CANADIAN LESSONS ABOUT HEALTH-CARE COSTS*

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I WANT to emphasize what is to us in Canada a very important point: When we talk about health costs, what are we talking about? When one talks about national health insurance, one thinks in terms of national health expenditures, the cost to the people. Health costs count equally whether through the public or private sector, whether they come out of a patient's pocket or from an insurance company.

A lot of emphasis has been placed on controlling costs by denying benefits or by denying payment for certain services, but that is no saving unless nobody pays for them. Therefore, if a private insurance plan does not pay for a particular health-care expense and the patient pays for it, that is not a saving from the standpoint of national health expenditures but a transfer. Consequently, when one looks at experience with national health insurance or any other kind of insurance one must look at its effect in terms of costs to the public, in whatever form.

The costs of health care, public or private, fall basically into three groups. First is the primary cost of providing services or benefits, and this is not simply a dollar cost but includes a social cost, which is often ignored in examining health-care costs. However, it is an extremely important cost that is very difficult to measure. If a patient has to pay a babysitter to be able to go to a doctor or clinic, that is a cost in relation to that service. Some lower income people, even if there is no direct cost to them for health service per se, put off going to the doctor or hospital because they

*Presented in a panel, Rising Costs of Health Care, as part of the 1977 Annual Health Conference of the New York Academy of Medicine, *Health Policy: Realistic Expectations and Reasonable Priorities,* April 28 and 29, 1977.

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cannot afford such associated costs as transportation, babysitting, or the time to seek the service. Another related question is whether the services are available. Obviously, if no service is available in an area, that affects costs, and must be taken into account when comparing costs there with costs in an area where services are freely available.

The second cost factor relates to the secondary cost of providing the service, the overhead, and associated costs. This factor takes into account such things as the cost of malpractice insurance because, after all, that cost has to be built into the fees or rates paid for service. It also has to take into account the costs of salaries or wages of supporting staff in the doctor's office or in the hospital, the cost of supplies required by the service, equipment necessary for the service, and such matters as light, heat, power, and food in institutional care. While all of these expenses are not easily within the control of the health-care sector, they are part of the cost and cannot be left out of the calculations.

Finally, one also must consider the cost of administration, which covers not only the payment of claims but also includes the cost of collecting premiums or tapping other sources of revenue and of paying commissions or salaries to those who collect them. In our experience, the more different policies and the more people involved the higher the cost, but I shall deal more with this point later.

I shall very briefly describe our national health insurance program. Some background is necessary to understand some points I shall make later, especially because our health-insurance scheme differs from that of most other countries.

We implemented Canada's health-insurance programs in two stages, perhaps three, but two are important for this discussion. We introduced hospital insurance in 1958 and medical care insurance in 1968. By virtue of our constitution, the federal government is not involved in day-to-day administration of these programs, but the provinces administer the programs for their residents, and the federal government pays roughly half the cost. To receive federal financial support, each provincial scheme must meet certain basic national standards.

We generally refer to these as the Four Points. The first of these points provides that coverage must be comprehensive with respect to the medically required insured services of the national programs, i.e., hospital and physician care. There can be no arbitrary upper dollar limits or exclusions except for services not required by the patient. There are no deductibles,

and only a few provinces have a cocharge, incidental only to hospitalization. The highest cocharge is $6 per day, and that applies only to more-or-less chronic, permanent hospitalization. Most provinces have dropped cocharges from their plans. Our coverage is not limited to areas traditionally covered by the private insurance sector, such as treatment, but also includes a wide range of preventive services, including such things as checkups, immunization, well-baby care, family planning, et cetera, and there are no disease exclusions.

The federal government also shares the costs of incentive programs to encourage physicians to settle in designated under-doctored areas, for example, sharing guarantees of minimum professional incomes or providing subsidies to help cover costs in high-overhead areas. One of our provinces, within a couple of years of implementing its program, had settled well over 200 physicians in designated communities, and a waiting list of senior medical students, interns, and residents now exceeds the number of available vacancies.

