

## Convocation Lecture: The Rationing and Rationalization of Cardiac Care—American or Canadian Style?

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Dr. Francis Klocke, ACC President, has asked me to compare cardiovascular care in Canada, with its predominantly government-financed health care system, with cardiac care in the United States, with its currently dominant free-market system. More specifically, are there any lessons to be learned from the Canadian experience that would in some small way be of value, firstly, in the current American debate on regulated versus deregulated health care and, secondly, to the American College of Cardiology as it embarks on the implementation of its strategic plan (1).

In addressing this subject we all know that the costs of cardiovascular care in particular, and health care costs in general, are worldwide problems that are not limited to our two countries. Increased life expectancy and an increasingly older population with chronic disease and disability, along with the technologic explosion of the past two decades, account in large measure for the spiraling health care costs in all countries (2). It has been said that no country today can afford unlimited medical or cardiac care, and limitation of care implies rationing of one type or another.

The United States and Canada have many things in common. We share a long and unprotected border and many cultural characteristics. Our predominant language is the same, and our recreational activities and capitalist outlook are similar. In the future, we may share a free trade pact. Even our annual national debt as a percent of gross national product is about equal, but of course we hear a lot more about yours because of its effect on the world economy. Our populations, however, are very different, Canada's being about one-tenth that of the United States and one-third French Canadian. Although we are both former British colonies, Canada remains a member of the British Commonwealth. This may, in part, account for the fact that I personally look upon Canadians as a blend of American and British characteristics—sort of half-way between the two, which we certainly are in terms of per capita health care

costs and in the rate at which aortocoronary bypass surgery is performed.

Thirty years ago, the health care systems of the United States and Canada were similar in both cost and style. Solo practice with fee for service physician reimbursement was the norm, while nonprofit community hospitals provided in-patient care. There were multiple payment systems, including out of pocket expenses, and third party payment schemes, some of which were more adequate than others. Physicians and hospitals cared for the indigent free of charge. In my intern year, the Toronto General Hospital charged the city of Toronto \$5 per day per indigent bed.

In 1965, just 23 years ago, health care costs in the two countries were identical at 6.1% of gross national product (3). Then the two countries went their separate ways with regard to providing for health care.

The Canadian health care system. In Canada, government-sponsored hospital insurance was introduced in the late 1950s and insurance for physician reimbursement on a fee for service basis was introduced in the late 1960s. This was the Canadian form of Medicare. By 1970, all Canadians were insured for health care costs involving physician and standard hospital services, but they were not insured for eyeglasses, dentistry, prescription drugs, private hospital accommodation or certain aspects of long-term care.

Health is the responsibility of the 10 provincial governments in Canada. The provinces were initially reimbursed for 50% of their health care costs by the federal government, but these transfer payments have decreased as the federal government has tried to decrease its spending in the public sector, as has occurred in the United States and Britain. These diminished federal transfer payments for health care, together with spiraling health care costs, have severely strained provincial budgets.

In 1984, physician "extra billing" (above the government-allowed fee schedule) and hospital user fees were outlawed by the Canada Health Act passed by the federal government. Within 2 years, the provinces passed legislation enforcing this law, because, if they had not, they would have lost hundreds of millions of dollars in transfer payments from the federal government. Although 90% of the medical profession in the province of Ontario did not extra bill, a series of strikes took place because many in the profession saw this

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legislation as an attempt by government to gain total control of the health care system. The majority of the lay press depicted the medical profession as an irresponsible group of money-grabbing individuals (a phenomenon known in Canada as "doctor bashing"). The press chose not to report on the inherent dangers of total government control of health care. The lay public was divided on the issue, but most sided with the government. This was perhaps understandable in that Canadians as a people believe very strongly that there should be no financial barrier or limitation of access to health care.

This was an uncomfortable time for all concerned. In many provinces there is continued confrontation between the government and the profession, but in Ontario, where the strikes occurred, there are now signs of the government and the profession working together to try to solve some of the serious problems of our system, such as the soaring costs despite resource rationing and the perceived overutilization of the system.

In the province of Ontario, health care costs amount to almost one-third of the total provincial budget even though physicians are reimbursed at only 75% of the professionally set fee schedule and hospital expenses are tightly capped by a global budgeting process. Capital equipment or new services can be introduced into hospitals only with government approval, a fact that has very definitely rationed technological expansion. Not only does the government tightly control hospital budgets and the rate of physician reimbursement, but it also controls medical school enrollment and the number of specialists being trained. Government, however, has no control over the utilization of the system by patients, for whom there is no deterrent fee, or by physicians, who practice on a fee for service basis, but it is currently showing great interest in this area.

