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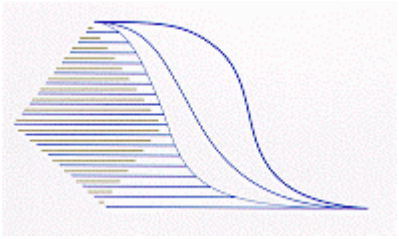

Health Care in Canada:
Organization, Financing, and Access

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Rachlis, M, RG Evans, P Lewis and ML Barer (2001), *Revitalizing Medicare: Shared Problems, Public Solutions*, Vancouver: Tommy Douglas Research Institute

Evans, RG, ML Barer, S Lewis, M Rachlis and GL Stoddart (2000), *Private Highway, One Way Street: The DeKlein and Fall of Canadian Medicare?*, Vancouver: UBC Centre for Health Services and Policy Research, HPRU 2000:3D

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The Canadian health care system took its modern form between 1968 and 1971, and its fundamental principles and basic structural features of organization and finance have remained the same since that time. The system has evolved over the past three decades, and has adapted more or less successfully both to significant changes in the external environment and to the changing needs and possibilities of health care services themselves. But it remains easily recognizable as the same system that was established more than thirty years ago.

How the System Works: A Summary

Broadly speaking, health care in Canada is provided by private practitioners – physicians, dentists, pharmacists and members of a number of other, much less populated professions – and by not-for-profit hospitals, each overseen by a Board of Trustees. Most health professional groups in most provinces are regulated by independent professional Colleges, under authority delegated by provincial governments. Most practitioners are paid on a fee-for-service basis and are predominantly self-employed in their own private practices – solo or small group partnerships – though some are employed full- or part-time in practices owned by other professionals. Hospitals, by contrast, receive an annual global budget from the Ministry of Health of the province in which they are located. Institutional care outside hospitals is provided by facilities reimbursed on a *per diem* basis. Some are for-profit, owned by individuals or corporations; others are run by community groups.

The principal form of public insurance covers the services of physicians and acute and extended care hospitals. All Canadian residents are fully covered for all "medically necessary" hospital and medical care, without deductibles or co-insurance.[1] (Certain forms of elective cosmetic service are excluded.) Thus, a person who feels a need for care will seek out a physician of his choice, and if accepted as a patient, will be cared for without any financial implications. The services provided are paid for by the government of the person's province of residence, according to a uniform fee schedule negotiated between that government and the provincial medical association. (If a patient is cared for in another province, reimbursement will be at the fees in effect in the province of service.)

Diagnostic tests ordered by the physician are also paid for according to the negotiated fee schedule, as are referrals to specialists. Roughly half of all physicians in Canada are generalists or family practitioners, so the normal pattern of care-seeking is for the patient to go to the family doctor and, if necessary, be referred from there. Patients may self-refer to specialists, but this is discouraged. The specialist receives a larger fee for a formal referral; but, perhaps more fundamentally, the (deliberately) limited numbers of specialists permits them to concentrate on truly specialized work, rather than competing with generalists for patients. If hospitalization is indicated, the physician arranges to have the patient admitted. With a few exceptions, physicians are not employed by specific hospitals; rather, they have admitting privileges at one or more facilities.

[1] Extended care hospital patients pay a per diem charge that is based, not on actual cost, but on the prevailing rates of income assistance for the low-income elderly. The intent is to "claw back" this payment, less a "comfort allowance", so as not to subsidize basic living costs twice.

Patients have "free choice" of general practitioner; they are not restricted to a particular source of care. If referral is indicated they can request referral to a particular specialist. (The physician also has a choice as to whether to accept the patient.) A patient wishing to be admitted to a particular hospital might select a physician on the basis of his admitting privileges. In practice, however, when the patient selects a general practitioner, he has also implicitly selected the set of specialists with whom that physician has ongoing referral relations, as well as the hospital where he or those to whom he refers have admitting privileges. In any case, financial considerations play no part because all hospitals, like all physicians, are included in the public insurance program. Thus the delivery of health care in Canada is predominantly "private" -- the public plans pay for care provided by private practitioners, and hospitals that are not government agencies, without restrictions on choice. The Canadian form of Medicare is not "socialized medicine", but rather "socialized insurance."

This universal public coverage applies, however, to less than half of total health care expenditures. Hospitals and physicians account, on current (year 2000) estimates, for 31.8% and 13.5%, respectively, of a total of $CAD 95.1 billion (9.3% of GDP) spent on health care. Another 36.7% was spent on drugs (principally prescription drugs), services of other professionals (principally dentistry), and institutional care outside hospitals.[2] Patterns of public coverage for these components are much less uniform – varying from one province to another – and less complete, ranging from about 70% for institutional care to slightly more than 40% for prescription drugs, to about 6% for dentistry and zero for non-prescription drugs. Overall, public sources covered 71% of total health spending in 2000, one of the lowest ratios among developed countries (CIHI, 2001; OECD, 2001). Canada thus provides more comprehensive public coverage than most countries for hospital and physician services, but less for other forms of health care.[3]

The Relationship Between the Federal and Provincial Governments

While the system described in this brief outline has not changed substantially since the early 1970s, the description masks some important changes in the relationship between the federal and provincial governments, particularly with respect to the fiscal transfers to the provinces that underpin the plan. The details of federal-provincial fiscal arrangements are arcane and highly specialized, and impinge little or not at all on either the individual patient or the individual provider in day-to-day practice. Over the long run, however, the survival or dissolution of the present system depends critically on decisions made at this level.

For fundamental constitutional reasons, as well as good practical ones, the governments of the Canadian provinces have virtually all responsibility for both regulating and funding health care within their borders. They can set up health care insurance programs any way they choose, or not at all. The federal government, however, sets the standards for "conforming" provincial programs, and provides both cash payments and access to part of the income-tax base for provinces operating such conforming plans. Effectively, then, the federal government can determine some of the

[2] The remainder is public health, research, capital investment, insurance administration, and "other".
[3] Private insurance covers just over one-third of the private expenditure, and Canada, like the United States, supports this private insurance with a public "tax expenditure subsidy" that offsets about a third of its cost.

fundamental principles governing provincial plans – so long as it also contributes to the plans' cost. Under current legislation, federal standards and corresponding contributions have applied only to the coverage of "medically necessary" hospital and physician services.

The principles of universal coverage, universal access "on equal terms and conditions," comprehensiveness of benefits, portability of benefits across provinces, and public administration are fundamental to all provincial programs. In particular, the access provision has been interpreted by the federal government as ruling out any form of direct charges to covered users of insured services. The federal *Canada Health Act* of 1984 provides that the federal cash grant to a provincial government will be reduced, dollar for dollar, by the amount of all such payments made by its residents.

Over time, both the nature of the federal contribution and its relative size have changed greatly. In the beginning the federal government shared a proportion (roughly half) of actual program costs; this was changed in 1977 to block grants independent of actual costs. But this grant consisted of both a cash payment, and the transfer of "tax room" -- the federal government lowered its rates of income tax to permit the provinces to increase theirs by a corresponding amount. In the 1980s and early 1990s, the federal cash contribution was on a steady downward trend. If this cash contribution were to become so small that the federal government could no longer withhold significant amounts from non-conforming provinces, then it is a virtual certainty that the present system would immediately begin to crumble. In 1997, the federal government began increasing the cash contributions to the provinces; this trend continues today.

System Performance

The health status of Canadians, at least as proxied by such measures as infant mortality rates and life expectancy, continues to improve, and is among the highest in the world. Life expectancy at birth for Canadian males born in 1997 was 75.8 years; for females, 81.4 years. These are up from 73.6 and 79.9 a decade earlier. Canada's infant mortality rate in 1997 was 5.5 deaths per thousand, down from 7.3 per 1000 in 1987. This was a new low for Canada, but still well behind the 3.7 rate for Japan (OECD, 2001). But these measures, though widely used, are incomplete measures of the health status of a population. Furthermore, the extent to which they reflect the impact or quality of a health care system, is questionable. The aggregate health status of populations has been shown to depend more on the quality of the physical, social and economic environments in which people live and work, than on health care system performance (e.g. Evans et al., 1994; *Daedalus*, 1994; Hertzman et al., 1996; Keating and Hertzman, 1999).

In any case, such statistics have little to do with aggregate health care spending, at least among industrialized nations. The Japan-Canada comparison makes the point: Japan spent about 7.6% of its GDP on health care in 1998 while Canada spent 9.5% of its larger (per capita) GDP.[4] The United States spent the world's largest share -- 13.6% -- of the world's largest per capita GDP. Yet this enormous expenditure was associated with significantly worse health outcomes: female and male life expectancies in 1997 of 79.4

[4] These data are based on OECD definitions of GDP. The difference between the 9.5% and the 9.3% reported in Canadian sources, arises from a slight difference in the GDP concepts used by the OECD on the one hand, and Statistics Canada on the other.

and 73.6 years respectively, and an infant mortality rate of 7.2 deaths per 1000. Canadians were significantly healthier, and the Japanese, healthier still.

An alternative measure of system performance may be found in the satisfaction of those it serves, as reflected either in periodic surveys or in public commentary. From the inception of Canadian Medicare until the early 1990s, Canadians have generally expressed a high degree of satisfaction with their health care system, and strong support for its fundamental principles. A 1989/90 international Harris poll reported them to be more satisfied than the respondents from any of the other ten countries surveyed -- including Japan (Blendon et al., 1990).

Over the last decade, however, surveys have shown a sharp deterioration in satisfaction with the state of the Canadian health care system. Thus, while 56% of Canadian respondents to the 1989/90 survey indicated that "The system works pretty well"; only 20% of respondents gave this response to a similar question in a 1998 survey. The proportion of respondents who indicated that "The system needs complete rebuilding" rose over the same period from 5% to 23% (Blendon et al. 1990; Donelan et al. 1999). A recent Canadian survey suggests that Canadians are still highly supportive of the fundamental principles on which the system was built, but are expressing growing concern about its ability to deliver when they need it (Maclean's, 2000/01).

