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Funding and Production of Health Services: Outlook and Potential Solutions

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The views expressed herein are solely those of the author and do not necessarily reflect those of the Commission on the Future of Health Care in Canada.

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Highlights

The author begins by reviewing the conceivable sources of funding, namely the injection of public funds, prefunding of the federal share on the basis of the growth of the elderly population in each province, controlling costs through simple changes in the structure of the Canadian health care industry, charging public insurance premiums which are nothing more than a mechanism of the tax system, partial incorporation of the value of health services into the taxable income of the individual receiving these services, and issuing users a credit that would be deducted from their personal income tax. This credit would be reduced by the value of the services received by the individual during the year. This latter formula can be likened in substantive terms to an individual health savings fund.

The author opines that the incentives for all agents of the system must be changed. Individual choices and private production have been shunted aside, profit (the reward for innovation) has been done away with, private capital has been criminalized, and then we bemoan the fact that the health system lacks investments and that it is not innovative.

In the second section, the author reflects on the core values associated with the Canadian system. Among the myths he seeks to debunk, the author takes up the assumption that financial considerations must not enter into people's decisions to avail themselves of services. He also rejects the assumptions that official comprehensiveness, i.e., non-billing, gives patients/consumers freedom of choice, that the non-billing of consumers and the transfer of the burden onto the overall tax system are the symbol of social justice, and that the billing of services would preclude a guarantee of universal access. The embodiment of this vision of things is the spectre of a two-tiered system. The author also criticizes the system's underlying egalitarianism and the link that is made between universal access and production in a public monopoly.

In a later section, the author posits that, in the present conditions, the system lacks favourable incentives for its agents.

Last, the author presents a promising avenue: the accumulation by individuals of personal health savings funds, which are not taxable or publicly funded, or its equivalent: the issuance of a deductible personal income tax credit. The essential aspect of this arrangement is that the fund belongs to the individual, which makes him the ultimate beneficiary of the thrift he shows in managing his health fund or tax credit. Public and private service providers would receive their money from the patients, but indirectly from the government.

The author feels that the introduction of a health savings fund system financed by the public treasury (or the tax credit) is unlikely to conflict with the principles of universality, accessibility, portability or public administration, since it only involves public financing mechanisms.

Executive Summary

Modes of Funding

The author begins by reviewing the conceivable sources of funding. With regard to the injection of public funds, he feels that increased public spending and a heavier tax burden would not solve the system's shortcomings. There is no observable relationship between per capita public spending and waiting times.

Prefunding of the federal share on the basis of the growth of the elderly population in each province would offer the benefit of easing the burden of intergenerational transfers associated with the ageing of the baby boomers. But if there is a lot to be said for prefunding, why not encourage its emergence within the population itself? This was done to resolve a similar issue with RRSPs. Ultimately, the notion of federalism and provincial responsibility is dissolving.

Many analysts feel it is illusory to believe that controlling costs involves nothing more than managerial reforms and simple changes in the structure of the Canadian health care industry. It is the incentives for all the agents of the system that must be changed. In the debate with the provinces on allocation of federal funds as part of the social union, the federal minister wanted to make his magnanimity with public funds contingent upon implementation of structural reforms by the provinces. Another grandiose plan, evocative of the major social projects of the 1960s, is contained in the report of the Clair Commission.

A more specific and more recent study on institutional structure criticizes the current public system for paying separately for each component of the production process, without regard for the integration requirements between the public authority, hospitals, hospital physicians and front-line doctors. The approach basically seeks to bring about an "internal market" of services and thereby restore good incentives for certain agents. But if the incentives traditionally associated with the functioning of a market are so desirable, why settle for imitations? The fact is that individual choices and sometimes private production have been shunted aside, profit (the reward for innovation) has been done away with, private capital has been criminalized, and then we bemoan the fact that the health system lacks funds and investments and that it is not innovative.

When it comes to public insurance premiums, to the extent that they are in no way linked to the use of services, the formula must be seen as a component of the overall tax system, a sort of capitation, rather than a health services fee or deduction.

There has also been a proposal to partially incorporate the value of the health services dispensed into the taxable income of the individual receiving them. Another mechanism would see users issued a credit that would be deducted from their personal tax. This credit would be reduced by the value of the services they received during the year. This latter formula can be likened in substantive terms to an individual health savings fund, in that the credit is basically a non-taxable allowance that can be used to absorb health services fees.

The myriad funding formulas examined would no doubt raise consumer awareness to a certain extent, but would not change the regrettable incentives for providers (i.e., physicians, hospitals and other service units) and for the politicians themselves.

System's Underlying Values

In the second section, the author reflects on the core values associated with the Canadian system. An initial assumption concerning the system holds that financial considerations must not enter into people's decisions to avail themselves of services. According to this argument, the patient knows what his medical needs are and the medical treatment is of a strictly professional and scientific nature. But we as individuals differ from one another in our inclination to take risks with our health. The uncertainty surrounding the choice of treatment also rules out the idea that there is only one standard, indispensable treatment. The market has its place in health care.

A second assumption of the existing system holds that its official comprehensiveness, i.e., non-billing, gives patients/consumers freedom of choice, autonomy and supremacy. In reality, in our system it is the political-bureaucratic apparatus that determines resource allocation and the system's capacity.

A very Canadian tradition holds that the non-billing of consumers and the transfer of the burden onto the overall tax system are the expression of the people's wills, the symbol of social justice, the expression of the meaning of compassion that animates the Canadian soul. But the market is also a powerful reflection of social values. In reality, the public's apparent affection for socialized medicine has less to do with the noble ideal of compassion than it does with the desire of the many to access unlimited services – as long as someone else picks up the tab.

Another common myth: if services were billed, it would preclude a guarantee of universal access. The embodiment of this vision of things is the spectre of a two-tiered system. But this is at odds with theory and experience. By fostering the growth of private additional capacity, most countries have managed to ease cost pressures on the public system. And it is individuals in lower socio-economic brackets who have often gained the most.

It can also be stated that the system's underlying egalitarianism is immoral in that it rewards that segment of the population that shows no concern for the medically deleterious consequences of its lifestyle.

In another widespread myth, an association is generally made between universal access and production in a public monopoly. But there is no relationship between the goal being sought, i.e., universal access to care, and the mechanism of public monopoly production. Funding is dissociated from production.

Incentives and Efficiency

In a later section, the author posits that an efficient system must put in place favourable incentives for all agents of the system. In the present conditions, this is not being done.

Non-billing generates on the part of users an excessive and inefficient demand for services. Thanks to its success in integrating into one process the production of services and health insurance, managed care has been able to curb user abuses and elicit desirable behaviour among providers.