The second of the four points is that provincial plans must be universal, which means that they must cover a minimum of 95% of the population on uniform terms and conditions. There can be no experience-rating on account of age, sex, previous health, occupation, ethnic background, and so on, and there can be no distinction in the premium charge for nongroup coverage compared with group coverage. When we introduced this program we eliminated all categorical programs that had previously existed for indigents, Indians, fishermen, and a number of other special groups. All these groups were swept up into the basic program and now have benefits identical to the rest of the general population.

The third requirement is that inpatient benefits must be portable, extending to cover the individual when temporarily anywhere in the world or when he moves within Canada. Coverage is not related to jobs and therefore a person changing occupation or retiring is not affected.

Finally, the fourth requirement is that the plan must be administered on a nonprofit basis and must be publicly accountable. In every province the plan is responsible to a cabinet minister who, in turn, has to report to the provincial legislature.

As I mentioned earlier, we brought in the two main parts of the program 10 years apart, and this had certain important consequences. First, preemption of the hospital-insurance field by the public program led private insurers to look around for areas in which they could make up for lost

business. At the same time some millions of people who had not previously had medical insurance thought it would be desirable, now that they had complete coverage for hospital care, to have similar coverage for their doctors' bills. As a result, there was a great increase in the amount of private medical insurance sold.

This was a positive factor, although the quality of the coverage varied tremendously. But there was a negative factor because the delay of 10 years in providing comprehensive ambulatory coverage after providing comprehensive inpatient coverage led to increased hospitalization compared to what might have been the case had we done things a little differently. Back in the 1950s and early 1960s even the most primitive private medical-insurance arrangements generally covered physicians' services provided in hospitals. Consequently, if the patient could be admitted to a hospital all diagnostic tests were covered, all drugs were free, and physicians' fees were covered. Therefore, both the doctor and the patient tended to use the hospital to spare the patient expense.

In theory it might have been better to bring in medical coverage first to encourage outpatient care, ambulatory care, and home care. But political heat was on in the hospital sector, which was—and is—the most expensive component, and many hospitals were having financial difficulties at the time. Private insurers believed that they could not raise premiums sufficiently to cover the increasing expenses of technical development, unionization, and so on without affecting the number of policies they could sell. Consequently, there was great pressure on governments to get into this area, bail out the hospital system, and provide necessary service to the people.

However, it was not the most logical approach but it was the only approach that could be sold politically at that time. While one often hears talk about the necessity of phasing in programs because they cost less money, they ultimately do not cost less money to the people. It certainly cost us in Canada more money in the long run, but it was the only way we could do it under the circumstances.

Before the implementation of our programs there were frightful prognostications of disaster. The most common prediction was that the system—hospitals, doctors, and the economy—could not stand the tremendous demands that were going to be made on it by universal coverage and free access to care. In other words, it was argued that it was immoral, almost literally immoral, to give free financial access to the people, who would go

wild, swamping the doctors and the hospitals, leading to national bankruptcy.

But our hospitals were not swamped, and after full implementation of universal ambulatory coverage the number of days of hospitalization per 1,000 population and the average length of stay began to decline, and these ratios have declined each year since 1971, the first full year that ambulatory coverage was available in every province in addition to universal hospital insurance.

Our provinces, having the constitutional prerogative with respect to personal health care, came into the national programs at their own pace, over two and one half years for hospital insurance and two and one half years for medical care. During the first year or so after each province came in, the rate of hospitalization in relation to population began to decline and has continued to decline in almost every province in almost every year, and nationally in every year since 1971.

Second, the supply of doctors easily kept up with demand and we developed a better distribution of doctors and a reduced exodus (principally to the United States) after the implementation of the program. Prior to this, every year we lost 400 to 500 doctors to the United States because of the difference in earning power between some parts of Canada and the United States. Previously, the poorer provinces had difficulty retaining doctors because they did not have much private insurance coverage and general economic conditions were unfavorable.

