



Health Care Spending, Fiscal Sustainability, and Public Investment

by Joe Ruggeri

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Introduction

The debate over health care spending and its fiscal implications in Canada has been going on for quite a while and there seems to be no end in sight. Three major aspects of this debate may be identified: (a) the concept and measurement of sustainability, (b) health care and fiscal federalism, and (c) health spending as consumption or investment.

The Concept and Measurement of Sustainability

There is a widespread view that the existing publicly funded health care system in Canada is “unsustainable”, a term which expresses the notion that we will not be able to afford it in the future. “Sustainability” remains a vaguely defined term largely because with respect to health care it is not particularly useful.

If health care was strictly a private good purchased by individuals, like any other good or service, the term sustainability would not even be mentioned in discussions about health issues. People work to earn income so they can spend it on what they want. If their income or the relative prices of different goods change, they make adjustments to the allocation of their budget. Within this framework, the issue of sustainability would be addressed within the choices made individually by private agents, and this choice may include spending more or less on health care and different forms of health care delivery. If the result of these decisions was that a large portion of the population was unable to afford what society considers a basic level of health care, the issue would be one of income disparities not of health care sustainability.

The concept of sustainability remains vague even when it is applied to the capacity of the public purse to finance health care spending. In democratic societies, the amount that is spent on publicly funded health care is determined collectively by taxpayers, who are also the users of the health care system, through the political process. If everyone had the same income and health care preferences, that decision would be made unanimously and the issue of sustainability would not be raised. In the context of publicly funded health care, the question of sustainability is really a manifestation of an unwillingness by all or some to pay higher taxes or to keep current tax levels and reduce spending in other areas. The fundamental issue, therefore, is not sustainability. It is choice and how this choice is made through the political process.

Because the term sustainability does not lend itself to a precise definition, researchers have developed a variety of measures to convey its meaning. The most commonly used indicators are (a) the ratio of total health care spending to Gross Domestic Product (GDP), (b) the share of public spending on health care to GDP, and (c) the share of government health care spending to government revenues (Jackson and McDermott 2004, Robson 2001, Ruggeri, Huang and Zhang 2001). Similar indicators will be presented in this paper, some traditional ones and some new ones, together with a discussion of their limitations.

Some of these indicators sometimes have been used to convey a sense of urgency and impending crisis, as in Skinner 2005, who used the growth rate differential between provincial health spending and provincial revenues as the indicator of sustainability. In general, studies that find the current publicly funded health care system unsustainable over the long run, whatever that means, convey the idea that we need to take drastic action immediately to avoid a future fiscal crunch. A major problem with this approach to policy,

especially when the findings about an impending crisis are challenged by other studies, is that the perceived need for immediate action may prevent a more thorough analysis and evaluation of alternative options and may lead to health care policies focussed mainly on its financial dimensions.

The foundations of pessimistic views on the fiscal sustainability of the current health care system in Canada are the projections of an aging population (Robson 2001). This pessimistic outlook is based on the fact that after a certain age, the average cost of health care per person increases due to age-related health risks, and there is a projected rise in the share of the population over 65 years of age. The focus on the elderly ignores the fact that population aging will at the same time reduce spending pressures in other areas because a rising share of the elderly population is necessarily associated with a declining share of the other age groups. Moreover, large portions of government spending are not age-related and some of them, such as general government, have a built-in growth rate lower than that of government revenues (Ruggeri and Zou 2006). The focus on age-related spending also ignores the fact that economic growth raises the country's capacity to handle these spending pressures. What matters for fiscal health is not the growth of government spending under a given set of public programs, but the combination of total spending and revenue raising capacity under a given fiscal system. Recent research on this issue shows that the concerns about the fiscal implications of population aging are exaggerated (Ruggeri and Zou 2006). The existing fiscal structure of combined federal-provincial/territorial-local governments can handle the projected fiscal pressures from population aging even with lower tax rates in the future. As will be shown later in this paper, the fiscal issue with publicly funded health care in Canada is not sustainability, but the imbalance between spending responsibilities and revenue raising capacity of different orders of government.

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Public Investment

Finally, the public policy debate in Canada, and in other countries as well, has been misdirected by a misrepresentation of the role of government. The insidious and erroneous view that the private sector creates wealth and the public sector wastes it has crept into our collective thinking about public policy. This view, which is ubiquitous in models used by economists, assumes implicitly or explicitly that all government spending is in the form of consumption and generates benefits that are exhausted in the short-term. The National Income Accounts include in government investment only fixed assets and changes in inventories. Studies evaluating the economic effects of the public debt automatically assume that all government spending is on consumption (Johnson 2004) and some studies on fiscal federalism treat inter-governmental transfers as “consumption of current prosperity...rather than investment in building future prosperity” (The Institute for Competitiveness and Prosperity 2005:8).