Promising Avenue

The accumulation by individuals of personal health savings funds, which are not taxable or publicly funded, or it's equivalent: the issuance of a deductible personal income tax credit. The essential aspect of this arrangement is that the fund belongs to the individual, which makes him the ultimate beneficiary of the thrift he shows in managing his health fund or tax credit. Public and private service providers would receive their money from the patients, but indirectly from the government. In this way, the formula influences supply as much as demand.

This formula has spread to economies as diverse as Singapore, China, South Africa and the United States. The Americans have already tested out this formula at both the public and business level.

Compatibility with the Canada Health Act

The introduction of a health savings fund system financed by the public treasury (or the tax credit) is unlikely to conflict with the principles of universality, accessibility, portability or public administration, since it only involves public financing mechanisms. In its public funding version, it does not charge users directly.

The System Today

Without examining the question methodically, we will take it for granted throughout the study that the current system suffers from irremediable flaws, which take the following forms. Waiting times are long and getting longer (Walker and Wilson 2001). The impact of this shortcoming on the public's health and well-being is real (Statistics Canada 2001; North American Association of Central Cancer Registries 2001). Accessibility remains unequal, notwithstanding official claims. The quality and quantity of care (waiting time, access to physicians, specialists, care units and drugs, life expectancy, surgery rates, survival rates, interest and respect shown patients, treatment obtained abroad, composition of services offered, and treatment reserved for military personnel, for people who are well-connected and for political leaders) vary by region and by income (Canadian Institute for Health Information 2001; Solomon 1998; *National Post* 1999; Statistics Canada 2001; and Blendon 2000). Access to cutting-edge technology is limited (OECD 2001; Blendon 2000). Services continue to be delisted for budgetary reasons. There is a widespread shortage of qualified staff (Canadian Institute for Health Information 2001).

I. Possible Sources of Funding

Conceivable sources of funding are not unlimited. Taxes can be increased, additional public monies can be injected, and the formula for federal transfers to the provinces can be amended in a variety of ways, for example by prefunding these transfers and linking them to growth in the older population in each province, controlling costs by changing the structure of the health industry and charging insurance premiums (higher premiums in certain provinces). There are at least four different methods whereby users can be required to assume some of the costs of the services they receive.

Injection of Public Funds and Taxation

The Commission has wisely asked for an analysis of options outside of the first hypothesis. Increased public spending and a heavier tax burden would not solve the system's shortcomings. This somewhat pessimistic diagnosis is in line with the findings contained in the recent studies commissioned by the Governments of Alberta, Ontario and New Brunswick, as well as the preliminary reports of the Senate committee on health care and the Romanow interim report of February 2002.

In any event, it is an established fact: there is no relationship between per capita public spending and waiting times. No relationship has been observed between changes in public spending on health and the number of procedures per capita (Zelder 2000). As an illustration, Saskatchewan ranks third in per capita expenditures, but the waiting time between a doctor's referral and treatment was 34.5 weeks in 2000 (as against an average of 14 weeks in Canada). The way everything works under the current system, it is as though the resources injected are simply swallowed up by salary increases, higher prices or various uses without benefit to users.

Pumping resources into a system with perverse incentives can only make things worse – and increased spending does nothing to change the system's incentives. At best, it only offers a reprieve, especially when it comes to foreseeable demographic and technological change. The formula would shore up the system just enough to appease the loudest critics and to keep the public at its tolerance threshold.

Public Spending on Health: Source of Economic Prosperity?

One of the myths perpetuated in Canada has it that Canada's heavy tax burden in comparison with that of its neighbour to the south stems from the funding of the public health plan. Public funding, or so the argument goes, saves employers from having to assume the cost of their employees' health insurance and, in so doing, attracts capital and qualified workers (Romanow 2002). This interpretation does not stand up to analysis; when the facts are presented, it does not bear scrutiny. First, American employees *choose* to be remunerated in non-taxable health services, rather than in higher wages. Furthermore, the higher tax burden in Canada is ultimately shouldered by Canadians, and this dampens growth.

According to a recent report by the OECD (2001), Canadian governments spend 40.9% of the entire national output (GDP) on goods and services. Spending by American governments accounts for 29.4% of US GDP. This means that Canadian governments spend 39.1% more (as a percentage of GDP) than American governments. Tax-wise, Canadian governments take in 44.3% of GDP in tax revenues, compared to 31.6% in the case of the Americans. From this, we can conclude that Canada's tax load is some 40% larger than that of our neighbours.

If these differences were applied to health budgets, public spending on health would be about 40% higher than what it is in the United States. It is nothing of the sort, however. In fact, Canadian governments allocated \$1,738 per person for health care in 1999, as against \$1,938 in the United States. However, American governments earmarked 5.7% of GDP for health care, while the Canadian figure was 6.6%, a miniscule difference of 0.9%. Canada's inability to meet its needs for services stems in large part from its low standard of living relative to its potential.

Federal Transfers Tied to Growth of Elderly Population

William Robson of the C. D. Howe Institute (Robson 2001) proposes replacing the current ad hoc federal grants system with a formula of transfers to the provinces tied to growth of the 65-and-over population in each of the provinces, and at the same time accumulating in a specific federal fund a portion of this future transfer budget (at a rate of \$3,000 per person aged 65 and over in each province). He estimates the future liability associated with ageing at about \$530 billion in present value terms, i.e., 50% of current GDP or twice the value of the existing provincial debt. As Robson indicates, pre-funding would offer the benefit of reducing the cost of the baby boomers' health care to the next generation.

There is a lot to be said for the perspective that heavier use of health services as people age should instil in the members of the labour force a desire to realize savings. The principle of pay as you go incorporated into the current system of public funding is even responsible to a great extent for the implicit negligence people are showing in the present conditions. The Robson formula, by assigning the federal government the task of pre-funding, entrusts the responsibility to the entity, which for 40 years has not seen fit to perform this task itself or to provide the public with the right incentives to save. In short, if there is a lot to be said for pre-funding (and there clearly is), why not encourage its emergence within the population itself? This was done to resolve a similar issue with RRSPs.

And should we be basing future transfers to a province on the proportion of old people it has? If the answer is yes, the formula should be extended to all functions shared by the two levels of government, including higher learning (which would be based on the number of people between the ages of 18 and 25), social assistance, regional development and, why not, the road network (transfers based on the size of the territory). Ultimately, the notion of federalism and provincial responsibility is dissolving. The federal government is taking on everything, at least all functions that have a variable budget. The Robson analysis is more a study of federalism than a study of health funding.