Far from costs escalating continually in terms of the economy as comprehensive ambulatory coverage spread across the country, the rate of increase in hospital costs began to decline. This favorable state of affairs, coupled with a decline in the rate of physicians' cost increases, led to reduction in Canada's national health expenditures in terms of our gross national product, such that between 1971 and 1976 health expenditures did not increase in terms of gross national product. In fact, in 1976 they were actually slightly less than in 1971 despite a much richer doctor-population ratio, a much better distribution of doctors, and a very inflationary hospital wage and salary settlement in 1974-1975.

I would like to mention a number of the lessons to be learned from the Canadian experience. The first lesson is that broader insurance coverage helps to restrain cost increases to the public (and it is the cost to the public that we are looking at—not cost to the plan, not cost to the budget, not cost to a program, but cost to the people). As I mentioned, our hospital

costs, which had been increasing throughout the 1960s, began to increase at a lower rate and within the rate of growth of the economy after ambulatory coverage was introduced.

Free public access to ambulatory diagnostic and treatment services helped to check the tendency, prevalent throughout the 1960s and into the early 1970s, of building hospital beds to keep pace with population growth. We now know that we have more active treatment hospital beds than we need, but we did not know this, or rather we could not prove this, until we had removed the reason for admitting people to hospitals to obtain certain services as an insured benefit. When the need to do that disappeared we suddenly discovered that we could stop adding hospital beds despite such advances in medical technology as organ transplants and coronary bypasses, which have changed tremendously what can be done and what is being done each year. And, despite the aging of the population, utilization of hospitals has begun to decline relative to the population.

I should mention that many of our general hospital beds have now been converted to chronic beds, but are still located in general hospitals. Despite this, the average stay in general hospitals is still declining. So again, phasing-in of benefits in retrospect may not be the most fortunate choice.

Lesson number two is that broader insurance coverage helps to improve the distribution of professionals, particularly physicians. There are many communities where the population size justifies one or more physicians, but for one reason or another cannot provide an equitable living for them. Hence, doctors do not go there, or they do not stay there. But under universal coverage there is very little difference in a physician's earning power between communities, provided there is need for his services. This phenomenon does help to attract and retain physicians in underserviced communities. It is certainly not the only factor, but it is an extremely important factor.

Prior to universal coverage for physicians' services in Canada, less affluent provinces had grave difficulties in retaining the more exotic specialties and subspecialties. There are many physicians from the poorer regions, such as the Atlantic provinces, whom you will find in the New England states or in Central Canada, because in the old days they had to go somewhere else to make an adequate living. That situation is now changed, and changed very dramatically.

The improved distribution of doctors is not only geographic, but functional. Functional improvement occurred particularly in the province of

Quebec, the only province in Canada in which the supply of general practitioners was declining each year in relation to the population. In the rest of the country roughly half of our doctors were general practitioners, but in Quebec it was less than 40%. They were aging, and the proportion declined each year because, with the pre-Medicare private insurance situation in Quebec, there was virtually no first-dollar coverage. With a relatively low-income population and visits to doctors' offices, patients' homes, and so on covered only after a substantial deductible, the young graduating classes specialized to have meaningful hospital privileges where private insurance coverage provided a better living. In fee negotiations after Medicare the province, to turn this around, deliberately agreed to overpay general practitioners relative to certain other specialties such as pediatricians, internists, and so on to encourage young people to go into family practice.

After the introduction of medical care insurance the situation did turn around. From a situation where perhaps 70%, 80%, or 90% of the graduating classes went into specialty training, it changed to the point where 70% to 80% went into family practice because they suddenly had a much better earning potential. Therefore, one can use fee schedules to improve physician distribution.

The third lesson is that broad coverage without artificial limitations helps to reduce demands for fee increases. Most demands for fee increases, or for that matter any other form of income change, result from a perceived need to offset the increasing cost of medical practice and of living. In our experience most physicians underestimated the extent to which the bad debts they carried on their books in the old days affected their income. Elimination of bad debts and the reduced cost of office practice in relation to billing (because most claims could be paid within a predictable period on a single billing) increased physicians' net incomes in most provinces.