This view is at odds with conceptual developments over the past couple of decades regarding the definition of investment and capital. Economists and social scientists in general are now recognizing five categories of capital: (a) physical capital (the only item included in the national accounts), (b) natural capital, (c) human capital, (d) social capital, and (e) civic capital. Even a cursory look at the categories of combined government spending by federal, provincial/territorial, and local governments indicates that a large portion of government spending affects one or more of these forms of capital. Acknowledging this fact would require a major re-structuring of our economic and social accounts and a drastic re-thinking of many traditional conclusions about the role and effect of public policy.

This paper addresses the above issues in the hope that the factual information and analysis provided will help redirect the public policy debate in Canada towards a more balanced path. I will not deal directly with the issue of how to define sustainability because, as mentioned earlier, I do not find this term particularly useful. Instead, I will develop some indicators of sustainability to determine what insights they offer on the issue of health care spending and fiscal sustainability. I will show that, on the fiscal side, the fundamental issue is an unhealthy state of fiscal federalism and not the capacity of the existing fiscal structure to handle the health care spending pressures arising from population aging. I will then deal in a general manner with the question of whether health care spending should be classified as public consumption or public investment. Finally, I will conclude with some suggestions about future directions in health policy.

Indicators of Health Care Sustainability: Relation to the Economy

When we consider total health care spending, which includes both private and public components, the notion of sustainability refers to the capacity of the economy to handle that level of spending. Since the broadest measure of economic performance is Gross Domestic Product (GDP), the total income generated from the production of final goods and services in Canada, an indicator used for the broad concept of sustainability is the ratio of total health care spending (combined public spending by all levels of government plus private spending) to the level of nominal GDP. Estimated values of this ratio (actual for past years and projected for the next 21 years), based on Ruggeri and Zou (2006), are shown in Table 1 below.

Table 1: Ratios of Total Health Care Spending to GDP in Canada: Selected Years, Actual for 1981-82 to 2003-04 and Projected to 2025-26

Fiscal Year	Health Care Spending as Percent of GDP		
	<i>Public</i>	<i>Total</i>	<i>Public/Total, Percent</i>
1981-82	5.3	7.5	70.2
1985-86	5.8	8.3	69.9
1992-93	6.9	10.0	69.0
1996-97	5.8	9.0	64.4
2003-04	7.2	10.5	68.6
2010-11	8.1	11.8	68.6
2015-16	8.6	12.6	68.2
2020-21	9.3	13.6	68.4
2025-26	10.2	14.9	68.4

Note: These ratios are higher than those in Ruggeri et al.(2002) because the new base year (2003-04) includes the increase in public spending that followed federal-provincial agreements on health care financing.

Focusing on public spending first, we notice that its ratio to GDP followed a fluctuating pattern from 1981-82 to 2003-04. First, the ratio increased steadily up to 1992-93, then it fell drastically in the following four years as a result of fiscal restraint and federal cuts in transfers to provinces, and reached a level of 5.8 percent in 1996-97, which equalled the level recorded nine years earlier. The additional federal funding provided under successive federal-provincial agreements in the early part of the 21st century gave a boost to public spending on health care and its ratio to GDP resumed an upward movement. A similar pattern is observed for the ratio of total health care spending (public plus private) to GDP because of the dominance of the public financing component.

The above pattern highlights the fact that health care spending in Canada is a managed variable in the sense that it does not reflect exclusively the health needs of the population or even the population's demand for health services but is determined by a combination of population needs and the fiscal response of governments. The latter, in turn, is affected by the conditions of federal-provincial fiscal relations.

With respect to the future, two observations can be made. First, the ratio of health care spending to GDP in 2003-04, both public and total, was slightly higher than it was nine years earlier. Second, this ratio is projected to climb steadily over the next twenty-two years. The projected increase from 2003-04 to 2025-26 is three percentage points for the public component and about four percentage points for the total. What does it mean that Canadians will have to use a bit more of the nation's gross income for health care? Would the nation go bankrupt if it had to divert three or four percentage points of GDP from other expenditures to health care?

Let me address this issue from a different perspective. For illustrative purposes let us assume that (a) health care is fully financed privately, (b) the government reduces taxes to offset the reduced expenditures, and (c) this change would result in the same level of total spending on health care. Taxpayers would have higher income because of lower taxes and would spend the extra income on health care. The budget position of governments would remain unchanged because the foregone revenue would match the reduced spending. In this case, we can construct an adjusted series for consumer expenditures, which includes this new private spending on health care, and compare health care spending to total consumer spending. The results are shown in Table 2 below.

Table 2: Adjusted Health Care Spending and Adjusted Consumer Expenditures, 1980-81 and 2000-01

	Percent of Adjusted Consumer Expenditures	
	1980-81	2000-01
Health Care Spending	11.8	14.0
Selected Consumer Expenditures		
Transportation and Communications	13.8	15.0
Recreation, Entertainment, Restaurant and Accommodation Services	13.4	14.7
Personal Care, Tobacco and Store Bought Alcohol	5.5	4.8
Financial and Legal Services	4.1	6.0

Source: Author's calculations based on data in Statistics Canada's CANSIM.