Yet despite this general and rather dramatic erosion in public confidence, Canadian patients continue to express high levels of satisfaction with their own personal encounters with the health care system – "the system is getting worse, but you wouldn't know it from my personal experience." For example, in the international survey quoted above 54% of Canadians said that the medical care they or their family received in the last 12 months was excellent or very good (Donelan et al., 1999). This raises some interesting questions about the sources of information that underpin public opinions about the state of the health care system more generally.

The 1989/90 survey, however, showed a strong relationship between real per capita health care spending and public satisfaction (with the notable exception of the U.S., where spending was highest and satisfaction lowest). One might then have anticipated that Canadians' high level of expressed satisfaction would be vulnerable to a decline in spending. And indeed this appears to have been exactly what happened.

Although its primary intent was to expand public access to health care, the Canadian Medicare system also turned out to be relatively successful as a device for controlling overall costs, at least in a North American context. Prior to 1970 the Canadian and American cost experiences tracked each other very closely. Beginning with the establishment of universal public coverage for physician services in Canada in 1971, the two countries' experiences have diverged sharply (see Figure 1). While in 1971 both countries were spending just over 7% of their national income on health care, a decade later a gap of almost 2% had opened up. This grew to over 3% by the early 1990s, and was as of 1999 creeping over 4% of GDP.

Comparisons of Canada's cost control experience with that of other countries provides a quite different perspective. Canada is among the high cost countries of the OECD. But considering the extensive similarities between Canada and the United States, and the latter's enormous influence on all aspects of Canadian life, the extraordinary divergence in cost performance is striking. Higher physician fees and system

administrative costs, and more resource-intensive hospital treatment have been found to account for this difference (Evans et al., NEJM, 1989).

As a percent of GDP, Canadian health care expenditures topped out in 1992 (10%; CIHI), and then dropped sharply, hitting a trough in 1996 (9%; CIHI). All of this decline was in public sector spending, which actually **fell** between 1992 and 1996 while the population was growing at a rate of over 1% annually.[5] Little wonder, then, that patient satisfaction declined sharply over this period. Once the public, and the people who draw incomes from that system, become accustomed to a particular level of spending, responses to changes in that level will be highly asymmetric – additional funding will be embraced; cuts will be bitterly resisted. This resistance has been successful. Since 1997, substantial additional financing has flowed into the public system, and the percent of national income spent on health care is once again on the rise (Figure 2).

Of course these aggregate indicators of system performance are not only imperfect, they mask underlying differences in the experiences of individuals. While Canada has made considerable gains in health status as measured by life expectancy and infant mortality, substantial differences remain across different groups in the population. In particular, Canada shows a significant gradient in health status by income class, with virtually all measures showing health to be closely correlated with socioeconomic status (Mustard et al., 1997). A recent report on the health of Canadians, for example, noted that:

- A 1991 study showed that Canadian men in the highest income quartile had life expectancies 6+ years longer than those in the lowest;
- A 1993 study showed a strong inverse relationship between mortality between ages 65-70 and lifetime annual average earnings prior to retirement;
- Potential life years lost before age 70 were almost twice as high for men as for women, and almost three times as high for men ages 20-34.
- Life expectancies for Canada's aboriginal population remain well below those for the entire population (Federal/Provincial/Territorial Advisory Committee on Population Health, 1999).

These gradients have persisted, however, despite the fact that there is no corresponding gradient in the use of health care services. Rather, people at the lower end of the income distribution use more services, not less (Mustard et al., 1998). And indeed, one of the key results of the establishment of the Canadian form of public health insurance was precisely to eliminate any income-based bias in access to, or use of, health care services (Enterline et al., 1973a, b). Recent studies have indicated that those in greatest need of services were, indeed, the highest users (Roos and Mustard, 1997; Finkelstein, 2001). Nevertheless, the health status deficits remain.

These striking relationships between socioeconomic status and health are occupying increasing amounts of attention from health services and population health researchers in Canada. However, they have not captured the imagination of the public, and correspondingly remain of little more than sporadic, and even then rhetorical, interest to politicians. In contrast, **geographical** disparities in access to care have been a source of public concern and political and policy interest at least since the establishment of

[5] Indeed, if the rate of change in private spending had been the same as that in public, the % of GDP spend on health care would have declined to about 8.5% by 1997.

Canadian Medicare. Despite any compelling evidence of corresponding geographic differences in health status, attempting to reduce or eliminate differences in geographic access remains a high profile policy preoccupation (and continues to defy easy solution).

The relationship between access, health status and health policy concern thus presents something of a paradox. On the one hand, differences in socioeconomic status are associated with very real differences in health status, but these do not correlate with differences in access and have not aroused much policy response. On the other hand, geographic differences in access, are not associated with differences in health status, but have been the source of policy concern over many years. Of course this observation may not be surprising if considered in light of responses to a mid-1990s survey conducted by Ekos Research Associates (Toronto) for the Canadian federal government. Canadians reported themselves far more concerned about "Equal access to health care for all Canadians" than about the "Health of Canadian population".

There is an additional distributional issue that has, however, received relatively little attention, either from analysts or in public debate, yet which appears to lurk in the shadows of many of the current key health care system issues. The distribution of system costs across the different members of Canadian society depends critically on decisions about financing mechanisms. The Canadian Medicare system as it exists today, being funded almost entirely out of general tax revenues, is financed purely on the basis of ability to pay, without reference to utilization or need. The system costs therefore bear proportionately most heavily on those with the highest incomes. Private financing (whether through private insurance or out-of-pocket payments), imposes costs independent of ability to pay. In the case of private insurance, premiums are based on expected risk status; direct charges are based on actual utilization. In Canada, over half of prescription drugs (out-of-hospital), and nearly all of dental care, are financed through such means (see above).

Accordingly, while Canada's Medicare is one of the most progressively financed systems in the world, it ranks relatively low among OECD countries in terms of the proportion of all health care costs that are financed publicly.[6] All proposals for changing the mix of financing sources necessarily include an implicit or explicit proposal to change this pattern of burden distribution.

Current Issues

As noted above, Medicare is facing a crisis in public confidence. While there is still broad public support for universal comprehensive medical care, Canadians are increasingly concerned that the cost of our current system is unsustainable and—at a more personal level—that care will not be available when they need it.

This drop in public confidence has occurred over the course of the 1990s. It is likely to bring about a major reshaping of the management and delivery of medical services in Canada. It could help redefine the current scope of services and programs, breathing new life into the original vision of a just and affordable health care system. Or it could bring about the end of Medicare, tying Canadians more and more tightly to what a former editor of the New England Journal of Medicine, Dr. Marcia Angell, has called the most expensive and inadequate health care system in the developed world: the

[6] Progressive financing means that the proportion of income a person contributes increases with income; regressive means the reverse.

American system (Angell, 1999). That is not what most Canadians want, but the possibility is increasingly real.

The original architects of Medicare were well aware that "socializing" the payment system was only the first step toward major change in the way in which health care is organized and delivered. In introducing the first provincial Medicare legislation, in Saskatchewan in 1961, the then premier, Tommy Douglas, described "remov[ing] the financial barrier between those who need health care and those who provide it" as only the first step. "The second step… will be to establish a new type of delivery system in the health field," a system that includes community-based care, preventive medicine that focuses on maintaining health and functioning, and alternative mechanisms for paying care providers (Douglas, 1984).

Forty years later that second step has yet to be taken. But the pressures in the current system are continuing to build; Medicare is facing very real challenges rooted in the organization and management of its delivery system. One way or another these must change. The National Forum on Health and numerous provincial reports have acknowledged both the need to reform this system and the ability for reform to be accomplished within the current public, non-profit model (National Forum on Health, 1997).

The crisis in public confidence, however, is being fuelled by quite different messages:

- We can no longer afford Medicare.
- The principles on which the system is based are no longer relevant.
- Moving more of the delivery of care to private, for-profit companies will lead to a more accessible and less costly system.

Each of these claims is demonstrably false. They serve to obfuscate rather than to illuminate, and tend to focus policy attention away from those very real organizational and management issues. Yet they have been made for the past thirty years with striking regularity, and for quite understandable reasons.

Something old

While Medicare has broad support among Canadians, that support is not and never has been universal. This, in large part, is because a number of individuals and organizations have an economic interest in Canada adopting an increasingly mixed public/private system more similar to that in the United States. While they argue that such changes will improve efficiency and accessibility, their opposition to Medicare is really based on economic self-interest and the inescapable logic of two fundamental accounting truths:

- Every dollar spent in health care, regardless of whether it buys more services or contributes to better health, is a dollar received - it is someone's income; and
- In <u>all</u> collectively funded health care systems (i.e., private group insurance, as well as publicly funded care), some people pay for more care than they use, and some people use more care than they pay for.

As political scientist Aaron Wildavsky pointed out a quarter-century ago, health care systems are not self-limiting; "…costs will increase to the level of available funds." (Wildavsky, 1977). This means that no matter how positive a society may feel about increasing funding for health care, eventually it will have to

impose some form of cost control. This, inevitably, leads to conflicts over funding between those who pay for and manage resources, and those who get paid for providing care.

Medicare is, in part, a cost control mechanism. Since its introduction, more profit-oriented health care providers—including equipment suppliers, pharmaceutical companies, and financial and administrative service corporations, as well as a number of physicians—have attempted to circumvent its constraints by regaining direct access to the patient's own resources. For example, although overt extra-billing by physicians ended with the introduction of the Canada Health Act in the 1980s, some continued the fight to overcome limitations on their incomes, most recently by advocating for "improving" or "reforming" the health care system through support for private clinics and two-tier health care.

