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Paying More, Getting Less

Ontario's Health Premium and Sustainable Health Care

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Executive summary

The new Ontario Health Premium as described in the 2004 Ontario budget is not structured like a true insurance premium. Normal health-insurance premiums, like those used to finance life, automobile, and home insurance, are designed to cover the cost of all expected future benefit payments to members of an insurance plan. Insurance premiums, therefore, are designed to link the expected use of insurance benefits to the future cost of providing those benefits and, thereby, partially create a financial incentive for the insured to avoid "making claims" unless absolutely necessary.

But Ontario's new Health Premium does not link health-care costs to a person's potential use of the system. Instead, the new premium is partially linked to a person's income level and capped at a maximum dollar amount within selected income groups. In fact, it is estimated that nearly 4 million people will not have to pay it all. The new premium will have no effect on making health-care consumers more responsible about their demands for medical services in Ontario because it will not link the cost of care to an individual's use of care prospectively, retrospectively, or at the point of service. Therefore, it will have no impact on controlling the demonstrably unsustainable growth in the costs of the health system. Furthermore, because the new premium is not fully indexed to the expected growth in government spending on health care, it will not cover the additional future costs of health care and is, therefore, an inadequate means of making public financing more sustainable over the long term.

If the new premium is expected to make an effective contribution to the sustainability of public health-care financing, the structure of the premium will have to be changed in the future. The new premium could be linked to an individual's potential use (risk rating) or actual use (experience rating) of the system as is done with all other types of insurance premiums. However, both of these approaches to health-care financing will be politically unacceptable as long as the public favours the redistribution of costs on the basis of income instead of use. Furthermore, on their own, these types of measures are not fully capable of reducing the over-use of healthcare. As private-sector insurers have discovered, a combination of risk- and experience-rated premiums as well as front-end deductibles or other forms of user charges and co-payments are necessary to make the insured behave responsibly when demanding the benefits of insurance.

A more politically acceptable reform might be to convert the new Health Premium to a front-end, income-graduated deductible (user charge/co-payment). This approach would introduce price signals for individuals that would encourage consumer responsibility for health-care demands. Permitting the development of a parallel private sector for health care would also help relieve demands for service in the public system without any extra costs to taxpayers by restoring to individuals the freedom to voluntarily obtain private medical services through private payment outside of the provincial public health-care monopoly.

In any case, reality dictates the available options and a fair analysis of public health-care spending under the current policy indicates that, unless Ontarians agree to (1) significant yearly increases in the new premium, (2) higher rates on other taxes, or (3) further reductions in the scope of medical benefits and coverage under OHIP (or some combination of these), they will have to consider the introduction of proven demand-control mechanisms like (a) linking the premium level to an individual's expected personal use of the health system, (b) user fees and deductibles under the public health-insurance plan, and (c) the development of a parallel private sector that can relieve demands on the public system.

Simple economic reasoning suggests that options (1), (2), and (3) are themselves unsustainable because they do not address the fundamental problem of over-use that is the result of the full-insurance design of public health-care in Canada; and because taxes cannot be perpetually increased without incurring serious costs in economic stagnation, unemployment, and declining relative incomes and living standards. Therefore, policy makers should immediately investigate options (a), (b), and (c) as potential solutions to financing health-care services in Canada and consider changes to the Canada Health Act (CHA) that would permit provincial governments to experiment with these policy options.

Highlights

Growth in spending underestimated

An analysis of *2004 Ontario Budget: The Plan for Change* indicates that the government has probably underestimated the future long-term annual average real growth in public spending on health care by about 4.5% per year adjusted for inflation, based on the most recent five-year trend. This leads to a serious understatement of the future revenue growth required in the province to sustain the health-care system over the next 30 years.

Growth in revenue of 1.9%

Using the budget's own estimates of the future growth in nominal revenues and adjusting into real terms using the budget's own assumptions of future inflation, total government revenues from all sources are projected to grow by 1.9% per year on average (2005/06 to 2007/08) after the revenue boosting effects of the one-time electricity liability elimination in 2004/05 and the full phase-in of the new Health Premium, which will be complete as of the end of 2005/06.

Public health expenditure to reach %100 of revenue by 2030

If, over the long-term, total government revenues from all sources grow at the same rate as the government estimates (after the short-term boost provided by the measures mentioned above), health expenditures continue to follow the most recent five-year trend, and inflation grows at the government's projected rates, then provincially funded public

health expenditures will rise from the currently budgeted 42% of all revenues, to approximately 50% of all revenues by 2013, over 60% by 2017, over 75% by 2023, and 100% of all provincial revenues by mid-2030.

