

## Rationing Health Care: Its Impact and Implications for Hematology-Oncology

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Received October 8, 1991

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Rationing of health care in the United States currently exists via the covert mechanism of restricting significant segments of medical care for many of those who cannot afford it. Provision of universal health care would necessitate explicit rationing of certain interventions and technologies, even though an individual could afford them. The British and Canadian experiences provide lessons from which America can profit, and the Oregon health plan is an experiment in this direction. The progressive "graying" of America has raised the question of the need for intergenerational charity as a form of rationing. The implications of these rationing plans would result in a major restructuring of the practice of hematology-oncology.

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Rationing has become the "buzz phrase" during any discussion of health care in the United States. The mounting percentage of the gross national product (GNP) which is used for medical care is now threatening other economic needs, and the health system is portrayed as addicted to unwarranted costs and an absence of equity [1]. Advocates of rationing correctly emphasize that the process already exists in the U.S.A., where rationing on the basis of affordability now partially excludes many of the 35 million Americans who cannot pay for medical insurance [2]. The majority of the uninsured are women and children, although any recession, with its toll of unemployment, consigns larger numbers of men to this uninsured category.

Critics of rationing hold to a free market-open competition system as the American way, claiming that medical care should be a product which is bought and sold like any other commodity. Competition in any guise has not, however, contained medical costs, and treating medical care as a product currently deprives many individuals of what is considered a basic human right in our society [3]. Vastly exaggerating the cost is the widespread assumption that physicians must do everything they believe will benefit each patient, without any regard to costs or other societal considerations [4]. This attitude has produced the tragedy of the commons and, more specifically, as coined by Howard Hiatt [5], the tragedy of the medical commons; individuals benefit from the vast, shared technology of medicine without any strong incentive for the individual physician to be concerned with the economic viability of the common enterprise. Freedom of grazing in the medical commons may bring ruin to all, since there is a limit to the resources which any society can devote to medical care. The American system is the most expensive health care system in the world, and yet a vast and growing number of Americans have little access to a basic level of good medical care. Many feel that the uncontrolled grazing in the commons must stop. The

*Abbreviations:* BMT: bone marrow transplant DPR: doctor-patient relationship GNP: gross national product

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combination of maldistribution and unacceptably high costs is creating increasing acceptance of a plan for some form of a national health service in order to put a cap on spending and to guarantee health care for all [6]. What form that health service will take is now the subject of much heated discussion in many different venues.

Any policy attempt to contain costs while maintaining effectiveness and equity in this country considers the comprehensive strategy successfully employed by Britain [7] and Canada [8]. Britain spends two-thirds as much money per capita in comparison with the U.S.A., while delivering health care to all its citizens. In Canada, with access to medical care universal and complete, medical costs are one-third less per capita than those in the United States; this policy results in a difference in costs of approximately \$100 billion between Canada and the U.S.A. Of additional significance is the fact that the Canadian system has maintained a cap on health care spending with only a 1.6 percent of the GNP increase in health care spending since 1971; the United States has increased its medical share of the GNP by 3.5 percent during the same period [9].

These national health programs work for Britain and Canada, but experts question their transference to the U.S.A. The high sense of responsibility for each other in Britain and Canada is in scarce evidence in this country [10]. Another problem is that socialized medicine in Britain has elevated the floor of medical care for all, while accepting as the trade-off a lower ceiling of access and medical choices for the population. This socialized medicine is unacceptable to many American physicians, and its introduction will require a major shift in thinking to effect such a comparable change in the United States.

These reservations need not be voiced with respect to the Canadian health plan, a system which has been in place for over 20 years, and which has near-universal political and public support in that nation [11]. The plan provides socialized insurance for hospital care and physician services; private fee-for-service reimbursement to physicians continues according to a uniform schedule negotiated between provincial medical associations and their government. Physicians in the Canadian system are not reimbursed to the same level as their American peers, but their lives are freed of the rationing by inconvenience which has become the albatross of American physicians [12]. Socialized insurance as it exists in Canada, if introduced in the U.S.A., would eliminate the boggling administrative costs and paperwork paralyzing the American system. Thirty to 50 billion dollars would be saved, enough to correct the deficiency in funds for child care that currently exists in the United States. Medical and lay literature suggests that the Canadian system is becoming more attractive to Americans, although long waiting lists and unavailability of the most modern technology echo those same deficiencies that trouble the British system. Both systems, however, guarantee universal access to health care, a freedom not yet in evidence in the U.S.A.