> Surely to heaven we are not going back after all these years… to a system in which the quality of care which patients receive depends on their financial capacity to pay. T.C. Douglas

Medicare's effect on expenditure trends is clearly shown in Figure 1 above. Had Medicare not been introduced, and if health care as a percentage of GDP in Canada had continued to track U.S. figures, there would now be about $40 billion more in the health care sector in Canada than we find today -- $40 billion in additional and /or higher incomes.

The second truth—participants in collectively funded health care systems do not pay according to the care they use—speaks most strongly to those groups for whom public coverage implies greater costs than benefits. Moving health care costs from public (taxes) to private budgets (user pay or private insurance) moves costs from the shoulders of the more wealthy to those of the less wealthy. As most care for the poor will continue to be paid for publicly, a greater portion of the public costs are shifted to middle-income earners. The fact that private payment is associated with a transfer of the financing burden from higher to lower income groups is clearly demonstrated by the experiences of the United States and countries of the European community (van Doorslaer et al., 1999; Wagstaff et al., 1999).

A natural consequence of these two truths is an alliance between the wealthy—who want lower taxes—and profit-oriented health care providers—who oppose limits on their incomes. Both of these groups gain, at the expense of the Canadian public, from any expansion in the scope of private payment. This alliance is not new; it was present before Medicare began. But it appears to be increasingly influential. Its members have every incentive to feed public uneasiness.

Something new

As noted earlier, the health care sector came under severe financial pressure during the mid-1990s. Between 1992 and 1997 total health care spending per capita, when adjusted for inflation, fell by 1.1 %. This absolute decline is unprecedented. Those areas primarily affected were hospitals, where per capita spending (adjusted for inflation) fell by over 16%, and per capita expenditure on physicians, which, when adjusted for inflation, fell by 6% (CIHI, 2001).

At the same time private sector spending - principally on drugs, dentistry, and the private part of institutional care - rose by 16.4%. This growth in real expenditures, combined with more rapid private sector price increases, pushed the private share of health care spending from just under 26% nationally in 1992 to more than 30% in 1997. This relative expansion in private sector expenditures has NOT come at the expense of, or in response to, public sector cost containment. These have been, and continue to be, largely non-overlapping sectors. The differential experiences do, however, demonstrate the relative effectiveness of the two sectors in cost control capability.

As noted earlier, since 1997 there has been a considerable reinvestment in the public sector. Overall public sector spending increased almost 23% between 1997 and 2000, and is now well above its 1992 level. But in 2000, per capita real (inflation-adjusted) expenditures on hospitals were still about 5% below 1992 levels (Canadian Institute for Health Information, 2000). The jobs eliminated by the mid-1990s cuts—many of them nursing jobs—have not all been restored. A strong case can be made that inpatient care had been over-provided in Canadian hospitals for decades and that a dramatic reduction in inpatient beds—a reduction taking place in most western health care systems—was long overdue. In fact, while the stresses of downsizing have been considerable, the number of patients cared for in Canadian hospitals has been maintained, even as beds closed.

The underlying realities of bed utilization have, however, had little influence on media reports, on the public's perception of the success of Medicare, or on hospital workers, whose reaction to the loss of jobs and income has been predictable. In an attempt to use public pressure to restore funding, unions representing hospital workers (and particularly the registered nurses) have claimed that the health care system is in a state of imminent collapse.

This message of crisis, continuously repeated by a group known to support Medicare, may inadvertently be supporting Medicare's traditional enemies, by convincing an increasing number of Canadians that the health care system either cannot adequately respond to their needs now, or certainly will not be able to do so when they need it in the future. There appears to be a real and serious problem of nursing supply but it arises from short-sighted personnel policies over at least the last decade. Some of these have been promulgated by professional nursing associations themselves. But these policies were not a consequence of the particulars of Canadian financing or organization. And, indeed, a shortage of nurses appears now to be a widespread international problem, which serves to reinforce the local message of crisis.

Something borrowed

In addition to old and new pressures within the Canadian health care system, there are important external developments that add to the seriousness of the present crisis. Primary among these has been the transformation in the United States of private insurers into managed care organizations that sell a combination of insurance, service delivery and management. These firms claim to achieve economies through superior management techniques, claims increasingly disputed even in the United States where managed care has fallen out of favour with the general public. Nevertheless, the rise of managed care organizations has greatly expanded the scale and scope of corporate, for-profit firms involved in organizing and delivering health care. These corporations, now firmly

established in the United States, have moved into markets in Central and South America, and are attempting to penetrate Canada and Europe.

Like other care providers, managed care organizations depend on expenditures (public and private) for income. As with other profit-oriented providers constrained by public programs (e.g. Medicare), these corporations try to undermine or circumvent these programs. To increase shareholder value in Canada, Medicare must be pushed out of the most profitable parts of the markets for insurance and care.

While the primary thrust of for-profit providers has been to try to open up private markets, they are quite prepared to accept large public subsidies in these markets. In fact, the sales of private health insurers in Canada such as Liberty Health (formerly Ontario Blue Cross) and Aetna are subsidized through tax concessions with an annual value of about $3-$4 billion. These arise because employer-paid insurance premiums are both deductible from the employer's taxable income as a business expense and non-taxable in the hands of employees. Absent this largely invisible public subsidy, the market for private insurance would probably shrink dramatically.

Managed care organizations are by no means the only external agents with an interest in altering or dismantling Medicare. Many groups, such as the right-wing National Institute for Policy Alternatives in Dallas, Texas, and the American pharmaceutical industry shell organization, Citizens for Better Medicare, are committed opponents of public insurance with allies in Canada (such as the Fraser Institute in Vancouver) and abroad. In March of 2000, CBM actually launched a multi-million dollar multi-media campaign in the United States "urging American seniors to reject the Canadian model of health insurance and coverage of prescription drugs." (This campaign glides smoothly over the fact that prescription drugs (out-of-hospital) in Canada are **not covered** under the universal Medicare programs – "the Canadian model of health insurance"). These American media campaigns flow freely across the long border between the two countries, and help to shape Canadians' perceptions of their own system.

Something blue

The last two decades have seen a remarkable increase in the degree of income inequality generated through private markets, particularly in the United States and Britain, but also in Canada. In Canada, the effects of this increasing concentration of wealth among the very wealthiest were largely offset, at least into the mid-1990s, by a relatively progressive tax system, supporting a number of social programs that transfer both money and non-money income to lower income families. As incomes and wealth have become ever more concentrated, the tax and transfer systems have redistributed more money from those at the top to those farther down.

One consequence of this tax/transfer system is that the potential payoff to Canadians in the top income brackets from lowering taxes and dismantling social programs such as Medicare has also increased. This places those programs at risk from a conservative tax cut/smaller government agenda. The resulting attacks on social programs are both direct– "they distort economic efficiency" –and indirect– "taxes crush economic prosperity." The indirect attacks have been particularly successful: It is hard, after all, to build a coalition to oppose lower taxes. Cuts to the social transfer programs in the mid-1990s were followed at the end of the decade by significant tax cuts (which

continue), primarily favouring upper income groups. These more recent changes have eroded the overall progressivity of Canada's tax and transfer structure.

The increasing concentration of incomes over the past two decades has had a counterpart in Canada's media where ownership and control is now in the hands of a very few, very wealthy individuals. At least one of these individuals has made no secret of his intent to use the media as a platform for his own political views, including a deep distaste for public programs that "tak[e] money from people who have earned it and redistribut[e] it to people who haven't", thereby restricting the power of those with wealth to use it as they choose. He believes, in short, that Canada should welcome a "friendly American takeover bid" which "Canadians.... might find irresistible" (Black, 2000).

This agenda, based on narrow economic interest, has powerfully reinforced the inherent tendency of the media to hyperbole and exaggeration. The result has been a steady flow of stories and opinion pieces predicting disaster unless various forms of private payment and for-profit health care are introduced immediately, or sooner.

These stories of impending doom now both cloud and shape public debate, making it virtually impossible for a member of the public to get a clear sense of what the problems facing Medicare really are, or of the plausible, evidence-based, supportable solutions that do exist. Instead of providing reasoned discussion, the media have, to a large extent, become a vehicle whereby a small minority of Canadians can undermine the confidence of an increasing proportion of middle-income earners, the very group who will suffer the greatest financial burden from the reduction or demise of Medicare.

Something Real

Beneath all the rhetoric and thinly concealed agendas bent on dismantling Canadian Medicare lurk some very real issues. The overriding challenge for the Canadian health care system is to find that elusive balance between providing timely access to an increasingly broad range of potentially effective services, and constraining the total share of national income being consumed by health care to an acceptable level. As demonstrated in the mid-1990s, the public programs have the necessary administrative mechanisms to contain and even roll back costs – at least for a time. But the public perception that access was severely compromised has led to the current general dissatisfaction and lack of confidence in the system. The resulting political pressure has forced a renewed expansion in spending at rates that Finance officials view as "unsustainable" – without as yet, any sign of a turn-around in public confidence. The clamour from providers, seeking to convert the new funds into increases in incomes rather than into better access has if anything grown louder and more disturbing.
The achievement of a balance depends, as it always has, both on "doing the right things" and "doing things right", i.e. making sure that the care provided is appropriate, effective and timely, and is produced in as efficient a manner as possible. But attempts to introduce innovations that would pare away inappropriate and unnecessary servicing, and improve the efficiency with which care is delivered, run head on into intense resistance from provider groups, because such innovations threaten their incomes, as well as established patterns of practice.[7] Their solution is always more servicing, with minimal

[7] This situation is in no way unique to Canada. "Health care may be the most entrenched, change-averse industry in the United States." (Christensen, et al., 2000)

external scrutiny of effectiveness or efficiency, supported by more money, whether public or private.