The Robson plan also raises the question of the impact of this massive transfer on the provinces' policies and by extension on economic growth. The question of the influence of equalization programs and cost sharing has been hotly debated in Canada for some years now. If the provinces with a younger future population must subsidize the provinces whose populations are ageing more rapidly, can we not expect to see an intensification of the provincial anti-growth policies historically associated with other transfer formulas? At the very least, we can expect that the formula will hardly be of the type to attract the youngest and the most entrepreneurial in less well-off regions.

All the more so since the Robson formula leaves unresolved the question of what to do with the \$185 to \$190 billion that the seniors health care accounts would produce.

Reforms to Structure of Health Industry

Many analysts feel it is illusory to believe that the flaws in our system can be addressed merely through managerial reforms and better planning. The reforms of the 1990s were predicated on the illusion that closing hospitals and cutting staff would achieve significant savings, that reducing the supply would eliminate the excessive demand for services and that no unfavourable consequences would ensue. The only additional reform to implement was to turn doctors into civil servants by putting them on salary instead of paying them on a fee-for-service basis. It was claimed that this change would make it possible to adjust the supply to the demand from high up through micro-management.

In the debate with the provinces on allocation of federal funds as part of the social union, the federal minister wanted to make his magnanimity with public funds contingent upon implementation of structural reforms by the provinces! Doctors, who serve as the gateway to the system, would be encouraged to form group clinics capable of offering services around the clock, so as to divert non-critical patients from the hospital. The doctors would receive a capitation (an annual fee per patient) rather than being paid for their services on a fee-for-service basis. A second mechanism for diverting patients from the hospital: implement a broad home care program.

Another grandiose plan, evocative of the major social projects of the 1960s, is contained in the 400-page report of the Clair Commission, which presented its all-encompassing blueprint for a socialist revolution early in the year 2000. Armed with the wisdom acquired from four public forums and consultations with 6,000 people (an affront to the 7,366,448 other individuals who, according to Statistics Canada, inhabited Quebec in the year 2000), the report was termed the "big bang" of health by the bewitched media. An essential creation comprising "family medicine groups," specialists' offices defined as "extensions of the hospital," an insurance plan to guard against the senility that lies in store for all of us, even the "national investment *corvées*" to upgrade the technological capacity and real estate holdings of the hospitals, all in the name of *solidarity*, without which we are condemned to plunge back down into the icy waters of US-style individualism – a stark reminder of what Quebec was like prior to the public health system.

A more specific and more recent study of institutional structure comes from the C. D. Howe Institute (Donaldson, Currie and Mitton 2001). The authors criticize the current public system for separately remunerating each component of the production process, without regard for the integration requirements between the public authority, hospitals, hospital physicians and frontline physicians. Hospitals do not have the power to manage the activities of physicians, and yet these physicians determine where most of the services are allocated in hospitals. Physicians also have the power to determine the allocation of resources, but owing to their mode of remuneration, they lack the responsibility (financially speaking) that leads them to optimize the functioning of the institution. Their solution: give regional health authorities greater discretion regarding the use of their resources, while getting hospitals and other suppliers to compete more with one another. In this way, hospitals could be converted into financially autonomous businesses that would sell their services to regional authorities or front-line physicians, each in competition with one another. Another formula would consist in making funding available to front-line physicians, who in turn would "purchase" services from hospitals and other providers. Lastly, the authors propose that, as is the case in a real market, integration proceed via the patient through individual health savings funds.

Apart from the latter option, the authors' approach basically promotes an "internal market" of services and thus the restoration of good incentives for certain agents by introducing mechanisms resembling those of a pure market. This clever idea is based on a sound principle. The authors have an intimate knowledge of institutional workings. If adopted, their ideas would undoubtedly improve the system.

Their undeniable contribution to our knowledge of Canadian processes raises two fundamental questions. The first, common to most proposed reforms having to do with funding and public production, can be summarized as follows: if the incentives traditionally associated with the functioning of a market are so desirable, why settle for imitations? The authors very lucidly call for the introduction of more favourable incentives, of alternate formulas that would bring patient and provider incentives more directly into line in terms of efficiency requirements, without opting for the formula on which they are all based, i.e., the introduction of an explicit market system. Clearly, it is their concern for realism and political pragmatism that inspires them, as much as their convictions as economists.

Their ambitious approach brings us to the second question, which has even broader implications than the first. What is the optimal structure of an industry such as the health care industry and, more important, how do we go about discovering and implementing it? How does such integration take place in a real market? It is price and profit outlook that drive entrepreneurs and get them to constantly adjust to preferences, new technologies, and the most efficient modes of production and organization. But this process of "creative destruction" was banished from the hospital industry. Individual choices and private production have been done away with, profit (the reward for innovation) has been done away with, private capital has been criminalized, and then we bemoan the fact that the health system lacks funds and investments and that it is not innovative.

Analysis and history have shown that the command and control of an entire industry, in the manner of the former Soviet Union, are the stuff of what Nobel laureate Hayek called the fatal

conceit: the entirely Cartesian pretension of believing that a central organization, even a democratic one, can obtain all the information needed to integrate the billions of relationships that this task involves; the pretension of believing that through central directives to subsidiaries and administrators, the dynamic nature of an innovative, efficient business can be reproduced.

Under the current system, the central organization must integrate each of the province's hospitals into its framework, anticipate each region's needs for the next generation and plan the opening and closing of hundreds of facilities, all the while relying on computer models, predictions and other mechanisms used by planners.

Charging Public Insurance Premiums

Another avenue presents itself: charging additional insurance premiums, which would go to the public monopoly system; these would either be standard or tied to income. This is one of the formulas selected by the Government of Alberta at the suggestion of the Mazankowski report. Charging these premiums (or increasing existing ones) is a form of fiscal levy that would affect the distribution of the tax burden but not the incentives for consumer-patients and other producer agents of the system. To the extent that the premiums are in no way linked to service use, the formula must be seen as a mechanism of the overall tax system, a sort of capitation, rather than a health services fee or levy.

Copayment Contribution Scheme Operated through the Tax System

In a study prepared by the C. D. Howe Institute (Aba, Goodman and Mintz 2002), the authors propose that the value of the health services an individual or family obtains be partially incorporated into their taxable income. The heavier the burden imposed on the system by the user, the more he would contribute to its funding (capped at 3% of income, and nil for an income under \$10,000). Instead of charging all service consumers a flat rate, as is the market practice, the implicit price would vary according to the income of the service recipient. Economists call this practice a form of price "discrimination" (without any moral connotation), since elasticity of demand is lower at high income levels. Estimating that average elasticity varies from 1.7 to 7.0%, the authors calculate overall cost savings of about \$6.3 billion in 2000. The tax revenue that the levy would generate (estimated at \$6.6 billion) would go toward reducing personal income tax rates. Naturally, the formula would involve developing a form of service cost calculation that does not currently exist. A huge database would need to be created to charge each taxpayer user's account with the value of the services consumed during the year (MacIntosh 2000). Combined with a smart card or a debit card, which would record how much each person consumed, as suggested by the Mazankowski report, this value would be calculated as taxable income (dummy invoices).