The Oregon proposal is a response to the hypocrisy of the silent rationing system of American medicine; it is a plan to provide access to medical care for all [13]. Since, however, there are fiscal limits to the costs that can be assumed for health care and because not all medical interventions are considered equal and effective, a prioritization of medical interventions has been created. An 11-member health service commission, consisting of five primary care physicians, one social worker, one nurse, and five consumers, has ranked medical services according to their expected benefits, which include quality of life and compassion, in addition to curing of disease. The

legislature must establish the budget available to fund health care and decide the percentage of available tax-generated assets which can be used for health care, schools, environment, and so on. This proposal has forced the citizens of the state to develop an overall health policy for the state and to decide how much money health care can demand. A ceiling is being placed on runaway health expenditures. Doctors will continue to do everything for their patients but only for those services included under the priority inclusion criteria. The fact that the Oregon proposal is being initiated to handle the Medicaid population of Oregon has led its critics to fault this experiment as being one conducted disproportionately on poor patients, who are predominantly women and children [14]. The exclusion of a young leukemic child from access to a bone marrow transplant (BMT) has also generated much negative publicity for an admittedly two-tiered medical system [15]. Its advocates maintain that very expensive medical care must give way to wiser use of resources, that the costs of BMT and other transplants could be better applied to preventive care, especially in the prenatal realm [16]. Of note is the fact that the rationing is determined by the citizenry and not by physicians, and a health plan will be in place that should permit savings in some aspects of care to be applied to improvements in others [17]—a major deficiency in the present medical setting and a major deterrent to any cost consciousness in the individual doctor-patient relationship (DPR).

These government-imposed health plans in Britain, Canada, and Oregon, if implemented in the U.S.A., would impose a medical change which involved physicians and health insurers but would not demand any basic alteration in the consumer-patient's attitudes regarding use of health care resources. The philosopher, Daniel Callahan [18], and, similarly, Larry Churchill [19], a theologian, believe that it must be otherwise; they contend that a fundamental shift in Americans' pursuit of limitless medical progress and "having it all" in health care must take place. Callahan implicates the World Health Organization (WHO) definition of health—a state of complete physical, mental, and social well-being—as a cause of our need to have every health care met and every evidence of mortality challenged. This unrealistic quest, coupled with the advertisement of patient autonomy as the most important component of the DPR, has vitiated any consensus on health care priorities which would allow us to live within our means. Callahan believes the American health care system is addicted to uncontainable costs and that no form of increased efficiency will hold down those costs [20]. This addiction has its source in our enchantment with technology, which is always supplanted by newer, and frequently more expensive, technologies. Callahan uses the metaphor of the ragged edge of medical progress—needs are constantly redefined—escalating and expanding. If any new therapy or tool is beneficial, it must be afforded, or at least it ought to be. To correct this misdirected quest, Callahan calls not only for rationing of medical care and stringent assessment of technological advances before dissemination, but he endorses a rationing of medical progress, a sacrificing of potentially beneficial advances that must be passed over on the basis of costs. The artificial heart has no place in Callahan's scheme.

The most controversial aspect of Callahan's rationing suggestions, however, focuses upon the progressive graying of America and the intensification of services that medical progress is adding to their care [18]. He suggests cost containment by explicit rationing, using age as a criterion—this approach requires that Americans accept death as the end of a natural life span and that they substitute communalism for selfish individualism. Each citizen would benefit over the course of his or her

lifetime if money, used to extend life at its end, were redirected to an earlier stage of life; in his most idealized schema, intergenerational charity would constitute part of any virtuous society. Callahan would also not fund medical research or the development of health care directed at extending life. His *Setting Limits* has, not surprisingly, unsettled the elderly and their defenders in our society. Callahan has been accused of perpetuating American society's emphasis on youth. But, in his defense, he has offered a solution which is not without precedent and parallels the surge of the movement of death with dignity. He is joined in his conclusion by Prof. Leon Kass, who defends the concept of a natural life span and castigates as a perversion the medical attempts at needlessly prolonging life [21]. Callahan's dicta arose from a bioethicist's concern with equity and costs; Kass's observations evolve out of his deliberations on the proper end of medicine as a noble calling.