Perhaps the best illustration of this three-horned dilemma is provided in the pharmaceutical sector. The share of national income spent on drugs has been increasing steadily since the early 1980s. Even during the period of restraint in Canada (1992-1996), drug costs per capita increased by 16% (3.8% annually). Since then (down to 2000) they have increased at an annual average per capita rate of 8.5%, and the public component increased even faster (over 10% per capita per year) (CIHI, 2000)!![8] Such rates of increase feed the perception that "Medicare is fiscally unsustainable", even though rates of growth in the larger public programs (hospital and physician services) that provide full universal coverage, have been much lower.

This growth has occurred primarily through the introduction of new and expensive drugs replacing old, much less expensive, products, the latter often now off-patent. Yet there is considerable reason to doubt the superior effectiveness of many of these new products. The increase in pharmaceutical costs appears to represent, to a significant degree, "cost without benefit" – a rise in the price of achieving particular therapeutic outcomes. Attempts by both levels of government to constrain these de facto price increases have, over time, been systematically attacked and effectively destroyed by the pharmaceutical industry lobby. Through the 1970s and 1980s, Canada operated a system of compulsory licensure that created a genuinely competitive market for prescription drugs (Morgan, 2001). This is widely viewed as having had a significant dampening effect on drug prices in Canada. It was abandoned under pressure from the United States, and is now effectively barred by international trade agreements.

Canadian provincial Ministries of Health have introduced programs to encourage generic prescribing; British Columbia has been particularly aggressive in this respect. These, too, have been quite effective in containing pharmaceutical costs, but their effectiveness is being attenuated as the availability of generic substitutes dries up in the face of extended patent protection. B.C.'s response to this erosion was to introduce a program of "reference pricing" that required substitution across therapeutically equivalent chemical entities. While apparently quite effective, this program was of limited scope. Nevertheless it has been bitterly attacked by the pharmaceutical industry, and the right-wing Liberal government elected in 2001 has not yet made clear whether the program will survive.

The experiences in the pharmaceutical sector are of particular importance because they illustrate starkly the direct conflict between the public objective of effective health care efficiently provided, and the private objectives of sales and profit maximization. A number of innovative programs have been tried; if successful, they have been squashed by the political influence of the industry.

Similar tensions arise in the area of health care personnel. There is a widespread perception of current and looming future shortages of physician, nursing and some technical personnel. The policy solution offered by representatives of these professions has been to increase the incomes paid and to expand university training programs. Yet

[8] As noted above, the majority of drug expenditure is private, either insurance or self-pay. But each province does provide some coverage for some of the population. For example, every province ensures that its seniors have the majority of their prescription drug costs covered.

these seem to be certainly the most costly and probably not the most effective forms of response.

Physicians

According to extensive media reporting and a growing number of physician organizations, there is a dramatic and worsening shortage of doctors in Canada. The perennial problems in rural and remote areas are allegedly getting worse, and now even Canadians in some urban areas are encountering the same difficulties. Claims of a worldwide shortage of physicians create an increasingly menacing backdrop.

From the 1960s until the late 1980s, the supply of physicians in Canada increased at rates well in excess of the growth in the population. This was fuelled in the early years by rapid immigration and then later by a major expansion in medical school capacity. Medical costs expanded in line with the increased physician supply. For the last decade, the physician:population ratio in Canada has been relatively stable. This has been associated with increasing concerns about an impending physician shortage, and increasing agitation for expansion by the country's medical schools. Overlayed on this concern has been considerable publicity about Canadian physicians migrating in droves to the United States, lured by higher incomes and more and better equipment.
The reality is, in fact, much more complex. It would seem that a fixed training capacity combined with a growing population must, eventually, result in a decline in the physician:population ratio. Yet this ignores the effect of immigration. Extensive publicity is given to out-migration, but virtually none to in-migration. But in fact Canada is now a net gainer from the migration of physicians, and recent changes to federal immigration regulations are likely to increase the flow into the country substantially (Barer and Webber, 2000). Only a small proportion of Canadian doctors leave the country in any one year. The outflow actually peaked in 1978 when 873, or 3.5% of all Canadian doctors, departed and only 192 returned (net loss = 681 or 2.7% of all physicians). In 1999, only 585 doctors left Canada, while 343 Canadian doctors returned for a net loss of 242 or 0.4% of the physician workforce. In addition, in 1997 (the most recent data available), almost 850 non-Canadian physicians entered Canada either as landed immigrants with pre-arranged employment or on "temporary" employment visas—visas that often become permanent. Meanwhile the American market for medical services is becoming increasingly crowded.

Nevertheless, there are at least pockets of real access problems in the country. Rural and remote regions have had problems since the inception of Canadian Medicare (and well before), with attracting and retaining physicians. And patients in a number of urban areas are now reporting problems with finding a general practitioner, and long delays in accessing certain specialties. Of course, increasing medical school enrolment will not solve any of these problems in the short run, and is unlikely to solve some of them even over the longer term (Barer and Stoddart, 1999a,b). The geographical access problems persisted throughout the decades of rapid increase in physician supply that were fueled by new medical school capacity, and the problems of access in urban areas, now emerging, are at a time when overall physician supply in the country has never been higher -- one doctor to every 550 Canadians compared to one to 950 in the 1960s.

Underlying the apparent contradiction of more physicians than ever before and poorer access is the fact that, on average, each doctor is providing less comprehensive services. In general, fee schedules pay much more on a fee-for-time basis for procedural

than for cerebral services. Put more crudely, the health care system pays more to cut and prod than listen and think and during the past 30 years, physicians have responded to that by gradually shifting their practices away from those services that take up relatively more of their time per dollar of reimbursement.

For example, in Ontario in the year 2000:

- gastroenterologists were paid 61% more for a complete endoscopic examination of the colon than for a full consultation, even though the consultation might take three times as long;
- an ophthalmologist received nearly ten times as much for a cataract extraction as for a consultation, even though the cataract procedure might take only 15 minutes; and
- an obstetrician/gynecologist was paid 26% less for a normal delivery than for a hysterectomy even though the delivery could take much more time and is fraught with much greater potential for a malpractice suit.

The financial rewards are even more skewed for physicians who are able to provide services privately (e.g., ophthalmologists providing laser vision correction, or dermatologists providing cosmetic surgery) and the expansion of these private markets draws an increasing proportion of the time of such specialists away from the public sector.

General and family practitioners do not have the same opportunities to increase their reimbursement per unit of time by substituting higher- for lower-paying services; the bulk of their income is derived from office visits. But they can (and increasingly do) achieve the same result by selecting for patients who will require only short visits. The result is increasing difficulties in access for elderly patients or those with complex problems. In urban areas, and in some rural communities, ever fewer family doctors provide on-call services. Although many of these perverse incentives have existed in Canada for decades, there does appear to have been a recent accelerated 'flight toward quantity' (of dollars).

We see similar trends toward limiting practice among specialists. For example, obstetrician/gynecologists are dropping obstetrics. Some geriatricians spend much of their time with younger patients because their problems are less complicated. Until relatively recently, most physicians did everything within their discipline including providing on-call coverage. When doctors provided services that paid poorly (e.g., obstetrics) or not at all (e.g., taking a phone call from a worried patient, or phoning in a prescription refill to a local pharmacy) they knew that there was compensation from the other parts of their practices that paid very well. However, as doctors have gradually restricted their practices, the financial inequities within medicine have become magnified. One family practitioner doing everything by the book (e.g., hospital care, home visits, etc.) could work very hard 60-70 hours per week and have a net (after expenses, before taxes) income of less than $100,000. Another family practitioner working only 40 hours per week in a "revolving door" practice might have a net income of over $200,000.

In short, with supply of physicians in Canada sitting at an all-time high, it is difficult to believe that a shortage of physicians lies behind the current claims of overall shortage. There are undoubtedly some specialties and some regions facing shortages that can only be addressed with increases in local supply. However, the flexibility provided to physicians by the open-ended fee-for-service reimbursement system appears to lie behind many of the current access problems. The solutions must surely lie, at least in

part, in making more effective use of the extensive physician resources currently available, rather than producing ever more physicians for an environment which encourages them to concentrate on a narrow range of profitable services and patients.

Nurses

Nursing personnel are generally perceived also to be in very short supply all across Canada, and indeed in a number of other countries. Access to hospital-based services appears compromised by staff shortages or work actions in a number of provinces as this is being written. Yet the use of hospital inpatient care has been dropping steadily; in the thirty years since the inception of Medicare acute patient days per capita are down by roughly two-thirds.[9] The patients now in hospital beds are accordingly now (on average) in significantly greater need of nursing care but the **total** workload is clearly much lower, making the apparent shortage all the more puzzling.

The field of nursing personnel is much less well mapped in Canada than that of physician supply, and it is hard to be sure of the sources of this particular "crisis". Its roots may lie, for example, in much broader social changes in the role of women in the workforce. A generation ago, nursing was one of the relatively few occupations for respectable young women prior to marriage; few made it a lifetime career. The workforce was young, fit, and low-paid. Today a much older nursing workforce is closer to the top of pay and benefits scales, including vacation and disability time, all tending to raise the wages per hour worked while lowering the average hours worked per nurse employed. At the same time the vast expansion in career opportunities for women has made recruitment much more competitive.

In addition, however, personnel policies within Canada have probably contributed significantly to the present problems. Most obviously, the continuing pressure by professional nursing associations to require a baccalaureate degree for entry to practice has clearly made the training process much more expensive for students and educational institutions alike. On balance this would tend to reduce both the rate of applications and the number of training places available. (If non-BScN nurses return for further qualification, as some have, this further reduces the effective supply.) This policy has never been justified by evidence of benefit in terms of patient outcomes, but it has undoubtedly achieved other objectives related to professional prestige, influence and incomes.