This in turn led to a much lower subsequent rate of fee increase than had been customary for many years. Of course, it did not hurt that the medical profession had to negotiate fee increases, because it was a little more difficult to justify fee increases when incomes had just gone up very substantially. This too had an effect.

Another factor is that with a better distribution of doctors there can be a more rational workload per doctor, and therefore one does not have to play "jiggery-pokery" with fees to offset dilution of medical workload. Previously, one factor which led to fee increases was the fact that too many

doctors of one kind settled in a particular community or province and insisted that they needed a fee increase because they were starving to death! With the information we get as a byproduct of universal coverage, this problem emerges as one of distribution rather than one of inadequate fees.

The next lesson is that universal coverage leads to data accumulation, particularly with a substantial fee-for-service component. Incidental to fee-for-service and as a by product of paying claims, a record is automatically created for nearly every service, including what was done by whom, to whom, when, where, and, more-or-less, why. The plan gets this information because if it is not provided the plan does not pay, and that helps to obtain data. However, in our experience there have been great delays in accumulating this data, particularly if multiple intermediaries are used in the system, as they often tend to record data in a way which cannot easily be combined. The one province in Canada which made extensive use of previous private insurance companies as intermediaries (that was Ontario, which used about 30 of them) was the last province in Canada to have meaningful reports on what doctors were doing, because generally these intermediaries continued to keep data in the way they had in the old days, when each was getting only a very tiny fraction of any doctor's practice and was mainly concerned with detecting fraud. It was quite impossible to put such data together to see what was going on in the real world until the province got rid of the intermediaries and put all into one computer.

The next lesson is that data accumulation leads to data examination. During the initial stages of universal coverage, which you might say is the first year or two, all energies are taken up in keeping a plan afloat, because there is a tremendous flow of claims coming in. The plans have inexperienced staff, unproved systems, and struggle just to cope. But just when it looks darkest things start to improve. People begin to have a little time to take a critical look at what has been going on, and they start to look at the accumulated data.

The next lesson is that examination of the data leads to surprise, horror, and publicity. Most costs of a public program are not new costs to the people but a transfer from the private to the public sector. While still in the private sector, the magnitude and detailed distribution of costs and payments are largely unknown, but when they enter the public sector and are totalled they become matters of record, although not necessarily public record.

However, people who are not used to interpreting such matters or who do not appreciate that gross professional earnings have to be discounted substantially before they can be compared with net wages or net salaries are surprised or horrified by what they think they see. Recently, information was leaked in Ontario that 12 physicians had received annual payments of more than 1 million dollars, while the incomes of 800 or 900 others had substantially exceeded $100,000. Actually, the first group were all medical directors of private laboratories with multiple branches, and they were on a salary, a relatively small salary in some cases. The gross payments to the firm, billed in their name, did not actually go to the doctors. But some of the newspapers played up the issue on the front page and gave a totally misleading, perhaps even dishonest, impression.

The second group of physicians were much more modestly paid, and included many pathologists and radiologists who have, of course, very high gross incomes but also very high expenses. There were also a few university professors who were charging for services rendered in their departments, with the collection being pooled, or senior partners of group practices in whose name the invoices were sent. The sums did not represent income to the individuals named in many cases, and again a great misrepresentation took place. There was one lighter side to it, however. It was alleged that some wives of physicians who were not on that list were very miffed, because to be listed had become somewhat of a status symbol!

Lesson seven is that publicity leads to misunderstandings of several kinds—political, press-related, public and professional. Some members of the public are accustomed to reading the press and discounting a lot of what is in it, but other people get the impression that the doctors and the hospitals are ripping them off. Therefore, they become somewhat antagonistic, to put it mildly.

Members of the press who do not take part in the leak nevertheless are often influenced by it, and this builds a bias into their future reporting. Politicians may be caught by surprise when information is leaked and suddenly appears in one or two newspapers without any advance warning. A reporter may catch a politician when he is distraught and thinking of something else, and if he is not careful he may react without finding out exactly what he is reacting to or its basis. That, in turn, creates more misunderstandings.