According to Table 2, adjusted health care spending accounted for 14.0 percent of adjusted consumer spending in 2000-01 compared to 11.8 percent in 1980-81, an increase of 19 percent. During the same period, spending on transportation and communications, as one category, and on the combination of recreation, entertainment, restaurant and accommodation services, as another category, was higher than adjusted health care spending. Yet we have not heard cries that we have reached a crisis stage in those two areas. Spending on financial and legal services rose at a faster rate than adjusted spending on health care, but we do not hear alarm bells that spending on those services is getting out of hand.

It should be stressed that this illustrative example does not model the response of private agents to the assumed policy change. The purpose of the example is not to show what individuals would spend collectively under a purely privately funded health care system compared to a publicly funded system. Its purpose is to highlight differences in public perceptions about private spending versus government spending. In this respect, the experiment of transforming health care spending into a totally private spending component exposes a paradox in the way we look at different sectors of the economy. An increase in private spending on sweets, fatty foods, tobacco and alcohol would be considered a boost to economic activity and job creation. Purchasing new hospital equipment and hiring additional health professionals would increase public spending on health care and would provide support to the view that public funding of health care is unsustainable.

Indicators of Health Care Sustainability: The Fiscal Side

The reason why we talk about the sustainability of the existing health care system is because, in Canada, the overwhelming share of health care spending is financed by public funds. The real concern is that rising health care spending will require higher tax burdens in the future or will eliminate opportunities for future tax reductions. The underlying concern is about higher taxation, not the public sector's capacity to finance it.

When we focus on publicly funded health care, aside from the issue of inter-governmental fiscal relations, the relevant indicator of sustainability is the ratio of public spending on health to the fiscal capacity of combined governments, measured by their total revenues. Estimates of these ratios for selected past and projected years are shown in Table 3 on page 10. These projections do not address the issue of changes in the "quality" of health care. They assume the quality that existed in the base year (2003-04) and project the public expenditures that may be needed to maintain it over time. The projections were derived through the following steps. Government expenditures on health care were divided into nine age groups and seven categories of services based on the Health Canada report entitled *Health Expenditures in Canada by Age and Sex, 1980-81 to 2000-2001* (2001). The age groups are as follows: 0-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+. The services categories include hospitals, other institutions, physicians, drugs, home care, other services, and administration. Per capita expenditures by age group and type of service contained in Health Canada (2001) were adjusted proportionately to ensure that they matched the total recorded in CANSIM table 3850001 for both 2000-01 and 2002-03. The per capita cost of all service categories was assumed to grow at an average rate of 3.4 percent per year (inflation plus labour productivity). Additional growth factors were assigned to selected service categories, based on cost pressures: 0.5 percent for hospitals; 0.6 percent for physicians to capture labour supply constraints, as in the case of hospitals; 3.0 percent for drugs because of the introduction of new drugs; and 0.5 percent for other expenditures to capture the introduction of new equipment.

The overall result was an average annual growth rate of total government spending on health care during the projection period of 5.6 percent.

Table 3: Ratio of Public Spending on Health Care to Total Government Revenues in Canada: Actual and Projected, Selected Fiscal Years, 1988-89 to 2025-26

Fiscal Year	Public Health Care Spending as Percent of Total Government Revenues
1988-89	14.8
1992-93	16.3
1996-97	14.0
2003-04	19.3
2010-11	21.1
2015-16	22.8
2020-21	24.7
2025-26	27.0

Note: These ratios are higher than those in Ruggeri et al.(2002) for two reasons; first, the new base year (2003-04) includes the increase in public spending that followed federal-provincial agreements on health care financing; second, the combined government revenues in the new calculations exclude the revenues of the Canada and Quebec Pension Plans.

The ratio of public spending on health care to combined federal-provincial-local revenues (excluding C/QPP revenues) shows a fluctuating pattern. It increased from 1988-89 to 1992-93, fell in 1996-97 to a level below that recorded eight years earlier due to fiscal restraint, and resumed its upward trend thereafter.

These projections indicate that health care spending will claim an increasing share of total government revenues in Canada over the next twenty-some years of about eight percentage points. The fundamental question raised by these numbers is: Will the projected growth of public spending on health care be sustainable or will it create a fiscal crisis? The above ratio cannot answer this question because it deals with only one item on the spending side of the fiscal system. This conclusion, which was originally expressed in Ruggeri (2002), has recently been emphasized by Jackson and McDermott of the federal Department of Finance (2004). Projecting an increase of 3.5 percentage points in the ratio of private and public spending on health care as a ratio of GDP over the period from 2001 to 2040, Jackson and McDermott concluded that:

1. “the structure of public spending has always evolved over time, and these changes have been affordable” (p.9);
2. “the spending increases projected under the 1990s enrichment ratios thus appear to be within the limits of sustainability from both fiscal and political perspectives” (p.10); and
3. “discussions of sustainability ultimately become a question of public choice. Even very large increases in health spending as a share of GDP are technically feasible, provided citizens choose to devote an ever increasing portion of GDP to the health care system and are willing to pay for its cost” (p.10).

