8) Difficult economic and ethical decisions must be made at both the macroallocation and microallocation levels of disbursement. Macroallocation decisions made by federal and

state governments and health organizations will determine where our health dollars will go. Microallocation decisions by doctors and hospitals will determine who will receive specific treatments and resources and who will not. Although present cost-containment approaches might gain more for our health dollar, we must critically examine the ethical costs: Are we destroying the physician-patient relationship of trust that the doctor will do all that he or she can for the patient? Given the economic incentive to hospitals to be paid more for less, will patients be receiving adequate care? What criteria will be used to select specific patients for the limited resources available? Who should be making these critical decisions -- governmental policy makers, the courts, local committees, physicians, or hospitals? Are we condemning our nation's indigent to inadequate or phantom health care? Since we cannot afford to do all we can and all we want to do, choices must be made; society must make these difficult choices in a manner that insures the allocation of our health care resources in a responsible way to provide dignified care, justice and efficiency.

Footnotes:

(1) Gorovitz, S., Doctors' Dilemmas , p. 184; Macmillan, 1982.
(2) Fried, C., "Equality and Rights in Medical Care", Hastings Center Report , vol. 6, no. 1, pp. 29-30; Institute of Society, Ethics, and the Life Sciences, 1976.
(3) Beauchamp, T. L., "The Allocation of Scarce Medical Resources", Contemporary Issues in Bioethics , p. 347; Dickensen, 1978.
(4) Childress, J.F., "Who Shall Live When Not All Can Live?", Intervention and Reflection--Basic Issues in Medical Ethics , p. 497; Wadsworth, 1983.
(5) Calabrisi, G., and Bobbitt, P., Tragic Choices , p. 33; Norton, 1978.
(6) Ibid , p. 18.
(7) Fried, C., "Equality and Rights in Medical Care", p. 29.
(8) Ver Hey, A., "Scarcity and Sanctity; the Makings of Tragedy", p. 2.

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