Provincial governments have also failed to establish forward-looking personnel policies. Nurse hiring by hospitals has been "stop-and-go", driven by fluctuating provincial budgetary policies. The present shortage was preceded by a time when nurses could not find jobs. And post-secondary educational programs are the responsibility of Ministries other than Health, making difficult the co-ordination of training capacities and needs.

Whatever the failures of public and private policy, however, they do not appear to derive from the particular financing structure of Canada's Medicare system. The international nature of the problem carries the same message. Equally clear, if the

[9] This decline is a consequence of "innovations" in hospital-based practice, particularly shortening stays and much greater use of day care surgery and medical clinics. But these innovations date from the late 1960s and early 1970s; their widespread adoption had to wait for severe financial pressures (and perhaps a new generation of physicians).

shortage is national or international, then efforts by individual provinces to deal with their problems by raising wages will be ineffectual, serving only to drive up the general level of nursing wages (and absorb the new public money now flowing as increased incomes, not increased services). Equally certainly, this will be, and is, the response stridently advocated by nursing unions and other representatives.

The logical approach is two-fold, to increase the capacity of training programs for registered nurses outside the university setting, and to expand the use of licensed practical nurses (LPNs, less highly trained than registered nurses, RNs) in the hospital setting. The latter was recommended by a recent joint report of the Health Employers' Association of B.C. (representing hospitals) and the Hospital Employees' Union (representing LPNs) on ways of dealing with the shortage of nursing services. But both run directly counter to the objectives and lobbying activities of the professional nursing associations, whose objective is, as far as possible, to replace both LPNs and non-university RNs with at least university trained BScNs and in some cases with Master's degree personnel.

Of course, this tendency for more highly trained, higher priced personnel to replace those with fewer qualifications, regardless of the need for their extra capabilities, is not exclusive to nursing. It seems to be general across all health care systems. In medicine it shows up as the replacement of general/family practitioners by specialists – as in both the "capitalist" American and "socialist" Swedish health care systems, unless (as in Canada and the U.K.) very specific measures, both administrative and financial, are established to protect the generalists' "turf".

Similarly, despite decades of research demonstrating that many of the activities of physicians are well within the competence of suitably trained nurses, and widespread deployment in the United States, the nurse practitioner has made little or no headway in Canada (see below). Opponents are now arguing that it makes little sense to try to alleviate a physician shortage with nurse practitioners when nurses themselves are in even shorter supply. But this neglects the fact that the nurse practitioner in primary care is a very different career from that of hospital nursing, and may attract people who would not have been recruited to more traditional nursing roles. This seems to be what has happened in the United States.

Other Personnel

Shortages of nurses and physicians, apparent or real, dominate the headlines. But similar problems of access associated with inappropriate use of personnel emerge in other occupations as well. Therapeutic radiology has been a continuing hot spot in Canada, with long waits for treatment and diversion of patients to American centres for urgent treatment. The public are told of a shortage of technicians, but note that at least in some jurisdictions in Canada, equipment is operated by two technicians simultaneously, each performing the same functions, so as to avoid error. But in the U.S., one technician does the work – and there is simply no evidence, one way or another, as to whether the U.S. approach is dangerous, or the Canadian simply wasteful (H. Walker, personal communication, March 2001). Treatment protocols vary from oncologist to oncologist, some using far more machine time than others, for the same problem. Again there is no evidence of differential outcome, suggesting the potential for significant improvements in throughput. But choice of protocol is a professional prerogative, and does not have to be justified by evidence. And management, probably wisely, chooses to bewail the

inadequacy of public funding rather than to challenge the prerogatives of physicians – or the policies of unions.

How far these examples of costs without benefit could be multiplied throughout the health care system is simply unknown. They appear to account for a very large part of the escalation of drug costs, and offer considerable opportunities for improvements in productivity and access. But they are all readily explicable in terms of the interests of particular people and groups within that system – "entrenched, change-averse" (Christensen et al., *loc cit.*) When innovative approaches emerge, they are either "walled off", and do not generalize, or actively suppressed as in the case of pharmaceuticals.

Access to Care in Rural and Remote Regions

Canada, like many other countries, continues to struggle with the challenge of providing access to quality health care in rural areas. Unlike most others, however, it must find ways of addressing its fundamental human geography -- vast areas of sparsely populated territory combined with a number of urban centres strung in a thin band along the Canada-U.S. border. This make the challenge of ensuring reasonable access to health care services for all residents quite different from that faced in more densely populated countries such as the UK and Japan.

The barriers to recruitment and retention of physicians in underserviced communities are well known to analysts and policy-makers concerned about physician supply issues. They include:

- lack of adequate training for the unique circumstances associated with practicing medicine in rural environments;
- remuneration issues;
- onerous on-call duties and, more generally, heavy workload leading to burnout;
- professional isolation;
- lack of spousal employment opportunities;
- limited educational and extracurricular opportunities for children;
- severe climate;
- limited recreational and cultural opportunities;
- distance from family, friends (Chan and Barer, 2000).

For many of these key barriers, developing effective policy responses is difficult if not impossible, in Canada as elsewhere. Education, recruitment practices, practice opportunities and support facilities, working conditions, and financial support are all "modifiable factors" (Rourke, 1993). Finding effective ways of addressing the spousal and family concerns remains a more daunting challenge. Furthermore, some modifiable factors, particularly medical school and residency training, may, as noted above, have less effect than is often presumed, or hoped (Rabinowitz and Rattner, 1997; Xu et al., 1997).

All provinces in Canada have a long history of developing policies, sometimes uncoordinated, aimed at changing the geographic distribution of physicians. Many regions have had a variety of initiatives in place for decades, with questionable success.

Table 1 provides a highly summarized overview of policies at the time of a recent survey (Barer, Wood and Schneider, 1999).[10] The approaches have been grouped for expository convenience into six generic clusters:

- regulatory/administrative
- funding/payment
- education-related funding
- education/training
- market-based
- other (including communication technology).

In practice, these clusters are highly interdependent and overlapping. For example, many financial incentives are rooted in enabling legislation, but are classified within both regulatory/administrative and funding/payment clusters. And many of the education/training-related initiatives, which fall within both the funding/payment and the education/training clusters, include financial incentives to medical students and residents.

Provinces and territories are experimenting with a wide range of different policies. This is illustrated by the number of rows with at least one ✓, each such row representing a different lever being attempted somewhere in the country. Most provinces/territories currently employ policies from more than one of the generic clusters. A few of the rows in the table, however, contain no ✓. They are included because they are used in other countries and there is no practical reason why such policies could not be tried in Canada.

Financial incentives appear to be the predominant policy instrument. The funding/payment cluster has the largest number of rows, and many of these rows have ✓ marks in most, if not all jurisdictions. Particularly noteworthy here are the number of jurisdictions that were offering: a) either subsidized incomes or guaranteed minimum income contracts for physicians practicing in rural/remote/isolated areas; b) "return-of-service" practice bonuses and grants; c) funded rural area *locum tenens* programs; d) specific funding for rural area on-call coverage; e) student loans, grants and bursaries tied to "return-of-service" commitments; and f) funding to allow rural/remote physicians to take advantage of continuing education/skills upgrading opportunities. While a number of policies are based on alternative methods of payment (e.g. salaried or contract positions, non-fee-payments for on-call), many of the more-widespread funding/payment initiatives intended to improve access to care in rural or remote areas are still tied to fee-for-service reimbursement (with all its attendant problems; see above). A more recent push, not yet reflected in the table for most jurisdictions, appears to be additional monies for specialists' on-call time in these communities.

Despite their widespread deployment, questions remain about the effectiveness of financially-based initiatives in Canada. For example, the general experience of provinces providing return-of-service-tied grants, loans and bursaries to students and residents is that the recipients often buy their way out of the service commitment (although some provinces appear to have been more successful than others). Even when recipients

[10] A more detailed description of the policies in place in each province in Canada as of 1999 can be found in this document.

complete their terms, these initiatives have limited effect on longer-term retention. This largely mirrors the American experience with the National Health Services Corps.

In contrast to the plethora of funding/payment-based incentives, there is comparatively less being done in the education/skills areas. Aside from most provinces now offering dedicated rural area training/exposures during the years of undergraduate medical education, and a fair number of opportunities for rural residency experiences, particularly for family practice, other initiatives are less common. A promising development has been the recent re-emergence of interest in nurse practitioners. Three provinces have established training programs, and other jurisdictions are either planning or considering such programs. However, confusion still exists over what types of individuals ought to be trained, and for what purposes. In part, the debate is over whether one should train "advanced clinical nurses" with highly specialized nursing skills, but whose focus continues to be the "nursing function", or practitioners in primary care who can provide some of the services usually the domain of physicians, including making diagnoses, ordering tests and prescribing. Provinces appear to have different conceptions of how independently, and in what situations, they would like such extended scope personnel to practice. Furthermore, this may all be, in the words of that eminent health policy analyst Yogi Berra, “déjà vu all over again”. Considerable interest in nurse practitioners was expressed in Canada in the early 1970s but nothing of substance was done to expand the capacity to train these individuals, likely because by the mid-1970s Canada was beginning to see the effects of the large expansion in medical school capacity. History may now be about to repeat itself.

As of 1999, three provinces had made amendments to existing Acts (subsets of Acts governing the practices of nursing, prescribing pharmaceuticals, and laboratory and radiology diagnosis) so that practitioners other than licensed physicians were legally able to perform a limited range of primary care functions. Other provinces, such as Manitoba and Saskatchewan, were contemplating, or in the process of enacting, similar regulatory changes.