To address the issue of fiscal sustainability, we must consider health care within the context of the entire fiscal system and its evolution over time. What we need to do is to project the revenues and expenditures of Canadian governments over a given period of time, under the existing fiscal structure, and with reasonable assumptions about economic growth. If projected health care spending leads to total spending that requires higher tax rates in the future, we may question its long-term sustainability as future generations may not want to bear the projected increase in the tax burden.

This experiment was performed by Ruggeri and Zou (2006). The results indicate that the concerns about the fiscal pressures generated by population aging through its impact on health care spending are not warranted. Their projections indicate that, even under moderate economic growth, the current structure of government spending in Canada can be financed in the future with even lower tax rates than the current ones. We are not passing the buck to future generations. Moreover, while per capita health care spending increases with age, especially after 65, the contributions that seniors will make to the public coffer will also increase in the future. We need to look at the big picture, and the big picture gives no indication of a fiscal crisis. Canadians would be better served by policies that enhance economic performance and human well-being rather than policies driven by the fear of a fictitious fiscal crisis.

The Real Crisis is in Fiscal Federalism

The previous section's conclusions do not imply that there are no health care issues in Canada and that we should be satisfied with the status quo. Health care issues abound. They include a limited emphasis on health promotion, long waiting lists, inefficient delivery systems, an inadequate number of health care practitioners, and an insufficient stock of up-to-date equipment. Fundamentally, however, fiscal sustainability is not an issue in Canada. From a purely fiscal perspective, the real issue is the existing imbalances in fiscal federalism, not the sustainability of the publicly funded health care system. The fundamental issue is a political one, namely, the re-structuring of the federation through the differential fiscal powers of federal and provincial/territorial governments that has been going on for over twenty years and is continuing. A brief historical survey of the developments that have led to the current state of affairs in Canadian fiscal federalism is found in Ruggeri (2005).

More than ten years ago, Ruggeri, Van Wart and Howard (1993) showed that the federal government had already put in place a fiscal structure that would lead to balanced budgets before the end of the decade. They also showed that the changes in the fiscal structures of federal and provincial governments had created vertical fiscal imbalances because the federal government had acquired dominance over the fastest growing revenue source, the personal income tax, while the provinces had retained responsibility for the fastest growing spending item, health care. Their projections indicated that fiscal restraint was not needed to restore fiscal balance at the federal level and that instead adjustments should be made to restore balance between the fiscal systems of federal and provincial governments.

Federal fiscal policy followed the opposite course, a course of fiscal restraint that incorporated a reduction in federal spending concentrated on transfers to the provinces for the three programs consolidated into the CHST. As pointed out in Ruggeri (2005:121), "from 1994/95 to 2000/01, provincial spending on health care, post-secondary education and social assistance increased by \$13 billion while federal cash transfers for those programs actually fell by \$2 billion. During that period, the provinces paid the full bill for the increasing costs of national programs and absorbed the cut in federal contributions."

The fundamental issue is a political one, namely, the restructuring of the federation through the differential fiscal powers of federal and provincial/territorial governments that has been going on for over twenty years and is continuing.

More recent studies have quantified the dimensions of these fiscal imbalances (Ruggeri 2001, Conference Board of Canada 2004). The projections of these imbalances by the Conference Board of Canada are shown in Table 4. The more recent federal/provincial agreements on federal transfers have raised the level of federal contributions, but these increases are short of the adjustments required to restore long-term balance to fiscal federalism.

**Table 4: Projections of Federal Fiscal Balances in Canada: 2000 to 2020,
\$ Billion**

Selected Years	Surplus (Deficit)		
	<i>Federal</i>	<i>Provincial</i>	<i>Total</i>
2000-01	17.1	12.0	29.1
2004-05	2.8	(2.4)	0.4
2009-10	16.2	(6.3)	9.9
2014-15	40.1	(11.2)	28.9
2019-20	85.5	(12.3)	73.2

Source: Conference Board [2004], Appendix Tables 2B and 3A.

The optimistic view about Canada’s fiscal prospects that applies to the combination of federal, provincial/territorial, and local governments, does not extend to all provinces. It appears that future demographic changes will operate to the detriment of the smaller provinces, especially the Atlantic provinces. These provinces have already older populations than the national average and their rate of population aging is projected to increase at a faster rate than for the larger provinces. The rate of population aging among provinces is also affected by the flow of inter-provincial migration of seniors.

These negative demographic developments are aggravated by the out-migration of young people and the failure, at least in Atlantic Canada, to attract and retain immigrants. Ruggeri and Zou (2004a) have explored some of the implications of these demographic shifts on the labour force and employment in Atlantic Canada. They have concluded that if the labour supply constraints arising from population aging become binding on employment, they will lead to widening regional economic disparities.