Finally, there are some people in the professional or hospital system

who originally opposed implementation of these programs and who take advantage of any adverse publicity to rush forward with such gems as, "We warned everybody that this would happen if they brought in an evil scheme of this nature." That, of course, gets everybody to believe that these things are true. I understand that we have some Canadian gentlemen who like to come to the United States and give frequent talks along these same lines, and who remain singularly aloof from what has really been going on in their own country.

Lesson number eight is that, as a result of the data accumulation, data examination, surprise, horror, and publicity, the means and the motivation to deal with major problems develops. Once no one can claim ignorance of the more flagrant deficiencies revealed by the above phenomena, steps are taken to deal with them. Fraud is detected in a small number of cases and is prosecuted. Grave deficiencies in certain areas are identified and, because of intense pressure from the publicity, somebody does something about it. A few doctors are found who require a bit more postgraduate training and they are advised by their licensing body to undertake it. Therefore, things do get done.

The next lesson is that the administrative cost of national health insurance should be lower than the cost of private health insurance. Contrary to the widespread belief that governments cannot do things efficiently, this criticism does not apply in the case of national health insurance. Among the reasons for this is the fact that multiple carriers with duplicate administrations are markedly reduced in number. In Canada we are down to one plan in each province, as opposed to more than 200 as was the case in Ontario before the universal program.

Standardization of the benefit package effects savings as well. Administration of one basic package is a lot cheaper than administering a great variety of individual and group policies.

One very important fact is that universal programs permit governments to operate without individual premium collection, which is very expensive. One can take advantage of other already existing mechanisms for raising revenue such as sales tax or income tax surcharges, where costs of collection are already being borne. Therefore, it does not need to cost anything extra to collect the additional amount necessary to finance the insurance scheme.

The cost of premium collection from nongroup enrollees is a principal cause of the marked difference in cost between nongroup and group

coverage. If you are going to try to cover a rural population of self-employed or seasonally employed people, just forget a premium system because it will cost more than it is worth to collect. In Canada in recent years it has cost the public less than $1.03 per dollar of health-insurance benefits paid, as compared with roughly $1.20 under the pre-existing private schemes which did not cover the whole population. I understand that a very similar figure, about $1.20 per dollar of benefits paid, is the current situation in the United States.

Quite obviously—remember we are talking about cost to the people—you can cover many more people for the same amount of money if you are paying $1.03 per dollar of benefits paid than if you are paying $1.20 per dollar of benefits paid. Simply by converting from one system to the other and spending exactly the same amount of money you will cover a substantially larger population, which represents a relative saving to the people. It is not a very popular concept with the insurance industry, but it does help the people.

We eliminated most of our categorical health-care programs, and we see no advantage to the public in carrying several different policies to achieve a particular essential level of benefit coverage. Each policy has its own administrative costs of various sorts. We view catastrophic coverage in this light: if you have to add it separately on top of some other level of insurance it just adds an unnecessary cost. Catastrophic coverage is something that only a small percentage of the population requires. You cannot predict who that percentage includes and it is much cheaper just to build it into the basic coverage at a relatively very small additional cost to everyone.

Finally, the last lesson is that the quality of care does not need to decline under national health insurance. We had very marked improvements in our vital statistics in all provinces coinciding with the introduction of our programs. The Canadian Council on Hospital Accreditation has found no evidence of reduced quality of care, and it is a body similar to yours and affiliated with yours. In point of fact, we have found that, through such devices as medical review committees, which are professional committees nominated by the profession to operate with the plans, there is quality review of care, and some of the grosser examples of poor care are discovered and dealt with.

One mandatory requirement for hospital accreditation is an active medical audit committee. The Royal College of Physicians and Surgeons, our

specialty accrediting body, has likewise adopted this criterion to recognize teaching hospitals for postgraduate training. Perhaps because the quality of medical care has obviously improved in recent years and because, by-and-large, our public is not out of pocket in relation to treatment, our incidence of malpractice suits is very much lower than that in the United States. Most Canadian doctors pay a fee of $200 a year for malpractice insurance, regardless of their type of practice and regardless of the region. Malpractice insurance is also a health cost that must be covered in the fees paid to the doctor or in the rates paid to the hospital. If you can lower the incidence of suits, and we believe that this can be promoted by improving the satisfaction of the public, it reduces costs.