Intergenerational charity, communalism, and a rejection of medical progress, specifically in the service of the elderly [22], do not appear as immediate options to resolve the problems of the U.S. health care system. Review of hospital cost containment in the 1980s leads experts to conclude that the real excesses have already been eliminated and that whatever further reduction will be achieved will only result in a limited and transient effect on costs [23]. The shift to the ambulatory setting in medical care is offsetting any major gain in savings on inpatient care. Marcia Angell looks to revision of fee schedules, which now favor performance of expensive procedures, to reverse the trend of rising costs; the relative resource value scale should be in place by 1992 to better reimburse the cognitive aspects, while reimbursing less well the procedural components of medical care. Systematic studies are already under way to assess the effectiveness of medical technologies and practices in the U.S.A.—this research is long overdue in a country where the relative number of angioplasties performed is 11 times the number performed in Britain [24].

But any major reduction in health care costs must primarily involve the physician, since physicians determine a major percentage of health care costs [25]. Expectations that individual physicians will police the use of resources in the care of their patients are unrealistic. A strong current in the profession still supports the position that the patient must remain the doctor's master in matters of obtaining all of the best treatment for that patient [4]. Savings will only be possible if external standards or restraints are imposed—if a system is in place that oversees the allocation of medical resources. The shape and outline of that system are still in the future, but it may be helpful to explore how rationing of various sorts would affect the practice of hematology-oncology and how the particular problems of this specialty might throw some light upon the problems and solutions of rationing.

Aaron and Schwartz in their book, *The Painful Prescription* [7], have compared treatment of cancer patients in the United States and Britain—they document a striking disparity in medical spending for chemotherapy in the two countries. Britain spent approximately 18 million dollars on such drugs in 1981, about 70 percent less than the U.S. on a population-corrected basis. The total cost of chemotherapy in the United States during the same period was 900 million dollars. The reasons for the difference in treatment costs are not attributable to the costs of the drugs, the method of financing treatment, or external restraints on the British physician; at the same time, hemophilia patients were provided the same care in both countries. The major reason for the disparity in spending for cancer drugs is physician-imposed—British physicians believe that palliative treatment of incurable solid tumors is

squandering large sums of money on ineffective treatment. They do not expose patients with renal, lung, metastatic colon cancer, or melanoma to chemotherapy, although they do treat breast and prostatic carcinoma as vigorously as their American counterparts. The relatively reduced numbers of oncologists in Britain versus the U.S. also keeps a cap on any excessive distribution of the funds. Aaron and Schwartz believe, however, that British physicians, under the restraints of their health care system, find medical reasons to withhold expensive care from their patients. They stop, set limits, where marginal benefits equal marginal costs. This attitude is in dramatic contrast to American medical care, where treatments are used until they provide no additional payoffs [26]. The British system has forced physicians to ration oncologic care, and without any real difference in outcome—its linkage with socialized medicine should not blind American physicians to avoid assuming the same stance, but the American public will need convincing of this non-interventional posture. British containment of cost by physicians is realized by recognizing the marginal benefits of many interventions in oncology and by excluding those therapies which are not curative. Patients with incurable malignancies in the U.S.A. might still desire or demand chemotherapy [27], a situation which could be resolved by requiring that all such patients enter experimental protocols. Any expenditures would thereby contribute to the common fund of knowledge in identifying those novel therapies which are curative. The means whereby these restraints could be introduced might issue from controls imposed by the Society of American Oncologists, a posture guaranteed to rankle many members of the society.

The Canadian system has successfully held in check progressive escalation in health costs by restraining administrative costs, physician fees, and the intensity of servicing in hospitals [28]; it has also marshalled funds from private sources to purchase expensive diagnostic machinery such as computed tomography scanners. American critics of the system point out the long waiting lists, the unavailability of some modern technology, and the depreciation of the physical plant as drawbacks of Canadian medicine. An example of this type of difficulty is the near unavailability of hemodialysis units to treat renal failure; however, the cheaper alternative of chronic ambulatory peritoneal dialysis is readily available for all in need of dialysis treatments [29]. In Canada, costs are contained by such limiting of the options in technology and, in one of the provinces, Quebec, monitoring and limiting individual physician expenditures. The Canadians deny that there is any real difference in accessibility to medical care in their country as compared with the U.S.; the denial is based on their definition of accessibility as the ability of people to get not only care which they need, but care that is likely to improve their health. The definition may vary from province to province, but the system is responsive and malleable, especially when there is any orchestrated outrage to effect changes. Health policy experts in Canada also anticipate that there will be a progressive squeeze on acute hospital beds, forcing physicians to alter their use of this resource. The Canadian system is therefore causing physicians at several levels—technology/bed use/reimbursement—to consider the effect of outcome on health care.