Regional economic disparities are associated with regional disparities in fiscal capacity. The fiscal implications of population aging in the case of New Brunswick were explored by Ruggeri, Goodwin and Zou (2004). Their general conclusion is that it will take approximately seven years before these fiscal effects are noticed. After that, the province’s fiscal position will deteriorate rapidly. In their view, correcting the structural fiscal imbalance that would be created by demographic and associated labour force developments requires “direct adjustment to the fiscal structure and innovative approaches to fiscal federalism.”

Inter-governmental fiscal arrangements are dominated by two programs: (a) equalization and (b) the two cash transfers for the national programs, the Canada Health Transfer (CHT) and the Canada Social Transfer (CST). Both programs provide cash payments based on per capita entitlements, the first only for provinces with fiscal capacity below a certain standard and the second for all provinces.

Neither one, therefore, can effectively address the fiscal problem faced by the smaller provinces, which is created by differential health care spending pressures due to higher rates of population aging. As shown by Ruggeri and Zou (2004b), in the case of New Brunswick, the failure of inter-governmental transfers to take into account inter-provincial differences in the effects of population aging on health care spending is a major determining factor in the projected deterioration in that province's fiscal position over the longer-term. The economic and fiscal implications of population aging may be less severe in Manitoba and Saskatchewan because, as shown in Ruggeri (2006), they will experience much lower increases in the degree of population aging than the Atlantic provinces. Over the period from 2006 to 2031, the increase in the share of the population 65 years and over is projected to increase by 8.0 and 9.9 percentage points for Manitoba and Saskatchewan, respectively, compared to about 15 percentage points for Atlantic Canada. By 2031, the share of the population 65 and over will be about 25 percent higher than the national average compared to 6 percent in Saskatchewan. In Manitoba it is projected to be 8 percent lower than the national average. Because differential rates of population aging can have a significant impact on the economic and fiscal prospects of a province, I suggest that federal and provincial governments undertake a comprehensive study on this issue.

Health Care Spending as Investment

The debate on health care in Canada is corrupted not only by the focus on a non-existing fiscal issue, but also by a misconception of the role of government. As mentioned in the introduction, economists and other social scientists recognize several types of capital. Yet, the national accounts measure only one type of capital, physical capital. For example, for the fiscal year 2003-04, in the national accounts 88.2 percent of total government program spending is listed as consumption and only 11.8 percent is considered investment.

A fundamental assumption common to all studies on the efficiency effects of debt reduction is that all government spending is for consumption purposes, with no beneficial impact on productivity and economic growth (see Johnson 224 for a review of studies on Ricardian equivalence). This assumption is becoming more unrealistic for two reasons: (a) public physical capital is essential for economic growth and social development, and (b) economic growth is increasingly fuelled by human capital, and the acquisition of human capital is heavily subsidized by government. To evaluate the relevance of this issue, Table 5 presents data on the percentage distribution of combined federal, provincial/territorial, and local government spending in 2003-04. (See the following page.)

Table 5: Percentage Distribution of Consolidated Government Program Spending by Major Category, 2003-04

Category	Percentage of Program Spending
Social Services (including income support and pensions)*	28.7
Health Care	21.2
Education	17.2
Protection of Persons and Property	9.3
Resource Conservation and Industrial Development	4.8
Transportation and Communications	4.7
General Government Services	3.9
Recreation and Culture	3.1
Environment	2.7
Foreign Affairs and International Assistance	1.1
Housing	0.9
Labour, Employment and Immigration	0.8
Regional Planning and Development	0.6
Research Establishments	0.5
Other Program Spending	0.5

*Excludes CPP/QPP. Source: CANSIM Table 3850001.

We notice that a number of government spending categories have large investment components – either by increasing productive capacity, or by providing a stream of services over a long period of time. Each one of these forms of public investment contributes to economic growth and human well-being, by itself or through complex interactions.

For example, spending on transportation and communications is largely in the form of physical capital, which helps the economic performance of the private sector. Components of this type of capital are also found in spending on the environment, education (schools, colleges and university buildings) and health care (hospitals). Spending on the environment affects natural capital directly. Spending on education and research establishments is an investment in human capital. Spending on culture and recreation, and some components of health care and social services, may also be considered as investment in human and social capital. Spending on general government and on the protection of persons and property is the foundation of civic capital, which provides the essential elements for the proper functioning of a market economy.

It is well established that the private returns to education are large. Indeed, a huge literature has been developed discussing the increase in the earnings differential between those with a university degree and those without. The extent to which high private returns to human capital translate into high social returns is a contentious issue. In the 1970s the filter-theory of education (e.g. Arrow, 1973) suggested the possibility that education might merely be giving out credentials for pre-existing (but otherwise unobservable) ability. In other words, education might not genuinely create human capital, and the high private returns to education might coexist with zero (or very low) social returns. Two types of empirical evidence have alleviated these fears. First, cross-country empirical studies on the determinants of

economic growth have definitively shown that “countries with a better-educated work force tend to grow faster” (Sala-i-Martin 1994: 746). And second, empirical studies have shown the existence of substantial social externalities associated with education. According to Davies (2003), the education externalities alone may be equivalent to a rate of return of 8%.