Table 1 may be somewhat incomplete in excluding fund-raising activity at the local level intended to support recruitment or retention. Informal discussions at the time of the survey revealed that this sort of activity is, in fact, quite widespread, but little of it is as a result of official government policy (see, e.g. Arnold, 1999). Indeed, most Departments/Ministries would prefer this sort of uncoordinated initiative did not exist, because it creates a 'whipsaw' effect in many situations and, in turn, puts additional pressure for resources on the central Departments/Ministries.

The continued heavy reliance on financial instruments in Canada comes despite research on determinants of locational decision-making which suggests that other factors outweigh financial considerations. The fact that Canadian provinces have relied so heavily on these instruments, and that the problems remain so evident, and so high-profile, would seem to provide *prima facie* evidence that different approaches are going to be needed if progress is to be made in the future (Barer and Wood, 1997). Nevertheless, financial incentives continue to be featured prominently in the current menu of policies to improve access to care for residents of rural and remote areas in Canada.

Table 1: Contemporary Provincial/Territorial Policy Approaches

Policy Approaches	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I	Nfld.	Yuk.	N.W.T.
Regulatory/ Administrative												
Billing numbers							✓	✓				
Provincial medical license tied to return of service in rural area												
Foreign medical Graduates with restrictions on practice location	✓	✓	✓	✓	✓					✓		
Enabling legislation for expanded role physician extenders/nurses		✓			✓					✓		
Direct Funding – Practice-related												
Subsidized income or guaranteed minimum income contract	✓			✓	✓	✓		✓		✓	✓	
Differential fees – bonus for practice in under-serviced region	✓			✓	✓	✓		✓		✓		
Differential fees – pro-ration for practice in over-serviced region					✓	✓			✓		✓	
Salaried and other 'alternate payment' positions	✓		✓	✓			✓	✓	✓	✓		
Grants/bonus tied to return of service	✓	✓	✓		✓	✓		✓		✓		
Special travel allowances for rural practice	✓		✓		✓	✓	✓			✓	✓	
Special program/funding for locum support	✓	✓	✓	✓	✓			✓	✓	✓		✓
Assistance with practice establishment costs			✓			✓						
Financial support for vacation (paid time off)					✓		✓			✓		
Special on-call payments for specialists	✓					✓				✓		
Special on-call payments for emergency coverage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Direct Funding – Education Related												
Undergraduate/post-graduate student loans/grants/bursary with return of service			✓	✓	✓	✓				✓		✓
Special funding or loans for residency and specialty skills development	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
Special travel allowance for students to get to summer placements or residencies		✓	✓	✓	✓							
Financial support for continuing medical education	✓	✓	✓	✓	✓	✓	✓	✓	✓			

Table 1: Contemporary Provincial/Territorial Policy Approaches cont'd

Policy Approaches	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	P.E.I	Nfld.	Yuk.	N.W.T.
Education/Training												
Rural training/exposure for undergraduates	✓	✓	✓	✓	✓	✓	✓			✓		
Rural placements/ teaching units in association with a rural practice residency or specialty	✓	✓		✓	✓		✓			✓		
Special (re-entry) access to residency and/or new specialty skills development		✓	✓	✓			✓	✓		✓		
Special recruitment policies/criteria for new undergraduate medical students, e.g. aboriginals, rural		✓	✓	✓	✓							
Special recruitment policies/criteria for graduate level residency training	✓											
Development of continuing education capacity using new communication technologies		✓	✓					✓		✓		
Promotion of rural practice in medical schools				✓			✓	✓		✓		
Nurse practitioner or similar program			✓	✓	✓					✓		
Market-based Initiatives												
Recruitment fairs/tours		✓	✓		✓	✓	✓	✓		✓		
Allow locally raised funds to directly support provision of physician services (e.g. housing subsidy etc.)						✓		✓		✓		
Other Initiatives												
Funding for new remote diagnostic technologies e.g. Tele-radiology etc.	✓	✓	✓		✓		✓	✓		✓		
Spousal Support Initiatives												
Education Support for Children (e.g. boarding school for older children etc.)												
Physician Resources Co-ordinator			✓							✓		

But there have been some successes. Small communities such as Beechy and Kyle in Saskatchewan, and Marathon in Ontario, have found innovative, but quite different, ways of recruiting and retaining physicians (Chan and Barer, 2000; Rachlis et al., 2001). The solution in the former has been to build around a group of advanced

practice nurses. In Marathon, an innovative non-fee-for-service funding model, and superb community support, were able to attract a number of new physicians to the community.

Of course geography is not the only dimension across which one finds marked disparities in access (Health Canada, 2000). Little has been done in Canada to address these issues. Some approaches to improving access for other sub-populations are likely to overlap those intended to address geographic disparities (e.g. education/training initiatives focused on attracting medical school applicants from rural communities). But some of these populations represent challenges that will not be addressed effectively by any of the policies designed to address geographic distribution issues. For example, training-based initiatives to increase awareness of, and the special problems faced by, marginalized populations, may be a key to improved access. In this respect, academic health centres across the country will need to take on more of a leadership role as part of their embracing of a broader "social responsibility" or "meeting needs" agenda.

Emerging Issues

The recently heightened concerns among Canadians' regarding access to care, however, go far beyond the problems of rural/remote communities (where, as we noted above, such problems have existed for decades). Nor do they arise only from perceptions of the effects of cost-cutting on access to a family practitioner, or timely access to surgery or specialist care. They are also a reaction to the growing spectre of the re-emergence of financial barriers to accessing care. Recent initiatives in Alberta (Evans et al., 2000) and rhetoric in Ontario (McCarthy and Chase, 2001; Mackie, 2001) suggest a new willingness, at least among politicians, to take on the sacred Canadian trust of Medicare.

The arguments tend to be couched in language about the public system not being able to afford to provide all necessary care, or the private system providing efficiencies not available in the public. Each of these can be shown to be unsupported by evidence (Evans et al., 2000), but evidence plays no part in these discussions. They are motivated by a conservative "smaller government, tax cuts" agenda that is being strongly influenced by forces south of the border. Since health care represents a major share of all provinces' budgets (in the range of 35-45%, and rising in most jurisdictions), publicly financed health care stands squarely in the way of any significant tax cut agenda. If some components of the health care budget can be shifted "off-line", and onto private pockets, then governments have more scope for tax cuts.

But there are other, less well-understood, forces at play here. They may not be of concern to those committed ideologically or for reasons of personal economic interest, to the belief that private health care is by definition a "good thing". But they should be of increasing concern to ordinary Canadians already fussing about access to care. Both the North American Free Trade Agreement (NAFTA) and the General Agreement on Trade in Services (GATS) of the World Trade Organization have as their over-riding objective the removal of all barriers to international trade in goods and services *in any form, including health care services,* and correspondingly the reduction in the jurisdiction and powers of governments. NAFTA "irreversibly protect[s] the trend towards private health care, while eroding the ability of governments to reverse this trend." (Appleton, 1999). Member governments are permitted to reserve certain sectors of their society from its provisions, and preserve their scope in these policy arenas, and Canada has done

so with respect to "health". But the language of this reservation is far from clear.[11] The Canadian government favours a broad interpretation of the terms "social service" and "public purpose", thus ensuring a continued wide scope for public policy. But as of 1995 the U.S. Office of the Trade Representative "[held] that where commercial services existed, that sector no longer constituted a social service for a public purpose." (*ibid.* p.96).

Two major points emerge from the NAFTA that are reiterated and reinforced in the GATS. First, all sectors that are not explicitly *and exclusively* reserved for public action are to be open to international trade and to intrusion by commercial interests, if not immediately then as soon as possible. Signatories bind themselves to accept this objective. Under Article 19 of the GATS, member countries are expected to pursue "a progressively higher level of liberalization" in any service sector involving a mix of public and private ownership. Governments that fail to do so, perhaps because of strong opposition, democratically expressed, will expose their countries to economic sanctions until that contrary popular will is broken. In a 1998 background note (WTO, 1998, as quoted in Sanger, 2001) the World Trade Organization Secretariat gave their interpretation of GATS to imply that countries where the hospital sector is a mix of public and private ownership, or where there is private insurance or user fees, cannot argue for exemption under Article 1.3.[12]

Second, this opening is a one way process. Once an Article 1.3 exemption is withdrawn it is unclear whether or how it could ever be restored. In any case for Canada, NAFTA is clearer. If a government chooses to enter a new field of activity, or return to one previously vacated, it incurs potentially prohibitive penalties in the form of compensation to any commercial interest that can claim lost business opportunities (Appleton, 1999). Once the dike is breached, it becomes financially impractical to get the water back onto the other side.

And since Canada, not any individual province, is signatory to the GATS, under WTO rules the failure by a province to meet the conditions of the Article 1.3 exemption would be interpreted as a Canadian failure, and would in all likelihood open all of Canada to foreign corporate competition in the sector in which the 'violation' had occurred. The fact that the Government of Canada may thus have signed away authority it does not possess, authority that by the Constitution is assigned to the provinces, is of no interest to the WTO.

Here, as everywhere in the "Brave New World" of international trade agreements, what is most clear is that nothing is clear. As Appleton points out, disputes will have to be resolved by various tribunals applying international, not domestic, law, and until the case law has emerged from this process, the outcomes are impossible to predict. International law does not even define terms like "social services" and "public purpose".

What is certain, however, is that no province that permits private financing in areas of health care currently covered under the terms and conditions governing Canadian

[11] The relevant Canadian reservation reads: "Canada reserves the right to adopt or maintain any measure with respect to the provision of…the following services to the extent that they are social services established or maintained for a public purpose: income security or insurance, social security or insurance, social welfare, public education, public training, health, and child care" (NAFTA, ann. II-C-9 as quoted in Appleton, 1999, p. 95).

