



THE NON-SUSTAINABILITY OF HEALTH CARE FINANCING UNDER THE MEDICARE MODEL



BRETT J. SKINNER



AIMS Health Care Reform
Background Paper #10

December 2002

Atlantic Institute for Market Studies

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EXECUTIVE SUMMARY

The official mandate of the Commission on the Future of Health Care in Canada, chaired by former Saskatchewan premier Roy Romanow was “to develop recommendations that will help ensure the long-term sustainability of a high quality, universally accessible, publicly administered health care system for all Canadians.”¹ However, there is a sharp division in the health economics literature about whether adequate health care financing is ultimately sustainable within the medicare model.

On one side of the debate, researchers argue that, in spite of public perceptions, health care spending in Canada is modest by international standards and has been essentially stable over the last decade; that the crisis in health care financing is largely a political creation; and that any future costs from an aging population will be compensated for by longer life expectancies, improved health technologies and additional revenues from taxes on the retirement savings of those who will use medicare most. This point of view is complacent or dismissive of concerns about the sustainability of health care financing under the medicare model.

On the other side of the debate, researchers argue that Canada’s medicare system is among the more expensive in the world while providing fewer benefits than health care systems in other countries. Moreover, a dramatically aging population, the introduction of new and ever more expensive medical technologies and rising consumer demands for the highest quality, leading-edge health care are driving costs beyond the capabilities of the health care system to afford them while relying on public financing alone. This second perspective is pessimistic about the ability of medicare to provide the kind of health care that Canadians demand without major changes to the fundamental structure of the system itself.

But if the sustainability of the health care system ultimately depends on whether public budgets can continue to absorb the costs of health care for Canadians, the evidence indicates that the medicare approach is failing and will not be able to fulfill the mandate of the Romanow Commission without fundamental reforms. Arguments that remain complacent about the financial challenges facing medicare are based on demonstrably incorrect and overly optimistic assumptions. The factors that are driving health care costs in Canada are serious and should not be dismissed by policy makers. Moreover, an analysis of the medicare approach to health care shows the system itself is poorly designed to deal with these factors.

¹ Roy Romanow. 2001. Official launch of the commission’s work. News conference statement. Commission on the Future of Health Care in Canada (CFHCC) May 1: www.healthcarecommission.ca.

SECTION 1

THE STATE OF HEALTH CARE FINANCING IN CANADA

To understand how serious the financial situation of medicare is in Canada, it is worth looking at some hard statistics. According to data published by the Canadian Institute for Health Information (CIHI), health care costs in Canada totaled \$102.5 billion in 2001. This came to about \$3298 per capita and about 73 per cent of this spending was paid for out of public funds. The remaining 27 per cent of total health spending was paid for by consumers or their employers through private insurance or out-of-pocket payments.² The total amounts spent on health care in Canada equaled 9.4 per cent of gross domestic product (GDP) by 2001.³

The significance of these figures becomes clearer when put in a broader context. For instance, the annual growth in health spending may be an important predictor of the future sustainability of the health care system under medicare. According to CIHI data, total Canadian health spending increased by 6.9 per cent in 2001 and 7.1 per cent in 2000. Over the last four years, annual increases averaged 6.95 per cent. Over the period 1975 to 2001, the data indicates that total Canadian health spending has grown at an average annual pace of 8.63 per cent.⁴

These growth rates are important because they represent health care spending increases that are double the annual growth in GDP. Put simply, health care costs are growing faster than the ability of governments to pay for them. Janice MacKinnon, former finance minister of Saskatchewan under the Roy Romanow government, confirms this observation. According to her comments before the Romanow Commission on health care:

“In the last 5 years the costs of the current healthcare system excluding inflation have increased by almost 5% while the revenue to government has gone up by only 3%. What does this large and growing gap between the costs of the current system and the money available to fund it mean for Canadians? What does it mean when 60 cents of every tax dollar collected by provinces goes to healthcare? It means that healthcare system is overburdened.”⁵

² Canadian Institute for Health Information (CIHI). 2002. *Health Care in Canada*. Statistics Canada.

³ CIHI. 2001. Total health care spending surpasses \$100 billion, reports CIHI. News release: Tuesday, December 18.

⁴ CIHI 2001.

⁵ Janice MacKinnon. 2002. Transcript CFHCC.