Aging population will increase health expenditures and reduce revenues

This estimate does not include anticipated effects from the aging of the population that will likely further drive up health expenditures and reduce net revenues from taxes due to declining workforce numbers, moving the hypothetical maximum health-care sustainability break-point to an earlier date.

Health Premium a one-time boost to revenue

An analysis of the structure of the new Health Premium indicates that, because it is only partially indexed to the growth in public health-care expenditures, it represents a one-time raising of the floor for base revenue that will not keep up with trends in health-care costs and, thus, will only delay the inevitable non-sustainability of health-care financing under the current public model.

Health Premium to triple by 2008/09

To see the costs of continuing to finance a public health-care monopoly like the Ontario Health Insurance Plan (OHIP) through tax measures, consider what the future personal costs of keeping up to the growth in public health-care spending would be if 100% of future increases are paid for through the new Health Premium and funding from all other sources is capped at the existing 42% of current revenues: to keep up with the same rate of increase in health expenditures that has occurred over the last five years, the Health Premium must eventually rise far above the levels initiated in the 2004 budget, tripling by the end of the government's mandate in 2008/09 and growing 10 times as large only a decade from now. This projection illustrates the flaws in the design of the new Health Premium as well as the error in attempting to address problems in financing public health care through tax increases instead of fundamental reforms that address the underlying cost drivers in the system.

True insurance premiums or user fees an alternative

If the new Ontario Health Premiums were structured on the same basis as private sector insurance premiums or if they were restructured to resemble deductibles (user fees), they would be more likely to contribute to the long-term sustainability of health care financing.

Policy needs to be reformed

The policy of operating the health-care system on the basis of an egalitarian, tax-financed, government monopoly in health insurance and medical services must be reconsidered. The continued sustainability of such an approach is in serious doubt and the costs of delaying reform are mounting.

The two main flaws in the public health-care system

Absence of responsibility for health-care consumers

Under Medicare, medical services are fully insured from the first dollar spent by consumers. It is precisely this full-insurance design that creates the potential for over-use because there is little economic incentive for patients, as consumers of health-care services, to restrain their own demand for medical services or scrutinize the care prescribed by their physicians if they are not paying directly for any of it. The introduction of sound private-sector insurance principles like consumer responsibility for a portion of the costs at the point of service are necessary to make Canadian health-care sustainable. This would include ideas like user fees, deductibles, and co-payments, which have been successfully implemented by the public health systems of almost every other modern industrialized country, and are part of proper insurance design in the market.

Absence of choice for health-care consumers

That Canadians lack the freedom to obtain medical services outside the public monopoly means there is no politically sustainable way to develop the extra capacity to meet current and future demands. If patients, as health-care consumers, were free to purchase health services in the private sector, this would act as a pressure relief valve for demands on publicly financed services. In contrast to the redistributive tax financing of Medicare, a parallel private sector in health care is more likely to be politically sustainable because (1) those using it will voluntarily fund it, as they will receive the full benefit of the dollars they spend and can hold health-care providers accountable by exercising consumer choice, and (2) it will be funded by those with the greatest ability to pay for it, without diverting resources from the public system or increasing burdens on users of the public system.

Key assumptions

Real annual growth in government revenues

According to the Ontario Ministry of Finance's 2004 Budget, average annual nominal growth in total revenues from all sources will be 3.8% per year (2006/07 to 2007/08) after the one-time electricity liability elimination in 2004/05, the full phase-in of the new Health Premium, which will be complete as of the end of 2005/06, and the introduction of other new tax measures (Ontario Ministry of Finance 2004: 106). Using the budget's own projected annual average provincial rate of inflation of 1.9% per year calculated over four years from 2004 to 2007, means that the real annual growth in government revenues between 2006/07 and 2007/08, adjusted for inflation, will be 1.9% per year unless government assumptions about economic growth are exceeded or new tax measures are introduced.