In countries without national health insurance there is often a great fear of interference with private medical practice and the operation of hospitals. Our scheme did not interfere to any extent with either. National health insurance gives a mechanism to control, improve, and rationalize the health-care system, but it does not necessarily ensure this, except very slowly and over time. Health is a very sensitive political issue among the public. By and large, in our experience the public is fairly conservative in health matters and will not support radical changes in the health-care system as opposed to radical changes in access to it. Consequently, most fears about the horrors of national health insurance are groundless, and I would like to give two brief examples.

In Ontario last year a great hullabaloo resulted when the provincial government announced it was going to close 10 small hospitals to save $50 million dollars in health costs. The affected communities objected very strongly and some of them took their cases to court, claiming that the government had no business closing hospitals simply because it did not want to pay for them out of its budget. The hospitals in this group were all accredited, and the courts upheld their contention. Hence, those hospitals are still operating.

In British Columbia, which is one of the provinces that feels it has more doctors than it needs, the government feels obliged to increase the size of the medical school. Why? Because the people of the province object to their children having to go somewhere else to study medicine. Therefore, it was considered necessary to enlarge the school.

Public opinion has a very strong influence on what happens and how extensively schemes are altered. In fact, in our experience the implementation of national health insurance removes most of the public's major

dissatisfactions with the health-care system and neutralizes most of the vainglorious planners who would change everything if they had their own way. This was recently brought home to us in a very convincing fashion by a poll conducted by The Canadian Institute of Public Opinion. Respondents were asked to record their satisfaction with a number of public services, one of which was Medicare, used in this sense to mean both hospital and medical insurance. Results showed that 84% of Canadians rated this as good value for their tax dollar, a higher score than that achieved by any other public service.

Of course, the longer the system operates with free access by the public the more difficult it is politically to change. But this is true only if the costs of the system are not much worse than they were before and if the public is basically satisfied. Accordingly, it is in the interests of all members of the health-care system to make sure that whatever program of national health insurance may be implemented in their country is made to work efficiently and economically and give satisfaction to the public. If that happens one need have little fear that what is good in the system will be interfered with, seriously, in spite of the aspirations of all sorts of people who would like to change the world.

Questions and Answers

QUESTION. What has happened to the private insurance companies? Please elaborate on the role of the private health insurance companies since 1968 in health care. Is this problem different in the United States? I understand that Blue Cross has expanded tremendously in Canada since the advent of federalized Medicare in Canada. Does this indicate a defect in the system?

DR. ARMSTRONG. The private health-insurance industry in Canada is not permitted to duplicate the public system's coverage. However, it is quite free to market supplementary and complementary benefits such as insurance for the differential cost of semiprivate or private accommodation in hospitals, ambulance charges, drug or dental benefits, coverage for services of any practitioners or types of institutional care not covered under the basic provincial programs, and supplementary coverage for persons travelling abroad where the charges might be greater than the benefits provided under the provincial programs.

In Canada the Blue Cross organization consists of a series of provincial Blue Cross plans just as in the United States. Some of these have become

very active in selling additional benefits or in providing coverage for tourists and other visitors to Canada who wish to insure themselves for an appropriate period of time. Others have largely contented themselves with providing coverage for the differential charges for semiprivate or private accommodation in hospitals. Blue Cross and the other private health-insurance agencies do not compete with the government programs but sell supplementary coverage for services not provided by those programs. Whether this represents a defect in the system depends upon one's views as to what should be covered in the public program and what should be left to the private sector.

QUESTION. Does the retention of fee-for-service payment continue to motivate physicians to provide unnecessary surgery and other services?