Focusing on health care, the view of government spending as largely consumption has led to the treatment of this component of public expenditures as part of our “social programs”, programs that are viewed primarily as instruments of income redistribution, income or in kind. This point has been emphasized by Courchene (2001). In his view, the fundamental problem with our approach to health care is that “we tend to view the health care system as falling entirely within the social envelope. Moreover, our collective approach to health care is to emphasize cost containment, subject to some national concept of an acceptable or appropriate standard of services (which we appear willing to have decline over time)” (Courchene 2001:196). Courchene stresses in the same paragraph that “viewing the health sector solely as a social policy sector will guarantee that it will never receive the requisite infusion of capital.” He then concludes “that in the 21st century, maintaining state-of-the-art health care for Canadians requires that we view the health sector as a dynamic economic sector as well as an essential social institution.”

Viewing health care from this broader perspective requires exploring its implications for human and social capital. The “health sector” affects human capital directly and indirectly. One measure of its direct effect is the level of employment in this sector combined with the skills embodied in these professionals, an approach consistent with the way economists measure human capital in general. With funding from the federal government, the National Round Table on the Environment and the Economy has developed national indicators for human capital and natural capital. The selected indicator for the former is the percentage of the population 20 to 64 holding a university degree. Health care professionals, broadly measured, make a substantial contribution to this national indicator.

An additional direct measure is the contribution that this human capital makes to Canada’s economic and social well-being. This measure also takes into account the spin-offs from the activities of the “health sector.” The importance of these spin-offs was stressed by the Ontario Hospital Association (1999:17) in its pre-budget submission to the Standing Committee on Finance: “The advantage of creating world-class organizations in a growing market such as health care is that there are significant opportunities to share our wealth of knowledge. This creates new high-skilled employment opportunities for Canadians and generates alternative revenue sources for Canadian health care providers....Not only is health care an essential service, it is also an engine of economic growth that leads to new skilled jobs and investment.” Strategies for expanding the economic contribution of the “health sector” were suggested by a report prepared by the Institute for Research on Public Policy (IRPP 2000). This report identified the following sub-sectors as “growth stimulators” in the health sector: health care delivery systems, health care management, knowledge management systems in health care, and imaging systems.

Health care also generates significant indirect effects on human capital, economic performance and human well-being. Economists are beginning to acknowledge that the definition of human capital should be expanded beyond the traditional confines of formal education and skill development (Laroche, Merette and Ruggeri 1999). Ruggeri and Yu (2000) have used a broad view to identify four major dimensions of human capital: potential, acquisition, availability, and effectiveness. This broader perspective makes it clear that human capital is not simply a measure of human development during a particular phase in a person’s life, but extends from birth (if not before) to death and it incorporates more than formal education. It also helps uncover the fact that health care also affects human capital throughout a person’s life-span.

The potential to acquire human capital later in life is affected by the health conditions of the mother during pregnancy and the quality of nurturing in the early years of a child's life, which has a large health care component. This conclusion has support from an extensive literature in this area. Quoting one of the most recent pieces of research on this theme "the nature of children's environments within the family, and in their schools, neighbourhoods, and communities, has a strong effect on children's cognitive and behavioural development and on the prevalence of childhood vulnerability" (Willms 2002:266). Willms referred to a large-scale study of home visitations by nurses in New York which found that "the mother's mental health plays a key role in child development, not only post-partum but throughout childhood" (Willms 2002:371). He warns, however, that "well-baby clinics need to embrace well-moms as well and be extended to cover a period longer than the first year of a child's life. Well-baby, well-mom services are likely to improve the physical and mental health of the mothers as well as their babies" (Willms 2002: 371).

Health status is also very important during the acquisition stage of human capital, both for students and teachers. Teachers prone to illness cannot perform effectively in class on a daily basis. And students with health problems and health-related behavioural problems, not only have their potential degraded, but will not be able to achieve even this lower potential. The net result is increased spending on education to generate a lower level of human capital acquisition. Fiscally-based health care policies that affect negatively the acquisition of human capital are misguided because they focus on savings in health care spending without consideration for the broader effects on education spending and the level and quality of the stock of human capital.

The portion of the human capital produced in a given jurisdiction that will be made available for market activities in that jurisdiction is affected by a variety of government policies, including macro-economic policies in the job market. The main focus of the analysis on international and inter-regional migration, however, has been on tax policy. The general idea is that high personal income taxes drive skilled workers to jurisdictions with lower tax rates, and even among those that stay put, high tax rates provide a disincentive to use human capital. Since in Canada the acquisition of human capital is heavily subsidized by government, fleeing or under-utilized human capital reduces the return on public investment. Less attention has been placed on the effects of health policy than on the availability of human capital.