MacKinnon also argued that if the federal government were to restore its share of public health funding to 50 per cent of the total, it would have to more than triple its financial commitment from its current 15 per cent share, requiring nearly \$50 billion in extra public money if other budget items remained the same, and at least a 25 per cent increase in income taxes to pay for it.⁶

MacKinnon's comments are supported by the Fyke (2001) report on health care in Saskatchewan. According to the report, in order merely to maintain current health services the provincial health budget would have to grow by about 6.5 per cent a year just to cover inflation, collective agreements and other cost pressures. At the same time, the report points out that government revenues to fund health care are estimated to grow by a maximum of only 3 per cent per year, including the additional \$175 million a year in federal funding the province will receive by fiscal 2003/04. As the report stated, "Since the province spends 40% of government revenues, a growth rate of 6.5% for health translates into an increase of 2.6% (i.e., 6.5% x .4) for the government as a whole. That is, the province is already locked into spending almost all of its forecast increase in revenues on health. Based on these future costs and revenue estimates, a "health gap" of over \$300M is projected by the end of four years [since 2001]."⁷

The Mazankowski (2001) report on health reform for the Premier's Advisory Council on Health in Alberta also confirms the seriousness of the financial challenges facing the health care system. According to the report, health spending in Alberta increased 64 per cent between 1995/96 and 2001/02. Adding capital costs drives the increase even higher. As a percentage of provincial program expenditures, Alberta spent 24 per cent on health in 1990/91 and 76 per cent on all other programs. By 2000/2001, the proportion devoted to health had increased to nearly one-third of the total. Based on the trends identified in the Mazankowski report, Alberta health spending could absorb up to half of all provincial expenditures by 2008.⁸

Some studies of health expenditures under medicare claim that recent trends during the early 1990s show that health spending in Canada has stabilized and imply that concerns about sustainability are misplaced (Kirby 2001,⁹ Guyatt, Yalnizyan and Devereaux 2002¹⁰ and Boychuk 2002).¹¹ The arguments are based on observed declines in the growth of health spending in Canada between 1992 and 1999. These studies suggest that the funding crisis in health care has been caused by reductions in federal transfer payments to the provinces. In addition, they argue that long-term doubts about sustainability

⁶ MacKinnon 2002.

⁷ Kenneth J. Fyke. 2001. *Caring for medicare: Sustaining a quality system*. The Commission on Medicare: Saskatchewan.

⁸ D. Mazankowski et al. 2001. A framework for reform. Report of the Premier's Advisory Council on Health: Alberta.

⁹ Michael J. L. Kirby, et al. 2001. *The Health of Canadians: The Federal Role. Vol. One: The Story So Far: Interim Report on the State of the Health Care System in Canada*. The Standing Senate Committee on Social Affairs, Science and Technology.

¹⁰ G. Guyatt, A. Yalnizyan and P. J. Devereaux. 2002. Solving the public health care sustainability puzzle. *CMAJ*; 167(1).

¹¹ G. Boychuk. 2002. *The Changing Political and Economic Environment of Health Care in Canada*. CFHCC Discussion Paper No. 1.

can be taken seriously only if costs are greater than those associated with an aging population and moderate cost increases for existing services, or revenues are lower.

However, it is undeniable that Canada's success at constraining expenditures through the 1990s was accomplished through reductions in access to services, which "produced long waits in emergency departments for unavailable hospital beds; delays in cataract, joint replacement and cardiac surgery; and the unavailability of needed home care services."¹² Canadians will hardly be convinced that medicare is sustainable if the only way to keep it financially viable is to continually reduce access to needed health services.

Sustainability is a trade-off between levels of service and the availability of funds. There are limits to taxation, limits to spending and therefore, limits to the quantity and quality of health services in a publicly funded health care system. Sustainability should be defined in terms of whether the medicare model can provide the financial means to pay the costs associated with present and future demands for health services in Canada. A second consideration is whether the means to this end are politically and economically acceptable.

Also, to argue that the growth in provincial spending on health as a proportion of overall budget expenditures was caused by the reduction of federal transfers seems to imply that each level of government has an independent revenue base. But there is only one taxpayer. Both levels of government reduced spending because budget deficits and accumulated debts limited their ability to cover the costs of social spending. Federal reductions in transfers were necessary to satisfy the need for balanced budgets and to hold the line on tax burdens. According to University of Guelph economist Brian Ferguson, it is important to emphasize that the level of health care that we enjoyed prior to the balanced budget era of the 1990s was paid for from deficit financing. Canadian health care was never sustainable under medicare if paid for out of current revenues. Only by borrowing to fund annual increases in health care costs were federal governments able to keep up. Now that annual deficits have ceased to be a policy option, governments are forced to reduce spending, as they did during the 1990s, to be able to pay for health care from whatever is left in the budget after covering the interest expenses on accumulated debts.¹³ Therefore, it is highly unlikely (in the absence of significant economic growth) that federal transfers can be raised to previous levels without incurring deficits and raising taxes again. Thus, it is a false distinction to separate the source of public funds between federal and provincial levels of government.