In the 1960s, cardiac catheterization laboratories and cardiac surgery were rationalized by limiting them primarily to a few teaching hospitals. In the province of Ontario, there were, and are, 10 hospitals with these tertiary cardiac care facilities for a population of 9 million people. Although limiting the rate of access to cardiac care at the present time, this rationalized and regionalized system worked well for a while and it was during this period that Senator Edward Kennedy visited Canada in 1977 to gain insight into our health care system. I had the opportunity to review with him the workings of this rationalized system of tertiary cardiovascular services, which contrasted sharply with the system that existed in the United States both then and now.

**The United States health care system.** While these developments were occurring in Canada, free enterprise medicine continued in the United States. In 1965, however, the United States form of Medicare (to look after the elderly) and Medicaid (to look after the indigent) were introduced. Initially, these government-financed plans did not basically

interfere with the United States health care system in that they acted as third party payers for the elderly and the poor, whereas private third party payment plans were expanded greatly for those who could afford them. However, millions of Americans were left without adequate health care insurance. During this period there was a notable expansion in the number of hospitals in the United States as a result of the Hill-Burton Act and the emergence of private for-profit corporate hospital chains as a force in American medicine. These institutions often invested heavily in expensive technology because the various third party payment schemes were open-ended. Many private hospitals opened cardiac catheterization laboratories and open heart surgical units without regard to demonstrated need. Such facilities often became a status symbol as well as a remunerative investment for the institution concerned. Unfortunately, many of these tertiary care facilities did not meet established national criteria for utilization and may represent an excess in the American system.

More recently, physician reimbursement by salary or capitation has increased significantly as the result of an increasing number of health maintenance organizations (HMOs). Concern has been expressed about physicians acting as gatekeepers to limit access to care in these HMOs (4). As health care costs escalated, Medicare and Medicaid introduced the disease-related group (DRG) as a means of limiting hospital costs for any disease category. Private third party payment schemes soon adopted the DRG system. As a result, many unnecessary hospital admissions were avoided and many necessary hospital admissions were shortened, leading to the comment that patients were being discharged "quicker but sicker." As hospital utilization decreased, bed occupancy decreased from 76 to 63% in the United States as opposed to 87% in Canada (5). Hundreds of hospitals in the United States have now closed.

Many health care economists predicted that a competitive free market system would eventually provide a mechanism for distributing health care services and for imposing economic discipline on the health care system, but this has not occurred. Kinzer (6) argues that we are now seeing the decline of deregulation in the United States health care system because of the limitation of access to care for the poor, the growing government and third party regulation that will not go away and the important phenomenon Ginzberg (7) has termed the destabilization of the American health care system. Destabilization is believed to result from excessive free market competition and refers to the wrongs in the system such as physicians and hospitals undercaring for patients for financial gain, private for-profit hospitals transferring the very sick to teaching or community hospitals to avoid financial loss, third party payment schemes skimming off the healthy population or nursing homes avoiding the very sick and the poor (7). As the result of these and other

inequities in the system, the United States has seen an increasing amount of regulation emerge in recent years. Currently, physician reimbursement reform is the focus of attention in Congress.

**U.S. and Canadian versus British systems of health care.** The United States system of health care appears to be at a crossroads between regulated and deregulated health care. Its development thus far perhaps reflects the American dream of "life, liberty and the pursuit of happiness," in that your system has been risky and pluralistic in approach, creative and innovative in character and capable of the ultimate in terms of excellence of care (Evans JR, personal communication). It has also provided world class leadership in many respects.

On the other hand, the Canadian system may reflect Canadian ideals of "peace, order, and good governance" (Evans JR, personal communication). (This sounds rather dull, doesn't it!) However, the development of the Canadian system has not always been peaceful, nor has good governance always been evident (3). Canadians are apparently prepared to accept less so long as the system is freely accessible to all citizens.