The availability of human capital is determined by complex interactions between market forces and individual preferences. The health status of economic agents plays an important role in this decision. People with chronic illnesses may not be able to participate in gainful employment even if they want to. Also, parents with sick children may be prevented from joining the labour force due to family responsibilities. In some cases, participation in the labour force may be hindered by the need to care for an ailing parent. Although most of the decisions are voluntary, they are heavily influenced by health care concerns.

A person's health condition also determines how effectively his/her human capital is utilized. Estimates of annual deaths caused by smoking are publicized periodically in the newspapers and the costs of absenteeism at work, part of which are due to health conditions, are known to be in the billions. Work place safety is another aspect of health conditions that has received special attention. In fact, we have developed special programs to take care of the financial effects of work-related injuries and programs to improve safety at work. Increasing attention is also being placed on the health effects of environmental degradation and on stress-related illnesses caused by work environments that place greater emphasis on international competitiveness than on the long-term well-being of workers.

All these factors contribute to a reduction in what society gets from human capital, to which it devotes enormous fiscal resources. These are real costs and need to be fully accounted in any analysis that is directed at the financial side of health care spending.

Health conditions also play an important role in social capital, an aspect of human activity that is being increasingly recognized as a major determinant of human well-being (Helliwell 2002). As indicated by Ruggeri and Yu (2002), the links between health status and social capital run in both directions, where social capital is defined as “networks together with shared norms, values and understandings that facilitate co-operation within or among groups” (OECD 2001: 41).

The relationship between health and social capital has not been fully explored and the evidence does not seem to be very strong. It is clear, however, that “poor health drastically constrains mobility and therefore affects participation in market and non-market activities.” To the extent that health status affects social capital, it may also indirectly influence human capital. For example, sick grandparents will not be able to provide babysitting services for their children thus affecting their ability and/or willingness to participate fully in the labour force. Given the projected increasing share of the senior population over the next forty years, this issue requires further scrutiny.

The link between social capital and health status has received more attention. The findings of this body of research have been summarized by Putnam (2001:50) as follows: “there is very strong evidence of powerful health effects of social connectedness. The evidence is strong not only in American states, but also in Finland, Japan and other countries.” This relationship has been confirmed by other studies, such as Brown and Harris (1978), Kawachi, Kennedy and Glass (1999), and Kawachi and Berkman (2000). According to Putnam (2000), there are two reasons for this link: social networks help reduce stress, and social connectedness helps boost our immune system’s ability to fight disease. Ruggeri and Yu (2002: 120) interpret these results as indicating that “the close link between social capital and health implies that investment in social capital will also help improve population health and may reduce health care costs in the long run.”

There is an urgent need to re-think our view of people over the age of 65. The treatment of health care spending as strictly consumption has led to the erroneous view that seniors are a burden on society because per capita health care spending tends to be higher for this age group. This view is misguided as it ignores the valuable contribution to society made by seniors in a variety of areas. First, as shown by Ruggeri and Zou (2005), seniors pay their share of taxes. Second, they provide financial and in kind support to their children through inter-vivo transfers, the accumulation of assets that will be passed on to their kin after death, and unpaid services such as baby-sitting that facilitates the employment of the human capital acquired by their children. Third, in a social environment characterized by high rates of family break-up, grandparents are taking over at increasing rates full responsibility for their grandchildren, thus providing the loving nurturing that will help them achieve their human capital potential. Seniors also make significant contributions to civic and social capital through their active participation in the political process and in all kinds of non-profit organizations that improve the quality of life of many Canadians. Finally, they strengthen human bonds by keeping alive the traditions that link us through time and space and by passing on orally and through examples the values that contribute to the sustenance of a civilized society. In a demographic environment that is projected to lead to potential labour shortages, people over 65 are an asset that will increase in value as labour markets become tighter, not a burden on society. Maintaining the health of this valuable asset is public investment and an economic necessity.

There is an urgent need to rethink our view of people over the age of 65. The treatment of health care spending as strictly consumption has led to the erroneous view that seniors are a burden on society because per capita health care spending tends to be higher for this age group.

Conclusions

The policy debate on health care in Canada has been dominated by two myths: (a) the escalation of health care costs driven by population aging will impose unsustainable burdens on the existing fiscal system, and (b) public spending on health care is exclusively in the form of consumption, no different than the expenditures on keeping government buildings clean. This paper debunks both myths.

While acknowledging that, with respect to health care, the term “sustainability” is not meaningfully defined or uniquely measured, a variety of indicators that may shed some light on this issue are presented. These calculations suggest that:

- the ratio of total spending on health care (both private and public) to GDP will increase by about four percentage points over the next twenty-two years;
- the share of total government revenues (excluding C/QPP) required to finance public health care spending is projected to increase by eight percentage points over the same period;
- what matters for fiscal sustainability is the balance for the total fiscal system and not just a single component;
- stronger spending pressures for health care will be associated with weaker spending pressures in other areas for two reasons: first, a rising share of the elderly population is necessarily associated with a declining share of other age groups, and second, some non-age related government spending, such as general government, tends naturally to grow at a relatively low rate;
- the overall result is that the current fiscal structure is more than capable of shouldering the spending pressures arising from population aging; this means that projected increases in health care spending can be financed without the need to raise tax rates in the future; in fact, the current fiscal structure will afford lower tax rates in the future; and
- from a strictly fiscal perspective, the fundamental issue is not the sustainability of the existing publicly-funded health care system, but the long-term viability of the current structure of fiscal federalism.