DR. ARMSTRONG. What constitutes unnecessary surgery (or for that matter other medical services) is very much a subjective opinion. Studies in Canada suggest that by far the most important factor influencing the rate of surgical procedures is the availability of surgical beds in the hospital system. It would appear to be a much more important factor when comparisons are made between provinces than the relative availability of specialist surgeons or the level of fees paid for surgical procedures.

Since our medical insurance scheme was introduced, the overall rate of major surgical procedures relative to population appears to have declined slightly despite the appearance during those years of a marked increase in such procedures as organ transplantation, coronary bypass surgery, etc. It should be noted that the nature of the fee-for-service system and universal coverage enables surgeons performing an unusual amount of surgery to be readily detected. When this happens their profiles are reviewed by a Medical Review Committee and frequently the surgeon is called in to explain his performance, or his records may be examined, or both. It is much easier to detect a surgeon who is overservicing under fee-for-service in a universal plan than to detect one who in underservicing under other methods of payment. Countries using basically nonfee methods of paying surgeons generally also have a private system operating outside the public system where a significant amount of surgery is performed on those who are prepared to pay their own way to bypass the system. This has not been necessary in Canada.

QUESTION. Has national health insurance made a more comprehensive approach possible through a team approach, i. e., doctor, nurse, therapist, social worker, nutritionist, and health educators?

DR. ARMSTRONG. To the extent that services are provided in a hospital setting, either inpatient or outpatient, the answer is yes. The services of all individuals on salary by the hospital and all physicians' services are covered. However, the degree to which the team approach has developed varies very greatly from one setting to another, as does the degree to which the various professionals wish to work in a team setting. Our health-insurance programs have had relatively little impact in either encouraging or discouraging the team approach in private medical practice settings.

QUESTION. How about mental health? Is there more utilization of preventive services plus acute therapeutic care now? What has been your experience in psychiatric care benefits? Full coverage?

DR. ARMSTRONG. Because no diseases are excluded under either our hospital insurance or medical care programs, there is full coverage for necessary hospitalization and physician's care for mental illness, both preventive and therapeutic. There are likewise no limitations on the number of days of hospitalization covered nor on the number of visits to the physician or dollars of benefits payable under either hospital or medical programs. However, it should be noted that, strictly speaking, pure mental hospitals are outside our national health-insurance system, although services provided in them are free to the population under other arrangements so that for all intents and purposes the public has full access to necessary medical and hospital treatment for mental illness.

It is also interesting to note that since the coverage of psychiatric services under the medical care program on an ambulatory basis and in community hospitals and private practice settings was implemented, most provinces had been able to close beds in traditional mental hospitals. How much farther this can be carried remains to be seen.

QUESTION. Do you have any mechanisms for keeping costs of unnecessary diagnostic procedures at a minimum?

DR. ARMSTRONG. In Canada we have the same problem in controlling the volume of diagnostic procedures as do other western countries. However, one of the many items kept in the profile of each physician's practice deals with the number of diagnostic laboratory procedures and diagnostic radiological procedures which he orders. Physicians' profiles which deviate from the normal range are reviewed by a medical review committee of practising physicians who may ask for an explanation and justification of bizarre patterns of ordering diagnostic procedures. In some cases a medical review committee has recommended that the guilty physicians be

charged the cost of procedures ordered beyond that which might be normally considered justifiable. In an occasional case, where it was obvious that the physician was unsure of himself, a period of further internship or practice under supervision has been recommended. Where hospital laboratories provide the service an additional factor comes into play. Because the hospital laboratories are funded under the hospital budget, any disproportionate increase in cost to the laboratory service will prejudice other aspects of the hospital's operation and consequently lead the medical staff and administration of the hospital to take note of the situation.

QUESTION. What has been the effect of available private practitioners on the university or teaching hospitals ambulatory services?