Billing through Issuance of Taxable Income Deductions or Tax Credits

In a paper presented at a Commission-sponsored roundtable hosted by the C. D. Howe Institute, two analysts (Reuber and Poschmann 2002) assess the impact on consumption and on public spending of four levy mechanisms linked to usage via the tax system. The first would levy a fee through partial incorporation of the value of the service into the person's taxable income. In this regard, the formula is in line with the scheme examined by Aba, Goodman and Mintz (above). The second approach would see the user issued a taxable income deduction, which would be reduced by the value of the services he used during the year. The third version involves a credit applicable to tax payable, which would replace the deduction. As we can see, the latter formula can be likened in substantive terms to an individual health savings fund, in that the credit (say \$1,000) is basically a non-taxable allowance that can be used to absorb health services fees.

The authors methodically (as much as they can when dealing with nothing more than working hypotheses) go about gauging the impact of these various approaches on service use and on tax savings per Albertan and Ontarian family.

The myriad formulas examined will no doubt raise consumer awareness to a certain extent, but will not change at all the regrettable incentives for providers, i.e., physicians, hospitals and other service units, and for the politicians themselves. They will not do anything to restore the virtues of competition, efficiency and innovation. They risk giving the principle of billing a bad name.

To the extent that the State continues to allow itself a monopoly on production, the rate thus introduced would be a political (and therefore arbitrary) price, dissociated from the real cost of the services. Which services would it apply to, what level should it be set at, to whom should it be charged? There is an infinite number of conceivable combinations and amounts. We should expect that it would be used to afford more preferential treatment to privileged clients. The deterrent fee is, in theory, superior to general taxes, which constitute entrance fees to an indistinct assortment of services, but provided that this is accompanied by corresponding tax relief.

Beyond operationalization considerations, the fundamental question raised by this formula involves its partial application to health services only. If the formula works well in this field, why not extend it to all divisible services offered by the public sector, such as education and public highways? More important, why settle for imperfect mechanisms, for ersatz versions of the real mechanism that we are trying to imitate, the true market?

II. Principles and Values Underlying Today's System

The interim report of the Romanow Commission urges us to reflect on the core values associated with the Canadian system. In reality, it has not been established that these fundamental values differ appreciably from one social stratum to another in Canada. All of us, it would seem, agree that universal access to services is an essential objective. It is in the ways we would go about achieving this objective that divergences appear.

The *Canada Health Act* spells out explicit principles governing the relationship between goals and means of achieving them. It specifies universality, accessibility, comprehensiveness, portability and public administration. But the Act also includes implicit principles – implicit core values, if you will – contained in the practices currently in effect.

Material Considerations Not Supposed to Come Into Play

The first assumption made by the Act and the system (implicit in the public monopoly of production, non-billing and prohibition on private insurance) is that financial considerations should not enter into people's decisions to avail themselves of services. This option is based on the assumption that patients do not know what their medical needs are and that the medical treatment is of a strictly professional and scientific nature.

But we as individuals differ from one another in our inclination to take risks with our health. The huge variety of lifestyles people adopt testifies to this diversity. We all know the dangers associated with smoking and other activities, as well as the benefits of regular exercise, seatbelt use and a diet low in fat. And yet, many people are inclined to take risks in order to enjoy the pleasures and comfort of "unhealthy" activities, even if it means regretting it later on. Perhaps it is worth bearing in mind that here again, there is much uncertainty as to the relationship between the behaviour and the result.

The system also assumes the scientific and immutable nature of the diagnosis and the appropriate treatment. Medical procedures become "medically necessary." But the uncertainty surrounding the various medical technologies is universal. The health costs that are incurred help reduce this uncertainty. Tests to clarify the diagnosis, procedures used by the hospital to lower the patient's risks, treatments aimed at improving the patient's long-term outlook... all of these expenditures are aimed at reducing the consumer's uncertainty. What we are buying with our health dollars is not, for the most part, an outcome with a specific and expected value; rather, it is a reduction in the uncertainty that will accompany us throughout our lives. Hence the naïveté of those who dream of the ultimate technological solution. Consequently, the uncertainty surrounding the choice of treatment rules out the idea that there is only one standard, indispensable treatment.

The corollary of this logic is that so long as health care involves weighing these various risks, medically identical individuals will choose different lifestyles, will want to obtain different treatments and will be prepared to spend different amounts of money to control these risks. The incentives for patients and service providers are reflected in behaviour.

No Fees: Guarantee of User's Autonomy?

A second assumption of the Act and of the existing system holds that its official comprehensiveness, i.e., non-billing, empowers patients/consumers and gives them freedom of choice, autonomy and sovereignty. Without financial constraints, it is assumed that the population would avail themselves of the services dictated by their true needs. In reality, the fact that the services are free limits choices and leads to irresponsibility.

In our system, it is the public sector that determines resource allocation and system capacity: number of hospital rooms, clinics, service providers; hospital size, location and equipment; treatment scale and job descriptions; services offered and number of physicians, deemed excessive in 1990 and insufficient a few years ago: in a nutshell, the monies earmarked for health.

The system prohibits patients from contracting with physicians and other providers to obtain an MRI, to purchase insurance and guarantee the quality of the services, and to obtain an appendectomy from a private hospital.

Consequently, it is no longer the user who decides his preferences, budget or treatment; it is the political-bureaucratic apparatus, by imposing physical limits on the system's capacity to produce services. This means that the Canadian system can be seen as comprising 10 huge HMOs (Health Maintenance Organizations) (the provinces), which filter the composition and scope of the services and, on top of all that, enjoy a monopoly of production.

No Fees: Symbol of Compassion?

A premise of the existing system is that the non-billing of consumers and the transfer of the burden onto the overall tax system are the expression of the people's will, the symbol of Canada's brand of social justice, the expression of compassion that animates the Canadian soul, as opposed to the rugged individualism of the Americans.

The Market: A Mechanism for Expressing Preferences

Conventional wisdom has it that the political process is the exclusive and ultimate instrument for revealing the people's will, be it in the area of health or other fields. This is the grand illusion of Canadian thinking. The market is also a powerful reflection of social values; it achieves this by guaranteeing economic progress – in the end, the only guarantee for the realization of people's aspirations. Nobody controls the market. It is the instrument through which millions of free individuals express their needs, not the needs that others attribute to them. Our greatest satisfaction would be to have helped convince Commissioner Romanow of the fragility of the distinction he has drawn between market and public interest. "Health care must be governed by the public interest, not markets," he argues (Romanow 2002).