¹² Guyatt, Yalnizyan and Devereaux 2002 (36).

¹³ Brian Ferguson. 2002. *Health Care Expenditures in Canada: Looking at the Numbers*. Atlantic Institute for Market Studies (AIMS).

SECTION 2

AGING AND HEALTH CARE COSTS

It is important to realize the heavily skewed nature of health care utilization related to aging. Over 50 per cent of per capita lifetime expenditure on health care occurs after the age of 65.¹⁴ Statistics Canada data from 2001 indicate that the median age of Canada's population has reached an all-time high of 37.6 years,¹⁵ an increase of 2.3 years from 35.3 in 1996. According to Statistics Canada, this was the largest increase in a century. Furthermore, there is a declining birth rate and record low-growth in population.

As the proportion of the population over 65 grows larger, demands for health services will drastically increase at the same time that the size of the working age population that pays for their health care services is expected to decline. The data show that, "seniors aged 65 or over accounted for 13% of the nation's population in 2001, up from almost 12% in 1991. Projections indicate this proportion will reach 15% by 2011. At the other end of the age spectrum, 26% of the population was aged 19 or younger, down from 28% in 1991. If fertility remains low, this could fall to less than 23% by 2011... The population aged 45 to 64 increased 36% between 1991 and 2001, due to entry of the baby boomers into this group. As a result, Canada's working-age population has become more dominated by older individuals."¹⁶

An analysis of census data shows that aging will be a major cost for health care. In fact, the Interim Report of the Provincial and Territorial Ministers of Health (IRPTMH 2000) made conservative projections of annual average cost increases of almost 5 per cent for the next 27 years. These projections do not include the effect of new technologies, increased quality and access expectations, information technologies or labour costs.¹⁷ Based on these forecasts, growth in health expenditures is predicted to outpace population growth by a substantial margin. Between the years 2000 and 2026 Canadian health expenditures are expected to grow by 247 per cent while population growth will reach only 19 per cent.

¹⁴ Glenn G. Brimacombe et al. 2001. *The future cost of health care in Canada, 2000-2020: Balancing affordability and sustainability*. Conference Board of Canada.

¹⁵ Statistics Canada. 2001. Profile of the Canadian population by age and sex: Canada ages. Census Analysis Series Cat. 96F0030XIE2001002.

¹⁶ Statistics Canada. 2001: 3.

¹⁷ The Interim Report of the Provincial and Territorial Ministers of Health (IRPTMH). 2000. *Understanding Canada's Health Care Costs*.

The annual growth in expenditure is also expected to exceed annual economic growth.¹⁸ These projections appear quite conservative; as noted earlier, both the actual growth rates for 2000 and 2001 and the average annual increases in health costs since 1975 were much higher.

A C.D. Howe Institute report (Robson 2001), on the impact of an aging population on health care budgets provides further comparisons. According to the report:

“If real (inflation-adjusted) output per person of working age rises over the next four decades at the same rate recorded from 1980 to 2000, then provincial health care spending grows from an estimated 6.1 percent of Canada’s gross domestic product (GDP) in 2000 to 7.4 percent by 2020 and 10.0 percent by 2040. If provincial own-source revenue remains at current levels relative to provincial GDPs, the share absorbed by health care spending rises from 35 percent in 2000 to 42 percent in 2020 and 57 percent in 2040. Expressing either increase – over the current share of GDP or over the current 50-year period yields a useful measure of the liability represented by higher health care spending: \$530 billion, equal to 52 percent of current GDP.”¹⁹

What this means for health care is that the very scenario that studies say will make health care costs unsustainable at current levels of taxation and economic growth is exactly what will take place as baby boomers retire. The sustainability issue simply cannot be dismissed. All reasonable projections show that health care costs will increase and that government sources of revenue will not keep up.

The dramatic aging of the Canadian population over the coming decades is expected to challenge the sustainability of the health care system in Canada. A report prepared by the Atlantic Institute for Market Studies (AIMS) outlined the nature of the problem in even more detail:

“...costs are going to be under strong upward, not downward pressure. This is partly due to the systemic reasons...but also due to demographic factors. Most significant here is the aging of the population. It is widely known that birth rates have declined in Canada, as have mortality rates. Canadians live longer, but have fewer children. That means that seniors are becoming a growing share of the population. In fact, in 1992 this country’s 3.3 million seniors were the equivalent of less than 20% of the working age population (i.e. those whose productivity pays for pay as you go programmes such as Medicare). By 2030, however, the 8 million seniors will be the equivalent of nearly 40% of the working age population. Moreover, very old seniors (those over 85) will also double their share of the population. Canadians over 65 currently consume approximately 50% of all

¹⁸ IRPTMH 2000: 31.