[12] This Article exempts "government services" from other provisions of the GATS. A "government service" "is supplied neither on a commercial basis, nor in competition with one or more service suppliers."

Medicare, can know, let alone control, the sequelae. The recent enactment of legislation in Alberta to permit private hospitals to provide overnight stay care, clearly expands the scope of private provision of health care, by corporate entities that have international links (Taft and Steward, 2000). Whether or not that legislation will initiate a NAFTA or WTO claim from corporate interests in the U.S. (or elsewhere for that matter), is impossible to know at this point. But it certainly raises the probability, and (at least in the case of the WTO) for all of Canada. The genie that may be let out of the bottle is not one whose behaviour anyone can predict. Whatever assurances may be given about the limited and controllable effects of Alberta's initiative, there is no way for anyone to know whether they can be backed up. When the Alberta government's web site (http://www.health.gov.ab.ca/health_protection/questions.htm) responds to questions about NAFTA vulnerability with "Absolutely not", their confidence is absolutely baseless. On the international trade stage, Alberta is not even a player. And so Canadians already concerned about access may have reason to be paranoid, and to be wary of "globalization" more generally.

Future Prospects

The Canadian Medicare system has succeeded in its primary objective, of removing all financial barriers to access to hospital and medical care and spreading the burden of payment equitably across the population according to ability to pay. This has significantly equalized access to care across socio-economic classes, but equalization of access to care has not led to equalization of health status. There are also remaining differences in access related to factors other than ability to pay, such as geographic isolation, and these remain matters of public concern. Interestingly, however, differences in access, or at least use of services, do not appear to be correlated with differences in health outcome, yet it is the former, rather than the latter that are matters of continuing public concern.

The Canadian financing system has also turned out to be relatively efficient, at least in a North American context. It embodies powerful mechanisms for cost control, providing that there is the political will and capacity to use them. As noted above, prior to the universal, first dollar coverage of physicians' services in the late 1960s, costs in Canada (as in many other OECD countries) were escalating at about the same rate, relative to national income, as in the United States. Universal public coverage was associated with an abrupt flattening of this trend, and the emergence of a widening gap between Canada and the United States, which now amounts to some four percentage points of GDP. Most other OECD countries developed their own cost control mechanisms at different times during the 1970s, however, so the Canadian experience was not unique, except insofar as it was achieved in a system and a society so similar to, and so heavily influenced by, the United States. While far more efficient, and less costly, than in the United States, health care in Canada is relatively expensive in world terms – in the same range as France or Germany, and much above Japan or the UK.

Not surprisingly, Canada's Medicare has been extremely popular, and strongly supported, by the Canadian people over most of its life. Until very recently, its opponents have judged it politically unwise – suicidal – to launch direct attacks. Rather they have advocated various "improvements" or "reforms" designed to undermine its cost

control capacity and/or to provide preferential access for those with greater ability to pay, while reducing their share of the burden of total costs.

Starting in the early 1980s, however, Canada's overall economic performance deteriorated markedly. Federal and provincial governments began to run growing deficits, leading to unsustainable growth in public debt. By the early 1990s these debts had reached crisis proportions, and all governments began to impose significant cuts on public spending. These have been very successful in restoring fiscal health, but their impact on the health care sector has been severe.

There seems little doubt that access to particular services has been significantly impaired, though the nature and extent of such problems is difficult to discern amid the strident rhetoric from providers whose distress is all too evident. In this atmosphere those who stand to profit handsomely from wrecking Medicare have been much emboldened, and have increased their attacks. Large increases in public funding over the last five years have not served to restore public confidence, and have instead alarmed finance ministries who are now arguing that medicare is "unsustainable" – in effect that more of the costs of care should be transferred from public to private budgets, from the wealthy to the sick.

This capsule history provides virtually a textbook illustration of Homer-Dixon's analysis of intra-societal conflict, recently summarized in The Ingenuity Gap (Homer-Dixon, 2000). The progress of human societies is marked by the continual emergence of more or less severe problems that threaten their well-being, their continued progress, or even their survival. Meeting these threats depends upon their ability to mobilize ingenuity, in the form of both physical technology but even more importantly as institutional adaptation, to meet or surmount these challenges. So, in the organization and management of health care, Canada like other societies faces the challenge of developing and adapting our institutions so as to provide our populations with the services that meet their needs, at an acceptable overall cost – to do the right things, and to do them right – in a continually changing environment.

But societal fragmentation poses a serious threat to the mobilization of ingenuity. Under stress, cleavages may open up between conflicting social interests. Ingenuity becomes diverted from addressing the shared social problems, into strategies for capturing a larger share of the threatened social resources, and ensuring that others bear the costs of adaptation or of scarcity. Such internal conflict not only diverts the inevitably scarce supply of human ingenuity, but is itself resource-using, increasing the severity of whatever challenges must be met.

Again, we are seeing precisely this process at work in Canada. Ingenious new approaches are being developed; changes in organization and management are known that could improve the efficiency and the effectiveness of health care delivery (Rachlis et al., 2001). But these are either not taken up, or if introduced do not spread. In the pharmaceutical case successful innovations that threatened to spread have been stifled by the commercial interests that they threatened. Innovative uses of personnel, and more effective uses of equipment and facilities, have been impeded or blocked by unions and professional associations, and by the resistance of individuals, as threats to incomes and/or professional prerogatives and ambitions. The political energy and leadership required to push them through has been diverted by ancient struggles over who pays what share of the bill – the endless "public/private financing" debates. These are typically

dressed up as questions of relative efficiency and effectiveness – economists are particularly helpful for this form of deception. In reality the advocates of private financing are seeking either to increase the flow of funds into health care – and incomes out – or to increase the share of benefits received, and reduce the share of costs borne, by those with greater ability to pay and better health status. Or both.

Homer-Dixon and his colleagues have found that in countries without democratic government, and with significant ethnic or religious differences, the cleavages opened by increasing environmental stress, and the failure to mobilize a sufficiently ingenious response, lead to endemic communal warfare -- intra- rather than inter-state. In democratic countries they lead to major shifts in government philosophy. There are certainly signs of the latter in Canada at present. It may well be that Canada's Medicare will be one of the casualties in what appears to be an increasingly open struggle between those trying to maintain the very substantial redistributive programs – financial and non-financial – operated by governments, and those who seek to dismantle them in favour of greater inequality of both incomes and life chances.

The issue is still much in doubt, and it is by no means unique to Canada. What is certain is that this conflict is diverting a considerable amount of ingenuity away from, as well as blocking, potential innovations in the provision of health care – exactly as Homer-Dixon's analysis predicts.

References

Angell M (1999), *The American health care system revisited – a new* series, New England Journal of Medicine, 340(1): Jan 7.

Appleton B (1999) *International agreements and national health plans: NAFTA*, in D. Drache and T. Sullivan, eds. Market Limits in Health Reform: Public Success, Private Failure, London:Routledge, pp. 87-104.

Arnold S (1999), *Niagara to subsidize new MDs*, The Hamilton Spectator Feb 17: A1, A7.

Barer ML and Stoddart GL (1999), *Bad medicine for solving doctor dilemma*, The Globe and Mail, Sept 16.

Barer ML and Stoddart GL (1999), *Improving Access to Needed Medical Services in Rural and Remote Canadian Communities: Recruitment and Retention Revisited*. HHRU 1999:5, Centre for Health Services and Policy Research: Vancouver, June.

Barer ML and Webber WA (2000), *The great Canadian physician exodus?*, ISUMA: Canadian Journal of Policy Research, 1(2): 94-102, Autumn.

Barer ML and L. Wood (1997), *Common Problems, Different 'Solutions': Learning from International Approaches to Improving Medical Services Access for Underserved Populations*, Dalhousie Law Journal 20(2):321-358.

Barer ML, Wood L and Schneider DG (1999), *Toward Improved Access to Medical Services for Relatively Underserved Populations: Canadian Approaches, Foreign Lessons*, report prepared for Health Promotion and Programs Branch, Health Canada, Vancouver: UBC Centre for Health Services and Policy Research, HHRU 99:3

Black C (2000), *The most boring election in history*, National Post, Dec. 1, p. A18.

Blendon RJ, Leitman R, Morrison I and Donelan K (1990), *Satisfaction with Health Systems in Ten Nations*, Health Affairs 9(2) (Summer) 185-92.

Chan B and Barer ML (2001), *Access to physicians in underserved communities in Canada: Something old, something new*, 5th International Medical Workforce Conference, Sydney, 2000.

Christensen C, Bohmer R, and Kenagy J (2000), *Will Disruptive Innovations Cure Health Care?*, Harvard Business Review, September-October, pp. 102 – 112.

CIHI (2001) *National Health Expenditure Trends, 1975-2001* Ottawa: Canadian Institute for Health Information.

Daedalus: Journal of the American Academy of Arts and Sciences Vol. 123, no. 4, "Health and Wealth" (Fall, 1994)

Donelan K, Blendon , Schoen C, Davis K and Binns K (1999), *The Cost of Health System Change: Public Discontent in Five Nations*, Health Affairs 18(1): 206-16, May-Jun.

Douglas TC (1984), *We must go forward*, Medicare: The Decisive Year, (Proceedings of the Canadian Centre for Policy Alternatives Conference on Medicare November 12-13, 1982 Montreal). L Soderstrom, ed., Canadian Centre for Policy Alternatives;Ottawa.

Evans, R.G., M.L. Barer and T.R. Marmor eds. (1994) *Why Are Some People Healthy and Others Not?* Hawthorne, N.Y.: Aldine De Gruyter.

Federal/Provincial/Territorial Advisory Committee on Population Health (1999), *Toward a Healthy Future*, Ottawa, ON: Supply and Services Canada.