Dominance by the Majority

In reality, the public's apparent affection for socialized medicine has less to do with the noble ideal of compassion and loyalty to general preferences than it does with the desire of the many to access unlimited services – as long as someone else picks up the tab. When people call for higher taxes to augment the system's capacity, it is an increase in the taxes on their neighbours, whom they see as richer than they, that they are calling for. It is often by granting benefits to the majority – on the backs of the minority – that elections are won in a first-past-the-post system. In a society where, as is universally the case, there is asymmetric income distribution (there are more families making less than the average income than there are families that make more than the average), i.e., the income made by the majority (\$46,000 a year or less) is below the average (\$62,000 a year), elections are won by bringing vast areas of economic activity under State control and relying on public funding. Nationalization of the health industry saw a majority of voters benefit from a transfer of wealth amounting to over \$1,500 a year, courtesy of upper-middle-income families (Migué 2001).

Dominance by Interest Groups

The system is also based on the power of interest groups to obtain transfers of wealth from the State. The majority is often rationally silent. Public decision makers seek to concentrate the benefits of their policies in the hands of the few (generally producers and unionized workers) within organized coalitions and spread the cost among the many (generally consumers or taxpayers). Further on we show how the public monopoly leads to the union monopoly and the inordinate strengthening of the power of large unions. These unions know full well that it is in specific areas that health expenditures have risen most – areas most favourable to the promotion of their interests – to the detriment of investment and drugs spending, for example (MacMahon and Zelder 2002).

Billing of Services: Obstacle to Universal Access?

Another implicit principle incorporated into our tradition holds that if services were billed, it would preclude a guarantee of universal access. This assumption flies in the face of economic theory and observation. The least well-off are often the most penalized by the current deterioration in service. Universal access to services is often confused with egalitarian and uniform access.

The embodiment of this vision of things is the spectre of a two-tiered system. Opposition to a parallel system holds that the most well-off would obtain in this manner a priority claim on the resources in this sector, and that the capacity to produce services would remain fixed, unchanged, after fees were introduced. But wealth, activity and production are not a zero-sum game. In a productive economy, access of the wealthy to resources takes nothing away from the poor, or anyone else for that matter. By fostering the growth of private *additional* capacity, most countries have managed to ease cost pressures on the public system. People in lower socio-

economic brackets have often gained the most from private sector involvement in the production of services. The supposed danger of evolving toward a "two-tiered" system, in which quality care is reserved for the wealthy, is a bogeyman, a spectre at odds with the experience of all the countries. Building a system to respond to the specific characteristics of 5 to 10% of the population is a surefire way of frustrating everyone's needs. Through the competition it generates within the public network, the introduction of a private network also generates beneficial efficiency effects on the public network.

Reservation: if it is true that competition would force providers to be more attentive to preferences, production costs and innovations, this concession to good sense would not substantively change the incentives for production agents in the public network or for users.

Egalitarianism: Guarantee of Equity?

Defenders of the existing system advocate not universal access, but egalitarian access. It can also be stated that the system's underlying egalitarianism is immoral, in that it encourages the adoption of antisocial behaviour incompatible with universal access. A system that treats prudent, conscientious and disciplined users the same as it does negligent, heedless and undisciplined users is immoral. And that is exactly what our system does by rewarding that segment of the population that shows no concern for the medically deleterious consequences of their lifestyle. One-third of the Canadian public is obese; these individuals impose a cost of \$2 billion on their fellow citizens. In addition, one-quarter of Canadians choose to indulge in tobacco use. It is felt that many episodes of the common cold, flu, sore throat and diarrhea are attributable to people's failure to wash their hands at the right time. When the time comes to make use of public health services, members of the latter group will enjoy the same access as those of the former group.

Public Monopoly of Production: Guarantee of Universal Access?

In another widespread myth, an association is generally made between universal access and production in a public monopoly. But there is no relationship between the goal being sought, i.e., universal access to care irrespective of wealth, and the mechanism of public monopoly production. Funding is dissociated from production.

Opponents to a parallel system are not interested in maximizing the community's health budget and the user's autonomy, but rather public spending. This is the inescapable consequence of allocation by majority voting, combined with public monopoly (Epple and Romano 1996). We know, however, that the coexistence of a public and a private system would increase overall health capacity and budgets, while at the same time easing the pressure on public budgets. Canada remains one of the only advanced countries in the world to impose a public monopoly on hospital services.

Sectoral Monopoly and Union Monopoly

One of the constants observed in the history of monopolies is that cartellization of a sector of activity by regulations or nationalization encourages union monopolies, i.e., the appearance of a cartel of actors eager to counterbalance the heightened concentration of the production structure. Some would argue that State monopolies serve at least to control costs. Indeed, the rise in public budgets has slowed at times, but the labour or wage budget component, for its part, remains excessive. The average Canadian hospital sets aside about 75% of its overall budget for wages, compared to 55% for the average American hospital (McArthur 2000). However, it should be pointed out that Canadian governments are not in the practice of accounting fully for fixed assets depreciation. In any event, under-investment in the sector remains a documented hypothesis (MacMahon and Zelder 2002).

At the same time, non-specialized union workers in the health services field (maintenance workers, electricians, plumbers, etc.) are making more than competitive wages, higher than their counterparts in the private sector. If we compare the wages of union workers in the hotel and restaurant industry with those of unionized workers in a hospital, we see that maintenance employees working in a hospital earn 17% more, painters 31% more, chefs 32% more, dishwashers 16% more, and so on and so forth (Esmail 2002).

Negotiations between the employer monopoly and the union monopoly give rise to a constant battle as to the management and allocation of resources. The ensuing contracts constitute a permanent obstacle to the professionalism of medical personnel and to staff productivity. Hours of work and classifications are becoming more rigid, which is stymieing creativity and excellence. Seniority clauses are replacing competence when it comes to advancement. Evaluation rules have been softened – that is, when they are present at all – and dismissal for incompetence is out of the question. Wage scales reward age rather than talent, often exclude any form of incentives to strive for excellence and prevent management from rewarding extra effort and success. Some analysts even feel that in these conditions public production becomes not an activity designed to serve the consumer population but rather a machine to manufacture jobs and conditions favourable to unionized workers.

III. The System in Place and Efficiency

An efficient system must provide favourable incentives for all its agents. In the current conditions, this is not happening.