¹⁹ William B. P. Robson. 2001. *Will the Baby Boomers Bust the Health Budget? Demographic Change and Health Care Financing Reform*. C.D. Howe Institute Commentary No. 148.

health care expenditures. This rate is expected to increase to almost 67% by 2030, and one can confidently assume that the Baby Boomers will be as demanding in their expectations of the health care system in their retirement as they have been about everything else over the course of their lives.”²⁰

According to the AIMS report, even more alarming is the fact that the taxation burden borne by Canadians takes no account of the rise in demand that these demographic shifts imply. As the report states:

“The Actuarial Services Division of the Office of the Superintendent of Financial Institutions in Ottawa found that Medicare had an un-funded liability (promises to deliver benefits in the future for which no provision has been made) of \$1,209-billion, an amount growing at an annual average rate of 5.7%. Not only, then, will an unreformed Medicare system involve a large transfer of wealth from relatively poor-off workers to relatively well-off Boomers over the next 25 years, but it implies a significant increase in taxation merely to maintain benefits at their current level. Alternatively, taxes will remain stable or rise more modestly, but at the cost of a significant decline in benefits in the future. The latter seems the more likely alternative, given Canada’s uncompetitive tax regime relative to the United States.”²¹

Faced with facts like these, some research contends that any future costs from an aging population will be compensated for by longer life expectancies and improved health technologies (Hogan 2001, Pollock 2001).²² The basis of the argument is that most health expenses occur in the last few years of life and that, because of longer life spans and better health in old age, health care costs could be “compressed” by being delayed farther into the future.

However, this argument does not explain how greater demands on health care can be avoided in the future; it only observes that they can be delayed. Unless the delay coincides with many years of economic growth that would permit governments to save some of each year’s current revenues to cover future health expenditures, delaying the costs only pushes financial problems farther into the future. If natural birth rates or immigration do not rise dramatically above current levels, there will still be the problem that the largest portion of the population is in the highest health cost phase of their lives without a workforce large enough to support them.

The literature on aging and health care costs also suggests that additional revenues expected from the taxes on retirement savings will offset increased expenditures on aging Canadians. However, a bulletin

²⁰ B. L. Crowley, D. Zitner and N. Faraday-Smith. 1999. *Operating in the Dark*. AIMS.

²¹ Crowley, Zitner and Faraday-Smith 1999.

²² S. Hogan. 2001. Aging and financial pressures on the health care system and Pollock, A. 2001. Aging as a health care cost driver and compression of health expenditures. *Health Policy Research Bulletin*. Health Canada: March.

put out by Health Canada in 2001 rejected the view that tax revenues on retirement incomes will compensate for increasing health expenditures on an aging population. According to the report, “expenditure increases due to aging represent an increase in the cost of maintaining a given level of health services; and aging is an expenditure driver that does not bring an offsetting increase in incomes and government revenues.”²³

While not stated in the report, the reason that taxes on retirement savings will not compensate for increased public health expenditures is simple; retirement savings are a replacement for employment income, not a supplement. In retirement, most people actually have a lower taxable income than they had during their working years. Therefore, if the working population becomes smaller, overall tax revenues will shrink if tax rates do not rise. Furthermore, while the overall pool of resources available for taxation is reduced, the overall obligations of governments are increased, not just for health care but also for public subsidies for retirement income such as Old Age Security.

²³ Hogan 2001.

SECTION 3

OTHER FACTORS DRIVING HEALTH CARE COSTS

Aging is not the only factor driving health care costs. A report by PricewaterhouseCoopers (PWC 2002) identified and analyzed the range of factors driving US health care costs. This report claimed that government regulatory requirements for insurance benefit coverage were responsible for 15 per cent of the increase in spending on health care between 2001 and 2002. Litigation related to medical practices added seven per cent and rising expenses for health care providers, including wages and salaries for professionals, added 18 per cent. Increased consumer demand from Baby Boomers accounted for 15 per cent more. General price inflation (18 per cent), drugs, new equipment and technology (22 per cent) and fraud (five per cent) accounted for the rest of the cost increase in health spending.²⁴ While the data are not directly comparable to the Canadian health care system, they do provide some insight on the environmental influences affecting overall health spending. For instance, PWC (2002) indicates that technological advancements in health care are contributing significantly to rising costs.