After going in opposite directions for over a quarter of a century, how do Canadian and American health care systems compare now and where do we stand today in relation to the situation in Great Britain, whose National Health Service is looked upon as the prototype of socialized medicine? I previously mentioned that in 1965, health care costs as a percent of gross national product were identical in our two countries at 6.1% (3). Today, health care costs as a percent of gross national product, at one-half trillion dollars, are approximately 11.5% in the United States compared with 8.5% in Canada and 6% in Great Britain. In very rounded figures, the United States annually spends >\$1,500 (U.S.) per capita on health care, Canada >\$1,000 and Great Britain <\$500 (3). In recent years, coronary bypass surgery was carried out 3 times as frequently in the United States as in Canada on a per capita basis and 10 times more frequently than in Great Britain (8). In 1986, coronary angioplasty was performed in the United States at three times the rate it was performed in Canada.

In the United States the government is responsible for about 40% of total health care costs, in Canada for 70% and in Great Britain for 90% (3). One might reasonably conclude that the more a government is responsible for health care, the less is spent on it and the more rationing occurs. This is certainly the medical profession's fear of government control and it would appear to be justified.

**Lessons learned from the Canadian experience.** What have we learned from the Canadian health care experience? One thing for certain is that "he who pays the piper calls the tune." Stated simply, if government pays, it certainly controls the system. I have described how governments in

Canada tightly control hospital budgets including capital equipment and new services. Across Canada, they have tightly controlled the allocation of resources devoted to the tertiary cardiac care field, and in so doing they have changed a system that was effectively rationalizing cardiac care to a system of rationing such care. There are now lengthy waiting lists for cardiac catheterization and angiography and for open heart surgery. Previously, patients waited 1 to 3 months for elective heart surgery. Now they are waiting 3 to 6 months or more, which results in: 1) increased patient morbidity and mortality, 2) undue stress to the patient and his physician and/or surgeon, and 3) inefficient delivery of cardiac care. This is an example of resource rationing in Canada (2,9), as opposed to the price rationing (2,9) that occurs in the U.S., to the sick through shorter hospital admissions and to the poor through lack of insurance. There is great concern in my country that parts of our health care system are slipping toward the crisis situation that now exists in Britain's National Health Service, and even Margaret Thatcher is concerned about that. Britain, however, has a private health care industry, which Canada does not, and this provides the wealthy and influential in the U.K. with a fast track to required care. Thus, in Great Britain, there is price rationing in the private sector as well as explicit and implicit resource rationing in the National Health Service. When Canadians are unwilling to wait long periods for their cardiac care, they may choose to come to the United States if they can afford to do so. This, of course, adds price rationing to the already existent resource rationing of the Canadian system.

I have indicated that governments in Canada also tightly control the rate of physician remuneration. Each year, the provincial medical associations must negotiate with the provincial governments the fee increase for the following year. This is the area where the greatest confrontation between the profession and government has occurred, and numerous strikes by doctors have resulted. In the current year, some of the provincial governments have offered no increase or even a decrease in fees, resulting in great professional unrest. Doctors in the province of Manitoba plan to go on strike within the next few days. Thus far, the strike mechanism seems to be the only way that pressure can be brought to bear on government, but it is a distasteful mechanism for the profession to use. It should be understood, however, that urgent and emergency care is provided during strikes, but doctors' offices and elective surgery tend to be cancelled.

I have also described how the utilization of the system is open-ended to patient and physician alike. With regard to patient utilization of an open-ended health care system, it is of interest to take note of what Barsky (10) has called "the paradox of health." People today are objectively healthier

but subjectively feel less well, causing them to seek medical attention more often.

**Common U.S. and Canadian problems.** As well as different problems in the health care field, the United States and Canada have a number of common problems. Both countries doubled their medical manpower production in the past 20 years and as a result have a projected physician excess, while at the same time, both have a problem of maldistribution of physicians (3). There are serious problems in the nursing profession in both countries, including a shortage of nurses that is becoming critical at times (5). In addition, both countries are faced with caring for what has been called "the failures of their success" (11), that is, the aging population with chronic disease and disability that has survived because of the success of previous medical and surgical treatment.

**Effects on physician-patient relations.** In closing, I will comment on three relations that are of great importance to the physician and the medical profession today. Traditionally, physicians have been concerned with one relation, that between physician and patient. Underlying the sacred trust between the physician and patient is the fact that the physician has always acted in the patient's best interest, that is, as the patient's advocate. This has been true since the days of Hippocrates, through the age of physician paternalism when the physician's word was final and in this era of patient autonomy, when the relation has been more in the nature of "doctors advise—patients decide" (12). Now the physician-patient relation is being strained by the fact that physicians are being asked to consider the cost of the care they are providing and at the same time remain the patient's advocate. If the physician has financial incentives to limit care, the physician-patient relation deteriorates still further. Many are concerned about the ethics and the apparent conflict of interest of the physician being a "resource-allocator," as well as the "patient's advocate," and rightly so. The physician-patient relation in particular, and health care in general, has been further depersonalized by the proliferation of terms such as HMO, DRG, PPO, IPA, etc. I understand that some find these three letter abbreviations of today as objectionable as were four letter words in yesterday.