Incentives for Consumer-Patients

The fact that services are free generates an excessive and inefficient demand for them, with the figure reaching as high as 45%. A 1% increase in disbursements is accompanied by a drop of 0.2% in consumption (survey carried out by the Rand Corporation [Newhouse 1993; Manning et al. 1987] from 1971 to 1982, and updated by M. Eichner [1997]). According to analysts, the demand elasticity values range from 0.2 to 0.7 (Aba, Goodman and Mintz 2002, p. 5). The significance of these results is that the impact of the reduction in services on the health of billed patients remains nil. Studies by the US Department of Health also confirm that seniors covered by Medicare and who at the same time acquire coverage under what is referred to as Medigap spend 28% more on medical charges than they would otherwise.

The determining and desirable nature of material considerations is also borne out by the phenomenal success of what has been called the greatest medical institutional innovation of the 20th century: managed care in the United States. By integrating into a single process the production of services and health insurance, managed care has succeeded in curtailing health spending and user abuse. This scheme saves between 10 and 40% compared to traditional insurance plans, and it does so without compromising quality of care (Dranove 2000).

Incentives for Physicians

The single payer scheme imposed on physicians by the centralized system does not tend to diminish the temptation for patients to abuse the system. The Rand survey and the study by Dranove (2000) on HMOs revealed that in managed care organizations that provide for fixed payment of physicians, the health expenditures budget per patient drops by 28% in comparison to fee-for-service. The number of hospital admissions and days in hospital is 40% lower. And without a noticeable impact on the respective health of the patients in each system. The system encourages physicians to order a raft of laboratory tests in their legitimate concern to minimize risks. Nor does the payment mode encourage doctors to concentrate their time on prevention and working with patients to adopt a healthier lifestyle.

Incentives for Hospitals, Service Units

We have highlighted the illusory nature of purely managerial reforms in the absence of appropriate incentives for hospital managers.

IV. Administrative Costs of Current System and Optimal System

A single payer system is definitely simpler and involves less paperwork. In any system, if you remove competition you simplify administration. It would cost the gas distributor less if there were only one service station per district or region; it would cost the supermarket less if there were only one variety of peas. It probably costs Canada Post less. However, the overall record of public corporations leaves no doubt as to the relative performance of the two systems.

The American system definitely generates higher administrative costs (Canada: 0.11% of GDP; United States: 0.59%). The fact is that running a public monopoly (health, education, post office) does not involve the same administrative activities or the same goals that one would see in a series of competing businesses. Take, for instance, the publicity and advertising activities necessary to succeed in a competitive environment. Other beneficial activities undertaken in a competitive environment consist in keeping a closer eye on costs, waste and duplication. There is also a greater abundance of clinical data, which are used to reduce health expenditures. In fact, it is known that Canada lacks information on the use of clinical services and on their contribution to people's health.

Minimizing administrative costs is not the system's only goal, or even its main goal. It is the system's overall efficiency that matters.

V. Promising Avenue: Individual Health Savings Accounts or Their Equivalent, the Tax Credit

Once we accept the idea that the system in its present form would be difficult to salvage, we can consider introducing mechanisms and incentives to ensure that the system's agents make more economical use of the resources earmarked for health, while at the same time opening the industry up to competition. In health as in any other sector, incentives matter.

The requirements of efficiency and sensitivity to patients converge toward an improved formula, one, which reconciles all the various goals: under this formula, individuals would accumulate personal health savings funds that are non-taxable or paid for out of the public purse.

The Consumer Policy Institute (2000)¹ and others (including Reuber and Poschmann 2002, the Mazankowski report and also Commissioner Romanow in an interview with the *National Post*) propose that the government issue individuals and families with health vouchers that would vary with a person's age, gender and health. Vouchers for the very young and the very old would be more generous, since their health care needs are more extensive. In the beginning, vouchers could be equal to a fraction of the costs incurred today by individuals belonging to the various age, gender and medical history groups. Let us suppose that the voucher is in the amount of \$1,800. The first \$1,800 of actual costs would be covered by the voucher. Any subsequent costs would be up to the patient to pay, up to a level to be determined, beyond which catastrophic loss insurance, public or private, would kick in.² Any unused amount would accumulate in anticipation of future disbursements or would be transferable to a retirement savings fund. It could also be used to purchase health services not covered under the system, such as dental care, drugs or home care.

This description suggests that the publicly funded health savings account is equivalent to a tax credit, in that such a credit constitutes a form of non-taxable allowance that can be used to cover health care. Under this version of the formula, all taxpayers would receive a credit, let's say \$1,800, but whose final value would be reduced by the amount of health services consumed during the year. Thus this credit constitutes a form of non-taxable allowance that can be used to cover health care. This type of public voucher also offers the administrative benefit of easier integration into the existing tax system.

Assessment

The essential aspect of this arrangement is that the fund belongs to the individual, which makes him the ultimate beneficiary of the thrift he shows in managing his health fund or tax

¹ The technical work was done by the international actuarial firm Milliman and Robertson. The savings calculations are based on Canadian data.

² There is no reason that the funds used to build each person's account cannot come from the savings of each individual or family and be used to build a non-taxable health savings fund, similar to the current registered retirement savings plans. That being the case, the contribution could be seen as a form of billing that might pose a conflict with the *Canada Health Act*.

credit. Needless to say, this form of cost sharing can easily be adapted to the constraints facing low-income individuals, since the deductible can be adjusted to family income.

In time and thanks to the incentives that would act on users, most people would record a surplus in their account, particularly those who would see this as one more reason to take better care of their health. The ensuing savings could be shared between the public purse and the thrifty family. Once the effect of incentives on users and providers reduces spending, the annual voucher will decline, generating savings in the order of \$6 billion in Canada (Consumer Policy Institute 2000). Reuber and Poschmann (2002) propose a tax credit equal to half the average health budget per family (p. 20) (we should bear in mind that this variant is equivalent in their calculation to the introduction of a health savings fund). Overall, they estimate that the ensuing decline in consumption of services in Ontario and Alberta would amount to 5.5%, representing a tax savings of some \$60 per family in these provinces (Table 1, p. 25).

This arrangement would broaden the choice of services for all families, while at the same time generating substantial savings. The Rand survey and the demand elasticity estimates (Reuber and Poschmann 2002, p. 5) guarantee that, contrary to critics' fears, consumers' concern about saving money would not lead to an underutilization of services, but rather their optimization. The formula makes it possible to preserve the system's universality while maintaining sensitivity to users' preferences and submitting to the rules of the market. At the same time, the general accessibility that it guarantees protects the public purse against the conceivable risk of bankruptcy.