In Canada, research shows that increased utilization of pharmaceuticals, diagnostic imaging and genetic testing will add to inflationary pressures in health care. The use of these technologies is itself largely driven by consumer demand for cutting-edge health technologies and Baby Boomers are leading the way in this regard.²⁵

Other factors are increasing costs as well. According to a 1999 report by AIMS:

“An expanding ‘menu’ of activities, including maintenance home care and long term care has begun to be accepted as a normal part of a public health care system. This increase in the menu of services contributes to increases in public costs. And the biomedical revolution is also increasing costs for the public system as more and more illnesses are treated that were not treatable before. While drugs are cheaper than surgery in some instances, overall drug consumption is rising, and the costs to Medicare are not limited to the partial coverage for prescription medicines (e.g. for seniors) offered under most provincial plans. One provincial health department, for example, estimates that

²⁴ PricewaterhouseCoopers. 2002. *The Factors Fueling Rising Healthcare Costs*. Washington DC.

²⁵ S. Morgan and J. Hurley. 2002. *Influences on the Health Care Technology Cost-Driver*. CFHCC Discussion Paper No. 14.

the introduction of new medicines increases the demand for physician services by about 8% per year, independent of the costs of the drugs themselves and without evidence to show that overall health benefits are increased. All of these factors help to explain why the cost of providing universal publicly-funded health care to Canadians has risen inexorably since 1970, when Medicare as we know it was largely in place.”²⁶

²⁶ Crowley, Zitner and Faraday-Smith 1999.

SECTION 4

SYMPTOMS OF A SUSTAINABILITY PROBLEM IN MEDICARE

One of the symptoms of the non-sustainability of the health care system under the medicare model has been the ominous financial situation of the nation's hospitals. For instance, the Ontario Hospital Association (OHA) reports that almost 35 Ontario hospitals recorded operating deficits totaling \$78 million in 2001.²⁷ Hospital deficits for the previous year totaled \$47 million for 69 hospitals or 47 per cent of the total number of hospitals in that year. In addition, short-term bank debt among Ontario hospitals increased by 52 per cent between the fiscal years 1998/99 and 1999/00 while total short-term debt has doubled, growing at an annual average pace of 26 per cent since 1996/97.

According to the OHA, this rate of growth exceeds the growth in both hospital revenues and cash flow. Moreover, total interest-bearing debts were over \$853 million in 2000, increasing by five per cent between 1998/99 and 1999/00. The annual interest expense alone absorbed \$60 million of funding that could have been used for operating programs. And the trends indicate that expenses have not remained constant but have been accelerating since 1996/97, reaching seven per cent by 1999/00.²⁸

Another sign that the medicare system is not sustainable as currently designed is the growing use of queueing to ration health care services. While there are significant problems surrounding data collection and information systems within medicare to verify waiting times for health services, the available published research indicates the problem is worsening.²⁹ An annual report by the Fraser Institute provides some insights into the lengthening waits for access to medical services in Canada. According to the latest data available, the following facts on waiting times can be ascertained:

Total waiting time between referral by a general practitioner (GP) and treatment by a specialist, averaged across 12 specialties and 10 provinces: 16.2 weeks in 2000/01 and 16.5 weeks in 2001/02.

Total waiting time between referral by a GP and consultation with a specialist: 7.2 weeks in 2000/01 and 7.3 weeks in 2001/02.

²⁷ Ontario Hospital Association (OHA). 2001. *Ontario Hospital Report-2001*: 53.

²⁸ OHA. 2000. *Financial Review of Ontario Hospitals-2000*.

²⁹ Crowley, Zitner and Faraday-Smith 1999and B. L. Crowley, and D. Zitner. 2002. *Public Health, State Secret*. AIMS.

Total waiting time between consultation with a specialist and treatment: 9.0 weeks in 2000/01 and 9.2 weeks in 2001/02.

Actual waiting time exceeded doctor approved, clinically reasonable waiting time in 87 per cent of comparisons across 13 specialties and 119 treatment categories.

Waits for diagnostic and therapeutic technology were 77 per cent higher in 2001/02 than in 1993.

The economic costs of waiting for cardiac care alone are estimated to be between \$1,100 and \$5,600 annually per patient.³⁰

The growing use of queueing to ration health care may also be leading to pressures on governments to contain costs elsewhere to slow the erosion in access to services. The response to this pressure is policy decisions that one could describe as exploiting medical professionals.

The claim that health professionals are exploited for their labour services by the medicare system is demonstrated by comparing incomes paid in the US to those paid in Canada. A comparison of data published by the American Medical Association (AMA) and the Canadian Medical Association (CMA) shows that the average income of American doctors was more than double that of Canadian MDs after making adjustments for exchange rates and the purchasing power of the currencies. The average income (GPs and specialists aggregated) for US physicians was US\$194,400 in 1998, down from US\$199,600 in 1997.³¹ Comparable CMA data shows the average income for Canadian doctors to be about \$105,200 in Canadian dollars in 1995.³²

According to the AMA, US physicians spent an average of 56.3 hours per week on professional activities in 1999.³³ Comparable data for Canadian physicians showed that doctors here worked 53.4 hours per week (2001), but the Canadian data did not include time spent on-call and included all respondents whether full or part-time.³⁴ Despite these caveats, given the widespread anecdotal accounts of human resource shortages in a growing number of under-serviced rural and urban regions, the Canadian figure is probably much higher.