There are other problems in the physician-patient relation. The medical liability problem is seen partly as a reflection of the dissatisfaction in this relation, although contingency law greatly intensifies the problem in the United States. The medical liability problem leads to the practice of "defensive medicine," which is estimated to cost 15 billion dollars annually in the United States or 3% of total health care costs.

**Physician-government and physician-society relations.** At a time when this basic relation between physician and patient is being threatened, the physician and the medical profession must increasingly take part in two other relations

that are of ever increasing importance. These are the relations of the profession with government and the relation of the profession with the society it serves.

Iglehart (13) indicates that society is deeply concerned regarding the cost and quality of care it receives and the competence of the physicians delivering it. In 1986, the president of the American Medical Association agreed when he indicated that "the profession must remove or rehabilitate its sore spots: the incompetent, the arrogant, the fraudulent, the impaired and the greedy" (14). Senator Waxman has written "before the medical profession can expect greater protection from malpractice suits, it has to convince the public that it is doing everything reasonable to police itself" (15). All of this I would agree with, and in the broadest sense I would say "physician heal thyself."

If society is concerned with the cost of cardiac and health care, then government is clearly more so. The American College of Cardiology has set an excellent example of how professional organizations should relate to government: speak with one voice in a strong and reasoned fashion (1). In our dealings with government we must speak out constructively and effectively to maintain "a seat at the table" while keeping in mind that "when you starve with lions, the lions starve last" (Peachey D, personal communication). At the same time, we, as cardiovascular specialists, must make sure that our house is in order, that is, that we are delivering not only effective, but also cost-effective health care (2). To do less is unacceptable in this day and age when medicine in general and cardiovascular care in particular are open for all to see. Our profession and our specialty are in the proverbial "fish bowl."

Finally, I would like to congratulate the Strategic Planning Committee of the American College of Cardiology, under the chairmanship of Dr. Robert Frye, for their enlightened, outward looking and forward thinking strategic plan (1). It should serve as a model for other national cardiovascular organizations in that it indicates the great breadth of responsibility that the cardiovascular community must pay attention to today. I strongly recommend this strategic plan to the new Fellows.

## References

1. American College of Cardiology Strategic Plan. *Cardiology* 1987;16:5-6.
2. Evans RW. Health care technology and the inevitability of resource allocation and rationing decisions. *JAMA* 1983;249:2047-219.
3. Iglehart JK. Canada's health care system. *N Engl J Med* 1986;315:202-8, 778-84, 1623-8.
4. Reiman AS. Cost control, doctors' ethics, and patient care. *Issues Sci Tech* 1985;1:103-11.
5. Iglehart JK. Problems facing the nursing profession. *N Engl J Med* 1987;317:646-51.
6. Kinzer D. The decline and fall of deregulation. *N Engl J Med* 1988;318:112-6.

7. Ginzberg E. The destabilization of health care. *N Engl J Med* 1986;315:757-61.
8. Aaron HJ, Schwartz WB. The painful prescription: rationing hospital care. Washington, D.C.: Brookings Institution, 1984.
9. Naylor D, Linton AL. Allocation of health care resources: a challenge for the medical profession. *Can Med Assoc J* 1986;134:333-40.
10. Barsky AJ. The paradox of health. *N Engl J Med* 1988;318:414-8.
11. Gruenberg EM. The failures of success. *Milbank Mem Fund Q* 1977;55:3-24.
12. Linton AL. Would Hippocrates accept cost containment? *Ann Roy Coll Physicians Surgeons Can* 1988;21:21-4.
13. Iglehart JK. Physicians and society. Renegotiating the contract. The 1987 Michael M. Davis Lecture.
14. Coury JJ, Jr. Physicians' fundamental responsibility. Presidential Address. *JAMA* 1986;256:1005-6.
15. Waxman HA. Medical malpractice and quality of care. *N Engl J Med* 1987;316:943-4.