This change has important implications for American hematologists-oncologists not only in the previously mentioned use of chemotherapeutic agents but in the use of expensive resources for many cancer patients near the ends of their lives. A commendable effort by an American subspecialty group, the pulmonologists, examined the proper use of mechanical ventilation [30] by looking at the outcome of

patients with carcinoma who required ventilator assistance. Of those 180 patients with malignancies who were intubated, only 26 percent survived to extubation; 13 percent were alive at two months and 7 percent at six months; a second group documented that only four of 52 patients with tumors who received mechanical ventilation left the hospital; one of 23 oncology patients with granulocytopenia survived the trauma of this intervention. Such dismal outcomes should force the hematology-oncology community to examine its use of these scarce resources and to consider whether intensive care units are likely to improve the health of the majority of these patients [31]. Our current system has no mechanism in place to establish any policy or guidelines in response to these statistics. The Canadian system is envisioned as one which will eventually examine these priorities and curtail the use of marginal interventions.

The Oregon proposal represents one state's attempt to control health care costs [32]—its initial prioritization scheme eliminated all organ transplants, apart from renal and corneal transplants, for the Medicaid population. After two adults were denied organ transplants, the Oregon policy received nationwide attention for denying a BMT to a seven-year-old boy with acute leukemia [15]. The designers of the plan defended their stance by pointing out that the projected cost of 2.2 million dollars for treatment of 34 such patients could extend medical coverage for 1,500 persons not previously covered for medical care. A new prioritization scheme has been established, and it will be interesting to see how the \$300,000 cost of a liver transplant will be handled—an intervention now covered by Medicare for the aged.

Critics of the Oregon policy's stance regarding transplant unavailability believe that organ transplantation, a successful therapy, has been unfairly excluded from the Medicaid menu; they suggest that endarterectomies and coronary artery bypass procedures should be foregone because of their lesser proven efficacy in restoring health. But the current use of BMT for treatment of a whole host of solid tumors could jeopardize the entire funding structure of any health plan. It remains an experimental therapy for metastatic breast cancer, and yet courts are forcing third parties to underwrite the costs of this intervention. This decision is the most recent example in oncology of dissemination into the community of unproven treatments without the efficacy of such interventions having been established by good clinical trials. The insurance companies are funding just such a trial in metastatic breast cancer—this type of funding, by the government or insurance companies, will pay for itself in reducing fees for unsubstantiated procedures and treatments. A marrow transplant might well fall within Oregon's priority funding if its efficacy is proven and other futile interventions are eliminated from the scale [33].

The final form of rationing, of setting limits according to Daniel Callahan, has especial reverberations in the field of hematology-oncology when one considers the management of acute leukemia in the aged. The prognosis with such an illness was once so poor that chemotherapy was not offered to individuals over age 60 with acute leukemia [34]. With better success in inducing remissions in the sixth decade of life, this therapy is now offered to individuals with little attention to age, although increased age conveys a significantly poorer prognosis in this disease [35]. Leukemia treatment requires at least an initial one-month hospitalization under extreme duress, and the cost of therapy for one year of treatment is \$150,000 to \$200,000. Less than 50 percent of elderly patients with acute leukemia will obtain a complete

remission, and the remission will last an average of only 12 months; there is virtually no chance of leukemia cure in this age group.

This instance represents the concrete situation which Callahan forces our society and the profession to address—leukemia treatment in the aged is not absolutely futile, but large amounts of money and resources are being used at an extreme of life to prolong life of questionable quality. Is this a defensible situation in which setting limits by age is appropriate, or is any attempt at rationing care on the basis of age unacceptable? Our society may echo the response of Admetus's parents in Euripides' play *Alcestis*, when Admetus asked them to sacrifice their lives for his own—"God's daylight is sweet even to the old. We do not ask you to die for us; we will not die for you." Admetus replied with angry contempt; "You, standing palsied at the gate of death and yet afraid to die" [36].

No current rationing system is without its problems nor its critics [37]. But the suggestions and plans in progress have forced people to recognize the problem and to open the dialogue. Most efforts at any explicit rationing or national health plan have been resisted and even sabotaged by the medical community. The atmosphere now appears different, and the outcome of the current dialogue should have a major contribution from physicians. There is much to learn from the British, Canadian, and Oregon plans and much to ponder in the gauntlet thrown down by Daniel Callahan and his colleagues. Formal rationing, whether by physicians, insurance companies, the government, or some other agency, will soon be integral to the practice of medicine in America [38].

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