What this comparison shows is that Canadian doctors work as hard or harder than their US counterparts and receive less than half the compensation in income from the medicare system. This exploitation of labour services from doctors is mirrored in statistics for nurses and is reflected in the continuing

³⁰ M. Walker and N. Esmail. 2002. *Waiting Your Turn: Hospital Waiting Lists in Canada-2002*. Fraser Institute.

³¹ American Medical Association (AMA). 2002. *Physician Socioeconomic Statistics, 2000-2002 Edition*.

³² Statistics Canada. 2000. Income Statistics Division, 1996 Census, cited in *CMAJ* 162: 860.

³³ AMA 2002.

³⁴ Canadian Medical Association (CMA). 2002. *Physician Resource Questionnaire 1982 to 2001*.

net loss of medical professionals from Canada to the US through emigration.³⁵ The inability of the Canadian health care system to retain its medical professionals by offering competitive compensation is just another symptom of the non-sustainability of medicare.

In this regard, a rather ugly sign that medicare is unable to sustain itself is evident in the proposed conscription of doctors in Quebec under that province's Bill 114. If passed, the law would require medical doctors (MDs) to surrender professional autonomy in exchange for billing rights under medicare; eliminate choice in where to practise; and require MDs to sign contracts to provide core services determined by their regional boards. GPs would be obliged to provide specific services for their first 20 years. Currently, only GPs working in private offices have to comply with this measure and only for their first 10 years of practice. Specialists could be forced to accept work in any hospital in their region to reduce medical staffing shortages.

According to representatives of medical associations in the province, doctors will leave Quebec for other provinces and the US, making existing physician shortages even worse. Doctors located in the area affected by the proposed law are reportedly already resigning and leaving. And the medical associations are suspicious that the Quebec government is adopting a policy of coercion to cover for the failure of the public system to sustain itself through properly designed incentives.³⁶ This law is bound to have a negative impact on the retention and recruitment of medical professionals in that province.

³⁵ Brett J. Skinner. 2002. *Medicare, the Medical Brain Drain and Human Resource Shortages in Health Care*. AIMS.

³⁶ S. Benady. 2002. Quebec gov't approach threatening: Physicians will leave province if 'force' continues: FMOQ. *The Medical Post*: Vol. 38, No. 35: October 1.

SECTION 5

IS THE MEDICARE MODEL CAPABLE OF SUSTAINING INCREASING HEALTH COSTS? COMPARING HEALTH SYSTEM COSTS AND BENEFITS INTERNATIONALLY

One of the factors that determine whether a health system is financially viable is its ability to control costs internally. Although, ultimately, sustainability is determined by how much revenue is available to meet health care demands, an efficient system is more likely to be successful at sustaining health care costs than an inefficient one with the same resources. But how do we know if one model for a health system is better than another at constraining health care costs while still providing top-quality care? Comparisons of national health spending levels give some indication of the relative efficiencies in alternative policy approaches to health care.

A study by Deber and Swan (1999) compared Canadian health expenditures to other Organization for Economic Co-operation and Development (OECD) countries using three statistical measures: total health expenditures as a proportion of GDP; nominal spending per capita in US dollars; and health spending per capita in purchasing power parities (PPPs). PPP's are especially important because this measure uses the relative purchasing power of currencies within countries to compare costs in terms of the number of units of different countries' currencies it would take to buy the same basket of consumer goods.

The authors discovered that Canada's medicare model was among the most expensive health care systems in the world when compared either on the basis of the percentage of GDP spent on health or by health spending per capita in PPPs. In fact, medicare ranked as the third most expensive system among 29 countries by these measures. Only when per capita health expenditures were compared on the basis of US dollar equivalence did Canada's rank drop to the fourteenth most expensive of 29 countries studied.³⁷

But this data on health expenditures provides an incomplete analysis of the relative efficiencies of health care systems. In order to make valid comparisons of international approaches to health care, national health expenditures should be adjusted for the age of the population, comparative growth rates in

³⁷ R. Deber and B. Swan. 1999. Canadian health expenditures: Where do we really stand internationally? *CMAJ* 160: 1730-4.

national economies and the quantity and quality of the medical care that is provided under each system. Research that fails to incorporate these considerations inevitably reaches the wrong conclusions.