Finkelstein MM (2001), *Do factors other than need determine utilization of physicians' services in Ontario?* CMAJ. 165(5):565-70, September 4.

Hertzman, C., S. Kelly and M. Bobak, eds. (1996) *East-West Life Expectancy Gap in Europe: Environmental and Non-Environmental Determinants* Dordrecht: Kluwer Academic.

Homer-Dixon, T (2000), *The Ingenuity Gap*, Toronto: Knopf Canada.

Keating, D.P. and C. Hertzman eds. (1999) *Developmental Health and the Wealth of Nations: Social, Biological and Educational Dynamics* New York: The Guildford Press.

Macleans's (2000/01) *We are Canadian*, Maclean's, vol. 113 no. 52 (25th. Anniversary Edition) December 25/January 1, esp. pp. 34-35, 44-45, 48, 50, 52.

Mackie R (2001), *Ottawa pinch pushing health to private sector, Harris says*, The Globe and Mail, Oct 25, pA10.

McCarthy S and Chase S (2001), *Chrétien squares off on Harris*, The Globe and Mail, Nov 27, pA10.

Morgan S (2001), *An Assessment of the Health System Impacts of Direct-To-Consumer Advertising of Prescription Medicines (DTCA). Volume V: Predicting the Welfare and Cost Consequences of Direct-to-Consumer Prescription Drug Advertising*. HPRU 2002:5D, Centre for Health Services and Policy Research: Vancouver, August.

Mustard CA, Shanahan M, Derksen S, Horne J and Evans RG (1998), *Use of insured health care services in relation to household income in a Canadian province*, Health,

Health Care and Health Economics: Perspectives on Distribution, Morris L. Barer, Thomas E. Getzen and Greg L. Stoddard, eds., John Wiley and Sons.

Mustard CA, Derksen S, Berthelot J-M, Wolfson M and Roos LL (1997), *Age-specific education and income gradients in morbidity and mortality in a Canadian province*, Social Science & Medicine, 45(3): 383-397, August.

National Forum on Health (1997) Canada Health Action: Building on the Legacy Final Report, Volume I, Health Canada, February.

OECD (2001) *OECD Health Data 2001* Paris.

Rabinowitz HK and Rattner S (1997), *Factors Influencing Physicians' Choices to Practice in Inner-city or Rural Areas*, Academic Medicine 72(12):1026.

Rachlis, M, RG Evans, P Lewis and ML Barer (2001), *Revitalizing Medicare: Shared Problems, Public Solutions*, Vancouver: Tommy Douglas Research Institute.

Roos NP and Mustard CA (1997), *Variation in health and health care use by socio-economic status in Winnipeg, Canada: The systems works well? Yes and no*. Milbank Q, 75(1):89-111.

Rourke JTB (1993), *Politics of rural health care: recruitment and retention of physicians*, CMAJ, 148(8):1281-4.

Sanger M (2001) Reckless Abandon: Canada, the GATS and the future of Health Care, Canadian Centre for Policy Alternatives: Ottawa.

Taft K and Steward G (2000), *Clear Answers: The Economics and Politics of For-Profit Medicine*, Edmonton: Duval House Publishing, University of Alberta Press, and Parkland Institute.

Van Doorslaer E, Wagstaff A, van der Burg H et al. (1999), *The redistributive effect of health care finance in twelve OECD countries*. Journal of Health Economics. 18(3):291-313, Jun.

Wagstaff A, van Doorslaer E, van der Burg H et al. (1999), *Equity in the finance of health care: some further international comparisons*. Journal of Health Economics. 18(3):263-90, Jun.

Wildavsky A (1977), *Doing Better and Feeling Worse: The Political Pathology of Health Policy"* Daedalus 106:1:105-24.

WTO Council for Trade in Services (1998), *Health and Social Services: background note by the Secretariat*, S/C/W/50, 18 September.

Xu G, Veloski J, Hojat M, Politzer RM, Rabinowitz HK, Rattner SL (1997) *Factors Influencing Primary Care Physicians' Choice to Practice in Medically Underserved Areas,* Academic Medicine 72(10):S109-S111.

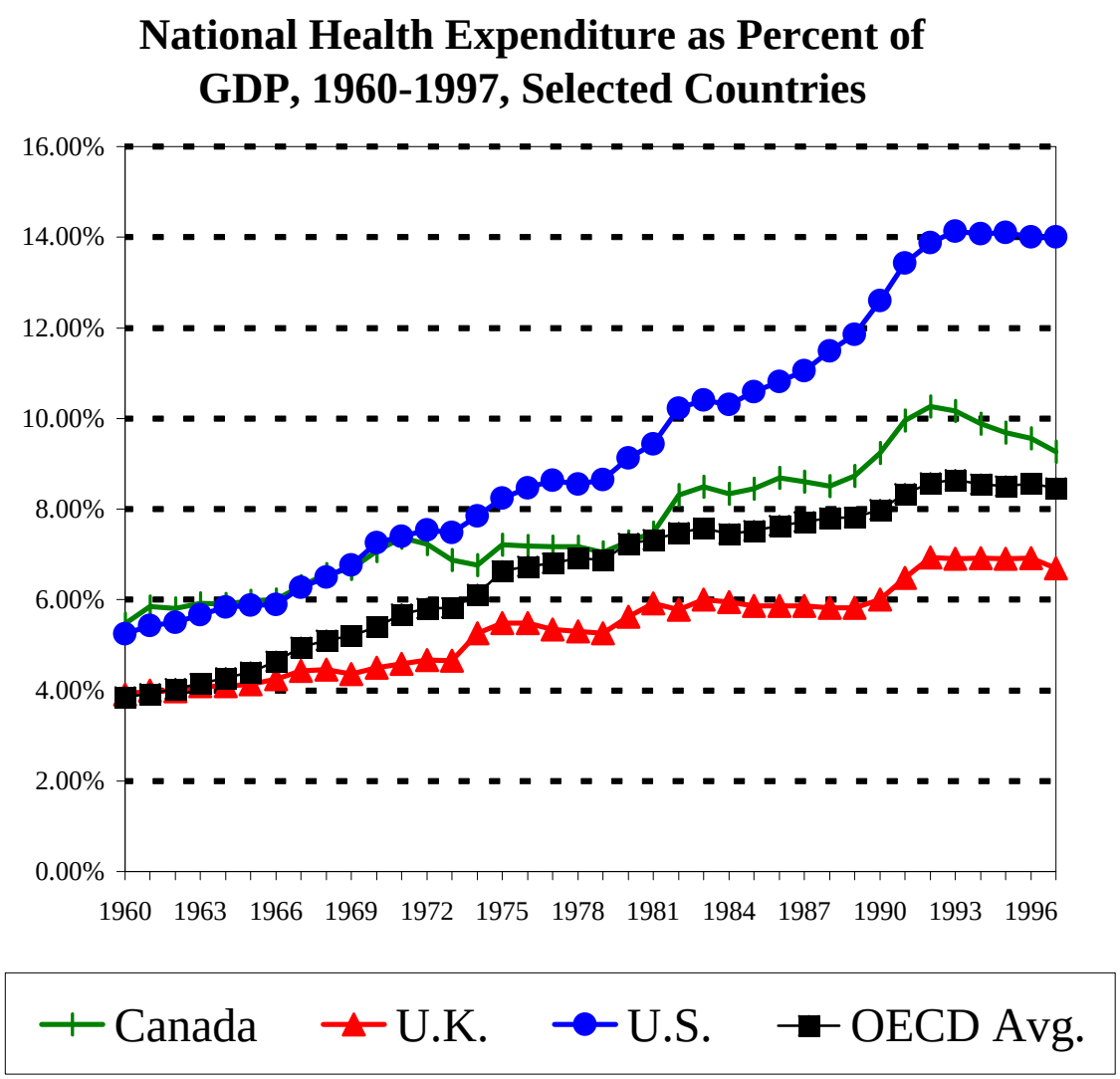
National Health Expenditure as Percent of GDP, 1960-1997, Selected Countries
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990
1993
1996
Canada
U.K.
U.S.
OECD Avg.

Figure 1

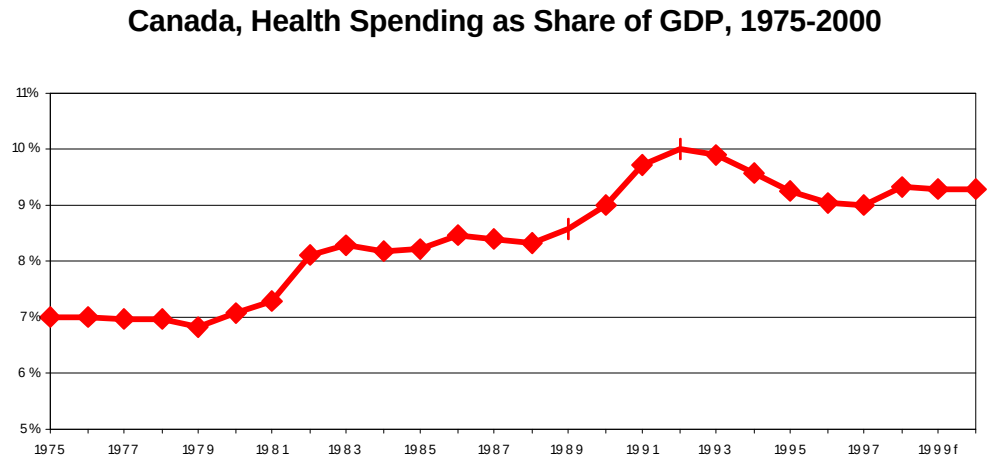
Canada, Health Spending as Share of GDP, 1975-2000
11%
10 %
9 %
8 %
7%
6 %
5%
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999f

Figure 2