DR. ARMSTRONG. The first effect, of course, is that the traditional indigent clinics at teaching hospitals and other hospitals have disappeared. Their place has been taken by family-practice units, which are a form of medical practice usually founded by several experienced general practitioners who have chosen to become salaried employees and who have brought their private medical practice with them into the teaching setting. Patients who attend these family-practice units are private patients except that the unit has interns, residents, and medical students who learn how to handle patients in an office setting. The teaching hospitals also have specialized clinics which treat private patients on referral for such conditions and services as diabetic day care, metabolic diseases, etc. There is also a large clientele which has never bothered to associate themselves with private physicians and who find it much more convenient simply to go the nearest hospital when they wish to see a doctor. These patients visit the outpatient or emergency departments for attention. The introduction of universal health insurance has not reduced the available amount of clinical teaching material and, if anything, has increased it is because most private patients do not object to being used for teaching purposes if approached correctly.

QUESTION. Are medical records in private offices reviewed for quality of care by the National Health Program? What sanctions are implemented if care is of poor quality?

DR. ARMSTRONG. All provincial medical care plans have medical review committees which, in Ontario for example, are appointed by the medical licensing and disciplinary body. These committees review the profiles of physicians whose patterns of practice are in various ways unusual, where there have been complaints received from the public which

appear to be meritorious, or where there are other reasons to suspect that something may be wrong. Since the profiles contain a record of virtually every medical act carried out by full-time, fee-for-service physicians, including the additional services they generate (such as referrals for consultation, laboratory procedures, radiological procedures, and hospitalization), a very complete picture of a doctor's practice is available to the committee. These committees have the power to appoint inspectors to visit the physician's office to examine his records and they also have the power to summon a physician before them to be cross-examined and to explain questionable matters. Cases of fraud are normally referred to the courts. Cases of obvious inexperience, lack of judgment, or deteriorating behavior generally result in referrals to the disciplinary body which, after conducting a hearing into the matter, may revoke or limit the physician's license or may require him to take an additional period of internship or to practice under the supervision of another physician. In a number of provinces the gross billings of physicians are watched fairly closely on the grounds that if more than a certain volume of services is rendered in a certain period of time there are grounds for suspicion that the quality of the service may well be below par. It must be admitted that many physicians consider this approach somewhat controversial.

QUESTION. Concerning the quality of care, you referred to hospital care and mentioned accreditation by outside agencies and medical committees. What about the quality of care at the ambulatory level? How do you control potential abuse built into a fee-for-service payment system or overutilization by M. D.s? Why retain it and require all the paperwork and increased administration costs?

DR. ARMSTRONG. As mentioned in the answer to the previous question, a profile of practice is compiled on each physician and from this it is fairly easy to determine potential cases of overutilization. These are generally investigated by medical review committees as mentioned earlier. It must be remembered that fee-for-service is not the only system of payment subject to abuse, and under fee-for-service it is much easier to detect overutilization by physicians and to follow progress in attempts to deal with it than to detect underutilization in a nonfee system and to follow progress in attempting to deal with that.

It must also be recognized that fee-for-service has one major attraction for the public and that is that it is the only system that gives free choice of doctor by episode of illness, which is something that the Canadian public

values. It is also the system which most Canadian doctors at this time appear to favor and it is the system which most facilitates portability of coverage, which in a mobile society is a very important element. Further, the processing of fee-for-service claims provides automatically a record of what was done by whom, to whom, when, where, and, more or less, why. Thus valuable information for a variety of purposes is automatically accumulated and much of this information is quite simply not available under any other system. Moreover, our total retention, including administrative costs for administering a largely (but not totally) fee-for-service system—i. e., less than 3%—compares very favorably with those of any other system. Undoubtedly, as time progresses an increasing number of doctors will be interested in other methods of payment and it may be that the public's attitude to a completely free choice of doctor may also change. However, at the present time a fee-for-service system would appear to be the system best fitted to our particular requirements. It should also be noted that fee-for-service is the only system that can accommodate major changes in the supply of doctors without grave dislocation of the system. For example, over the last 10 years the supply of doctors in Canada was increasing at three to four times the rate of the population growth and yet the system was able to absorb them because of the nature of the payment mechanism. Once the growth of the supply of doctors becomes stabilized, of course, other payment mechanisms become more feasible.