A Fraser Institute study (Walker and Esmail 2002) showed that if the international health spending data is adjusted to account for the proportion of the population over age 65 years in each country studied, Canada ends up having the most expensive health care system in the world among comparable countries with publicly funded universal access to health services.³⁸ But this still does not complete the analysis; any reasonable concept of efficiency must include both the overall costs of health care and the quantity and quality of the medical services provided. By this measure, Canada's medicare model also fails relative to many other national policy approaches to health care. In fact, if the age-adjusted data on health spending as a percentage of GDP is also adjusted for quantity and quality of health care services, Canada is shown to have one of the lowest-quality, highest-cost health care systems among industrialized OECD countries.

The Fraser study used three outcome measures to rank the performance of health systems in OECD countries: disability-free life expectancy versus total life expectancy; prevention of death by preventable causes; and the death rate from breast cancer. These measures are more appropriate for estimating the performance of the health care system than overall measures of public health, such as life expectancy and infant mortality, because these outcomes are largely determined by other factors affecting population health, like nutrition, public sanitation and mass inoculations, not the performance of the health care system which exists to cure acute conditions.

According to these measures, Canada ranks tenth in the percentage of total life expectancy that will be lived disability free, seventh in the prevention of death by preventable causes, and sixth in the incidence of breast cancer mortality. This is a mediocre performance at best when one considers that Canada spends more than any other industrialized OECD country on health. On other measures, Canadian medicare fares even worse. For example:

“Canada has one of the poorest endowments of physicians in the OECD. In fact, it ranks seventeenth out of 20 countries with 1.8 doctors per 1,000 people for a total of 56,914 full-time-equivalent doctors. To rank first among OECD countries, Canada would need 48,000 more doctors, an 83 percent increase over the current level. In 1970, the year when public insurance first fully applied to physician services, Canada ranked fourth in the countries that could be ranked in that year. With regard to access to high-tech machinery, Canada performs dismally by comparison with other OECD countries. While ranking number one as a health care spender, Canada ranks eighteenth in access to MRIs, seventeenth in access to CT scanners, eighth in access to radiation machines,

³⁸ M. Walker and N. Esmail. 2002. *How Good is Canadian Health Care? An International Comparison of Health Care Systems*. Fraser Institute.

and thirteenth in access to lithotripters. Lack of access to machines has also meant longer waiting times for diagnostic assessment, and mirrors the longer waiting times for access to specialists and to treatment found in other comparative studies.”³⁹

Therefore, if the international comparative data is adjusted for the age of the population and also for the quantity and quality of services provided, it becomes clear that the Canadian medicare model of health care is not performing as well as its international counterparts. And there are other contextual factors to consider when making international comparisons as well.

For instance, one of the most frequent international comparisons in the debate over Canadian health care reform is between the medicare model and the US approach to health care. Direct comparisons of the most recent OECD data show, for instance, that the US spends about 3.9 per cent (unadjusted) more of its GDP on health care than Canada.⁴⁰ Based on a superficial analysis of these figures, many researchers are quick to make the claim that medicare is a more efficient approach than a free market system of health care. There are at least three reasons why this analysis is invalid.

First, the US system is not really a free-market system. In fact, the American health sector is a mix of Canadian-style health insurance systems for the old, the poor and war veterans, as well as a heavily regulated private health insurance market that is seriously distorted by perverse incentives built into the US tax code.⁴¹

The US-Canadian comparison is invalid on another level as well. Some argue that health care costs are not only higher overall in the US but also have grown at a faster rate than Canadian health expenditures since the introduction of Canadian medicare. This statement is false. Typical direct comparisons of health spending to GDP are incomplete measures of the rate of growth in the costs of health care over time. Longitudinal comparisons between national health spending levels as a percentage of GDP over a given time frame fail to control for differential rates of economic growth between Canada and the US. Over a given time frame, these differences can produce fluctuations in the percentage of GDP devoted to health care; that is, because one country’s economy is growing at a different rate than the other countries’, overall health-spending levels may not necessarily follow the domestic growth rate. Therefore, the health-spending-to-GDP figures could generate the false impression that one country’s costs were growing faster than another country’s costs.

This is an important point because medicare was introduced during a period when Canada enjoyed 20 years of economic growth rates that outpaced the US. Once the comparison of health care spending trends are adjusted to control for different growth rates between the US and Canada, it becomes clear

³⁹ Walker and Esmail 2002.

⁴⁰ OECD Health Data 2002.