The differences between the long-term fiscal prospects of the federal government on one side and the provincial/territorial governments combined on the other side are well-known. More than one study (see, for example, Ruggeri 2001 and The Conference Board of Canada 2004) have shown that the federal government dominates the fastest growing revenue source (the personal income tax), but is not responsible for any spending program with high built-in growth. As a result, its fiscal structure has a built-in tendency to generate surpluses of increasing amounts over time. Provincial/territorial governments rely to a lesser degree on personal income taxes, but have the constitutional responsibility for the fastest growing spending program, health care. They face serious challenges in their efforts to maintain balanced budgets. This means that their ability to meet the pressures of rising health care costs is constrained by unilateral federal decisions on its cash transfers to other governments.

What is less well-known is that there are demographic forces at work with the potential to create widening regional disparities in Canada, especially between the smaller and the larger provinces. The former will face stronger health care spending pressures because they will experience a faster rate of population aging. At the same time, the projected below-average growth of the labour force in those provinces will have a dampening effect on their economic growth and their fiscal capacity. These are the real fiscal issues facing the nation, not the overall capacity of the fiscal system to finance the existing health system over the long

run. Canadians would be better served by redirecting public policy so that (a) health policy would be separated from fiscal policy and would focus on the health of Canadians, and (b) fiscal policy would be aimed at restoring balance in fiscal federalism and supporting economic growth and human development (a set of suggestions that address issues of fiscal federalism are found in Ruggeri 2006).

The predominant emphasis on the financing side has degraded the debate over health care policy from fundamental principles and collective values to a matter of dollars and cents. Moreover, the course of inter-governmental fiscal relations over the past couple of decades has created some confusion over these two aspects of health policy. The general public still considers universal and readily accessible health care as its top policy priority (Colledge 2005) while federal-provincial negotiations have focussed primarily on financing issues. We need to de-link health policy from fiscal policy if we want to address effectively the policy priorities expressed by Canadians.

The focus on the financing side has been detrimental to the development of health policy in Canada. Since the visible and readily measurable costs of health care that capture the attention of analysts and policy makers arise from the expenditures on the treatment of illnesses, the focus of health policy has been confined almost exclusively to the financing side, and has been largely directed at the containment of the growth of public spending. As a result, inadequate resources have been dedicated to prevention.

This misguided focus has also tended to marginalize health care professionals in the policy development process. Within a policy framework of cost containment, these professionals, who are the recipients of most of the public spending on health care as payment for their services, became viewed as a part of the problem. Public policy, therefore, created the paradox whereby the providers of health services were treated as a burden on the system while the policy makers dealing with cost containment were considered as the saviours of the system. It is incomprehensible to have a system that expends large amounts of public funds to secure an adequate supply of professionals with specialized knowledge in health matters but fails to optimize the participation of those professionals in the formulation of health policy. Since the Fall 2005 mini budget (Finance 2005) has made it clear to all Canadians that the federal government's policy flexibility is not constrained by fiscal capacity, it is time to open the doors to the full participation of health professionals both as health care providers and health policy developers.

The narrow focus on financing and cost containment has also blurred the link between health policy and other government policies. For example, failed environmental policies impose a burden on the health care system by swelling the ranks of Canadians with respiratory illnesses. The associated increase in health care spending is not a sign of an unworkable public health care system, it is the effect of ineffective or misdirected environmental policies. Similarly, labour market policies that aggravate the stress level of workers by increasing job insecurity in the name of efficiency and competitiveness affect the challenges faced by the health care system. The associated increase in health care spending, however, is not the result of some natural growth in an unmanageable public health care system, but a symptom of unworkable labour market policies. Instead of focusing blindly on cost-containment in health care, it would be more productive to investigate other areas of government policies to determine how we can minimize the burden of these policies on health care costs.

Finally, the emphasis on financing and cost containment incorporates the implicit assumption that health care spending is entirely in the form of current consumption. Under this assumption, reducing health care spending not only is viewed as having no effect on economic performance, but actually improves it to the extent that the savings are used to finance growth-enhancing policies. Holding onto this assumption is a major obstacle to the development of effective health policy in Canada. Such a policy should rest on an understanding that health spending is largely a public investment that complements public spending on education, supports human development, stimulates knowledge creation and has the potential of becoming a major source of growth in the knowledge-based age (Friesen 2005).

About the author

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Dr. Ruggeri has authored and edited a variety of monographs and has published numerous papers in refereed journals on subjects that include taxation, fiscal redistribution, fiscal sustainability, human capital, regional disparities.

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