In their overview of individual health savings accounts, Donaldson, Currie and Mitton (2001, p. 18-19) describe the minimal impact on overall health spending. By and large, the authors cast doubt on the consumer's determining role in the demand for services and therefore on the degree of overconsumption peculiar to non-billing systems (including the traditional private insurance formula). These analysts point out that there are limits to the formula and wisely stress the need to proceed by experimentation. The significance of the formula would depend, of course, on how it is applied. Canadian empirical studies (Aba, Goodman and Mintz 2002, as well as Reuber and Poschmann 2002) paint a brighter picture of the impact that one might expect.

The main administrative start-up costs of the formula would involve the need to set up a methodical accounting of the unit costs of the services, in particular those of public hospitals. These data generally do not exist, except where physicians' services are concerned. Actuaries often link the idea of health savings accounts to an electronic debit card, which would let everyone know exactly how much they have left for the current year and also how much they have banked from previous years' savings. At the same time, the debit card would make it easier to calculate the costs incurred by each patient, particularly those in poor health. And in the case of these latter patients, the voucher should also be sufficient to enable them to realize the same type of savings as the rest of the population (every third year, according to actuarials' calculations). Otherwise, they would have no incentive to manage their account wisely, by visiting their GP instead of the emergency room, for example, or by changing their lifestyle in terms of alcohol and tobacco use, or physical exercise.

It is in the least well-off segments of the population that the formula is most popular (70% of those earning less than \$30,000 a year). The popularity that the concept enjoys among lower income individuals stems from the improvements in the doctor-patient relationship that these segments of society attribute to it (Solomon 2002). Low-income individuals are less comfortable with doctors because they feel they do not get the attention they deserve, and because they see themselves in a relationship of dependency. The health savings account would offer them the opportunity to forge a more egalitarian relationship with doctors. The formula would also empower them to access drugs and other services excluded by the current system.

The idea of health savings accounts (or tax credits) is generally associated with the best expression of demand, in that it gives users incentives to save. In reality, it introduces the market dynamic into calculations by all agents, even within a publicly financed system. Public and private service providers, including physicians, as well as hospitals and other service units, would receive their money from the patients, but indirectly from the government. In that sense, the formula has the advantage of reintroducing competition and making providers accountable to the people who matter: consumer patients. It impacts on supply as much as on demand. As confirmed by the public-sector unions' steadfast opposition to this arrangement, one of the indirect benefits of the formula would be to curb the power of union interest groups.

As a by-product, the economy in general and growth would be enhanced in that the savings rate would increase. This beneficial effect would not be produced by tax relief alone, but by the fact that as baby boomers reach the age of heavy consumption, they would be spontaneously led to set aside an increasing amount of money for this item. We can even expect that the system would evolve in a completely natural manner to the detriment of intensive care and in favour of care for the elderly and home care.

Experimentation

This formula has spread to economies as diverse as Singapore, China, South Africa and the United States. The Americans have already tested out this formula at both the public and business level. It reconciled a large portion of the American workforce with the great institutional revolution that was managed care, which theorist Richard Epstein calls the most significant institutional revolution of the 20th century in the medical field (Epstein 1997). Managed care was created specifically to apply the brakes to health spending and provide health insurance at a lower cost. The virtue of this system lies in its ability to integrate into a single process the production of services and health insurance, while at the same time preserving competition (Dranove 2000).

However, recent developments in the United States show that managed care alone is no longer enough to curtail the rise in costs. Prescription drugs are now part of companies' insurance plans. The consumer backlash against the restrictions imposed by the formula have led employers to relax some of them.

In reaction to these developments, a growing number of American employers have introduced a formula that confers more responsibility on employees with regard to the type of services they will use and with regard to their funding. This formula is called "defined benefit" health insurance, but it closely resembles individual health savings accounts. The employers pays, say, \$1,000 into the employee's personal care account (Medisave) – \$2,000 if he has dependants. The employee makes withdrawals from this account to pay his regular health care expenses. Beyond \$1,000 and up to, say, \$1,500, the costs are assumed by the employee himself. Any subsequent amount in excess of \$1,500 is paid for by catastrophic loss insurance. One of the features of the formula is that any unspent amount is carried forward to the next year and can be used to cover the deductible. Jurisdictions that have used this formula have seen their insurance costs stabilize and even go down, unlike their neighbours who are covered by conventional insurance. In his last budget, the President of the United States earmarked \$14 billion for the promotion and financing of this formula in the form of tax exemptions for individuals who opt in.

For over 10 years the formula has been used on a small island in the Pacific, in Singapore. The results are definitely favourable, judging by the overall performance of the system. No one in this country is deprived of care. Waiting lists are unheard of, and the most high-tech equipment is universally available. The national health budget, as a percentage of GDP, is scarcely more than a third of Canada's. We should point out here that Singapore's system is particularly stringent: catastrophic loss insurance is left up to the user; there is no ceiling on the costs assumed by the user over and above the public allowance, and low-income earners do not automatically receive favourable treatment.

The formula has been promised to Albertans by their Premier, proposed in the Mazankowski reports and included in the items under consideration by Commissioner Romanow.

VI. Compatibility with the Canada Health Act

A total break with the provisions of the *Canada Health* A*ct*, while desirable in theory, would generate incalculable political fallout. The significance of this national legislation is more symbolic than constraining. Any provincial premier would fear the anger of his constituents more than federal sanctions for having contravened one or another of the provisions of the Act. In any event, Ottawa's share of provincial health expenditures is barely more than 15 %.

For the first time in recent history, there have been calls, even from official spokespersons including the Health Ministers, for a reinterpretation of the meaning of the *Canada Health Act*. Could a mechanism like price, competition and the consumer's choice be reconciled with the requirements of the Act? Is the principle of public administration irreconcilable with the reintroduction of competition among providers?

In reality, it seems that there is nothing in the Act to prohibit the provinces from contracting out to private providers. The current set-up is explicitly based on the principle of private production. In fact, this principle is already widely incorporated into current practices concerning physician services, home care, laboratory tests, medical supplies and food in public institutions. It is the funding which, since the origins of the public system, has come from the public purse. Reliance on private providers is therefore widespread. The presence of a private sector constitutes the status quo. Production and funding are two separate considerations. What we see in Canada, for the most part, is private production and public financing: 100% private production would be perfectly legal under the existing system.

In addition, interpretation (of the national legislation) has proven very elastic. The Premier of Alberta can announce that he is implementing all the reforms cited in the Mazankowski report, including a few radical ones, all the while swearing that these measures remain consistent with the Act. His end goal is to dissociate interpretation of the Act from its author, the federal government. He even goes so far as to propose a federal-provincial interpretation mechanism, which would amount to co-administration of the Act. For his part, Commissioner Romanow recognizes that the five principles spelled out in the Act are being violated left, right and centre in current provincial practices.

The introduction of a health savings account system financed by the public treasury is unlikely to conflict with the principles of universality, accessibility, portability or public administration, since it only involves public financing procedures aimed at raising user and provider awareness of the costs involved. In its public funding version, it does not charge users directly.