⁴¹ David R. Henderson. 2002. Myths about US health care in *Better Medicine: Reforming Canadian Health Care* edited by David Gratzer. Toronto: ECW Press.



that the Canadian growth in expenditures increased faster than the US after the introduction of medicare. In other words, if, between the introduction of medicare in 1971 and the cutbacks of the 1990s, Canada's economy had expanded at the same pace as the much slower US economy, the statistics would have revealed a higher rate of inflation in Canadian health care spending measured as the percentage of health spending to GDP. In fact, if Canada's economy had grown at the same pace as the US since 1971, we would have had the most expensive health care system in the world during this period, as measured by spending to GDP. This trend only abated in the 1990s when governments began to rein in public spending.⁴²

A third reason to reject direct US-Canadian comparisons is that they do not provide a complete context. The US spends a higher portion of its GDP on health care than any country in the world. While Canada may do better than the US, the real question is how we compare to the rest of the world. As previously mentioned, if spending levels are adjusted to control for the percentage of national populations over 65 years of age and the quantity and quality of the services provided, Canada is shown to have the most expensive health care system among OECD countries with publicly-funded universal access to health services while ranking among the lowest in terms of quantity and quality of services.

Even when the US is included in the comparison, Canadian medicare appears to suffer from serious deficiencies. According to a report from the Commonwealth Fund that examined health care in the US, UK, Australia, New Zealand and Canada, our country ranked poorly in terms of timely access to surgery compared to all of these countries.⁴³ This measure of efficiency is important because surgery is often the most urgent form of medical care.

So if valid international comparisons are going to be made between US and Canadian health expenditures, the analysis must account for the differences between what health care dollars in Canada buy versus what Americans receive for their health care spending. And if the quality of health care is considered in terms of access to top-notch acute care services, direct comparisons with the US system show that Canadian medicare comes up short.

It is no secret that American hospitals and clinics are more modern, have far greater access to high-tech equipment, have higher staffing levels and provide care that is arguably second to none in the world. For instance, Canadians wait an average of 150 days for an MRI diagnostic procedure while Americans wait three days.⁴⁴ Furthermore, Canada's best hospitals lack the specialized programs available at most American hospitals, public or private.

⁴² Ferguson 2002.

⁴³ Lorne Gunter. 2002. Our smugness unfounded: Medicare doesn't compare well with health care in other countries. *Edmonton Journal*.

⁴⁴ N. Seeman. 2002. Low-tech, low-brow in *Better Medicine: Reforming Canadian Health Care* edited by David Gratzer. Toronto: ECW Press.

An example is the absence of a program to treat involuntary physical movements in children at Toronto's Hospital for Sick Children, a program that exists in almost every American hospital in almost every American city.⁴⁵ And the US News and World Report's annual ranking of America's best hospitals highlights the cutting-edge technology being widely employed for acute medical services in the US.⁴⁶

So, what do international comparisons really say about the sustainability of health financing under medicare? An important fact to remember in the international comparisons cited above is that none of the countries studied prohibits the private provision of core medical services except Canada. Moreover, all of these systems incorporate some form of consumer co-payment mechanism for health care costs.⁴⁷

Therefore, it seems clear that a more complete comparative analysis of the efficiencies of national health systems refutes the argument that health financing in Canada is more likely to be sustainable within the medicare model than under alternative approaches. Efficiency comparisons among national health systems must include considerations of quality and accessibility. Once the data is adjusted for comparability, Canadian-style medicare appears to be among the least efficient approaches to providing health care services. So, assumptions about the cost efficiencies of the medicare model are a myth resulting from incomplete analyses and inappropriate comparisons and offer no basis upon which to argue that the health care system is sustainable under medicare.

⁴⁵ Seeman 2002.

⁴⁶ *US News and World Report*. 2002. America's best hospitals: Exclusive rankings in 17 key specialties: July 22.

⁴⁷ For international comparisons see C. Ramsay. 2001. *Beyond the public-private debate: An examination of quality, access and cost in the health-care systems of eight countries*. Calgary: Marigold Foundation.

SECTION 6

CONCLUSION: IS THE STRUCTURE OF MEDICARE ITSELF NOT SUSTAINABLE?

As other research has pointed out, the universal public health insurance design and monopoly regulatory structure of the medicare system itself is what makes the system ultimately non-sustainable. So-called free health insurance creates an incentive for consumers to overuse the system.⁴⁸

The lack of a price mechanism to rationalize demand for health care exacerbates cost pressures brought on by an aging population, and creates persistent cost pressures on public finances. Over utilization also contributes to longer waits for services and may interfere with access to medical services for those who truly need them. Furthermore, the monopolistic provision of services, lack of accountability to consumers, political interference in health care decision-making, barriers to innovation and lack of regular, reliable information under medicare, all conspire to make the system financially non-viable.⁴⁹

The future sustainability of health care in Canada requires fundamental and economically rational reforms to the basic design of medicare.

⁴⁸ E. B. Keeler. 1992. *Effects of Cost Sharing on Use of Medical Services and Health*. RAND Corp.

⁴⁹ Crowley, Zitner and Faraday-Smith 1999.

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