Direct billing of "medically necessary" services (or the financing of health savings accounts by the individuals and families themselves) would no doubt pose problems from the standpoint of the principle of public administration. But even this formula leaves room for interpretation. The fact is that the provinces have systematically (albeit indirectly) gone this route in the past through the delisting of insured services. Many provinces, including Alberta, are promising to step up this practice. In fact, nowhere in the Act is there a definition of the notion of comprehensiveness.

VII. Conclusion

The two main health budget determinants in the 20th century were population ageing and the explosion in new medical technologies. The role of these two variables is not expected to diminish in the least. Regardless of the sector, experience tells us that when scarce resources are offered to everyone free of charge, the system ends up collapsing. We have seen this in the fisheries, and we have seen this on our roads and highways at rush hour. Today it is the health system's turn to suffer from the effects of abuses that are inherent in the rules of the game.

History and analytical research offer two bases for this interpretation. First there is the concern to give users back the freedom to choose the composition and quality of the care that suits them, rather than assigning this task to the political/bureaucratic machinery. In this regard, competition is the only guarantee that incentives for all parties will give rise to the production of services at the lowest possible cost.

The second basis: the political apparatus lacks the information that the market possesses in order to run the health industry. Even equipped with perfect information, public intervention is inevitably biased by the dominance of interest groups, majority-based though they may be. No amount of managerial improvements can protect us from this pathology of political logic. Public intervention as a whole, underpinned by the fragile and dubious postulate of the right to health care, is threatening the well-being of even those it claims to protect. The unconditional assurance of obtaining health care, including for the most well-off, encourages people to adopt unhealthy behaviour and inflates costs. It is young people, responsible people and healthy people who end up paying the price, in the form of a crushing tax burden. By increasing the tax burden on all, State-run medicine slows long-term growth. Historically, this growth is responsible for improvements in overall health, particularly for the least well-off.

In light of analytical research and recent history, consumer choice cannot be restored without introducing some form of individual health savings accounts (or their tax equivalent). Combined with a form of managed care, which incorporates both health insurance and the production of reasonable services, the health savings account (or the tax credit) is at once the most equitable and least arbitrary of the conceivable arrangements.

Bibliography

- Aba, Shay, Wolfe D. Goodman and Jack M. Mintz. 2002. Funding Public Provision of Private Health: The Case for a Copayment Contribution through the Tax System. Toronto: C. D. Howe Institute Commentary 163.
- Blendon, Robert. 2000. Harvard School of Public Health. Study condensed in *The National Post*, 12 October 2000, p. A1.
- Canada. Senate. 2002. Interim report of the Standing Senate Committee on Social Affairs, Science and Technology. Vol. three: *Health Care Systems in Other Countries*. Ottawa, January.
- Canadian Institute for Health Information. 2001. Health Care in Canada 2000. Ottawa: CIHI.
- Coffey, J. E. and Jacques Chaoulli. 2000. *Le choix privé universel*, Montreal: Institut Économique de Montréal, September, p. 9-12.
- Consumer Policy Institute. 2000. Feasibility of Health Care Allowances in Canada. Toronto.
- Donaldson, Cam, Gillian Currie and Craig Mitton. 2001. Integrating Canada's Dis-Integrated Health Care System: Lessons from Abroad, Toronto: C. D. Howe Institute.
- Donaldson, Cam Craig Mitton and Gillian Currie. January 2002. *Managing Medicare*. Toronto: C. D. Howe Institute.
- Dranove, D. 2000. The Economic Evolution of American Health Care. Princeton.
- Eichner, M. 1997. *Incentives, Price Expectations and Medical Expenditures*. New York: Columbia University Business School.
- Epple, D. and R. E. Romano. 1996. Public Provision of Private Goods. *Journal of Political Economy* 104(1), 57-84.
- Epstein, Richard A. 1997. Mortal Peril. New York: Addison-Wesley.
- Esmail, Nadeem. 2002. Labour Costs in the Hospital Sector Revisited. *The Fraser Forum*, January, p. 31-32.
- MacIntosh, Robert. 28 July 28 2000. Use Prices to Fix Health Care. Financial Post, p. C15.

Mackenbach, P. 2002. Income Inequality and Population Health. British Medical Journal, January 5.

Maclean's/Global Poll. 18 December 2000. National Post, p. A1.

Manning, W. et al. 1987. Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment. *American Economic Review* 77, 251-277.

McArthur, William. January 28, 2000. The Wall Street Journal. p. A19.

- McMahon, F. and M. Zelder. 2002. "Making Health Spending Work," in David Gratzer (ed.), *Better Medicine: Reforming Canadian Health Care*, Toronto: ECW Press.
- Migué, J.-L. 2001. Le monopole de la santé au banc des accusés. Montreal: Éditions Varia, p. 47-61.
- *National Post.* 28 October 1999. Heart Attacks More Likely to Kill Poor People, p. A1. (Condensed from a study in the *New England Journal of Medicine*)
- Newhouse, J. P. and The Insurance Experiment Group. 1993. *Free for All? Lessons from the Rand Health Insurance Experiment*. Cambridge. Harvard University Press.
- North American Association of Central Cancer Registries. 2001. Report Card 2000. Springfield, Ill.
- Organisation for Economic Co-operation and Development. 2001. OECD Health Data 2001: A Comparative Analysis of 29 Countries. Paris: OECD.

_____.2001. Economic Outlook. Paris: OECD, June.

- Reuber, Grant L. and Finn Poschmann. 2002. "Increasing Patient Incentives to Improve the Financial Stability of the Health Care System." Paper presented at a roundtable, C. D. Howe Institute, Toronto.
- Robson, William. 2001. Will the Baby Boomers Bust the Health Budget? Toronto: C. D. Howe Institute.
- Solomon, L. 12 February 2002. Medical Savings Accounts Would Benefit All Canadians. *The Financial Post*, FP15.
- _____. 4 July 1998. Empowerment to the People. *The Globe and Mail*, p. D6.
- Statistics Canada. 2001. National Population Health Survey 1994-95. Ottawa.
- Walker, M. and G. Wilson. 2001. *Waiting Your Turn: Hospital Waiting Lists in Canada* (11th ed). Vancouver: The Fraser Institute.

Zelder, Martin. 2000. The Myth of Underfunded Medicare in Canada, The Fraser Forum, August.

Interviews

Romanow, R., Commissioner, Commission on the Future of Health Care in Canada. 7 February 2002. Medicare: My Thoughts So Far. *National Post*, A16.

_____. 7 February 2002. Money alone not the answer. *National Post*, A4.