Real annual growth in government spending on health care

According to the Canadian Institute for Health Information (CIHI), Ontario's average annual real growth in government spending on health care adjusted for inflation, from 1999/2000 to 2003/04 was 5.9% per year. In contrast, the budget estimates that public health-care spending will grow by only 3.3% in nominal terms from 2005/06 to 2007/08. This means that the government is estimating that public spending on health care will grow by only 1.4% in real terms after adjusting for the government's own future average annual inflation projection of 1.9%. This is 4.5% less than recent growth trends and an unrealistic expectation in our opinion. Therefore, this analysis will assume that recent growth trends, which also match longer-term trends, will continue into the foreseeable future because they are structurally related to the full-insurance public-monopoly design of Medicare, and should be expected to continue unless fundamental structural reforms are made.

Estimates of growth in Ontario's GDP

The government's own expectations for revenue are based on their projections of nominal GDP growth for Ontario reaching 5.3% per year by 2007, a growth rate nearly equal to what will be the seven-year high of 5.6%, which occurred in 2002, and nearly 1% higher than the seven-year average of 4.5% (Ontario Ministry of Finance 2004: 83). The government's revenue expectations are not, therefore, cautious underestimates and the analysis presented in this paper, which uses the government's own numbers, should be seen as conservative. Faster growth in GDP under stable inflation will extend the sustainability projections of this paper, while slower GDP growth will shorten them.

Projections for public spending on health care in Ontario

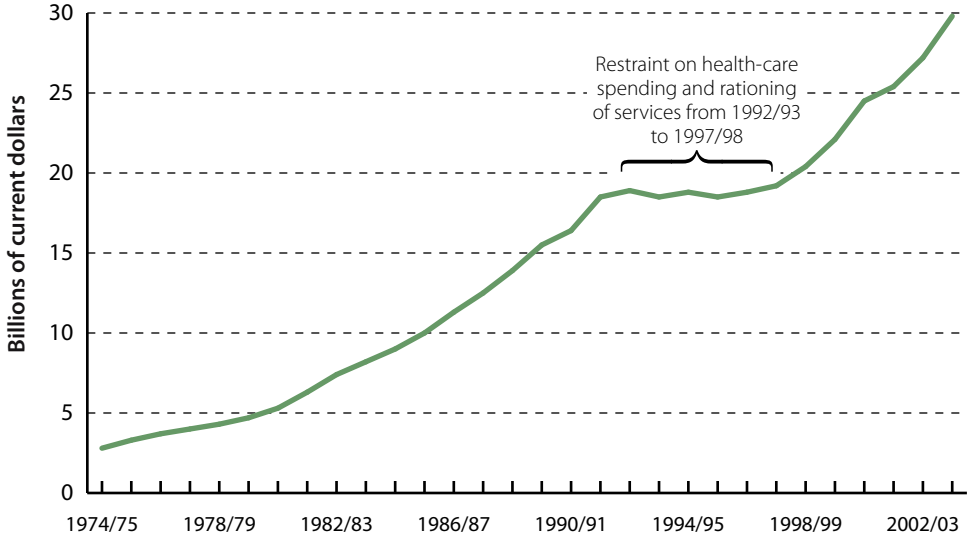
Publicly funded health care spending in Ontario was $28.1 billion in 2003/04, according to the budget documents. [1] This figure does not include what the budget refers to as SARS-related or major one-time charges amounting to another $0.8 billion. Including all public spending on health care raises the total to $28.9 billion in 2003/04. [2] Projections in the budget indicate that total provincial public spending on health care will reach $29.7 billion by the end of the 2004/05 fiscal year, not including $0.6 billion to be spent on health care through the "change fund." Including all public spending on health care raises the total to $30.3 billion in 2004/05. The year-over-year increase in total spending on health care between 2003/04 and 2004/05 is $1.4 billion (Ontario Ministry of Finance 2004: 38).

The budget estimates that the annual nominal rate of growth in public spending on health care between 2003/04 and 2004/05 (not including one-time expenses) is just over 5.5% (Ontario Ministry of Finance 2004: 38). If one-time expenditures were included, the nominal one-year rate of growth in health spending between 2003/04 and 2004/05 would be only 4.6% because, even while spending rises in both years, it rises by a larger amount in the earlier year, making the difference to the next later year smaller. But the budget assumes that public health-care spending will increase from $28.9 billion in 2003/04 to only $32.9 billion by 2007/08, an average nominal increase of only 3.3% per year.

Both recent and long-term trends in Ontario suggest, however, that these budget projections seriously underestimate the future growth in public spending on health care. Measured in current dollars (nominal spending), the actual long-term average annual growth in public spending on health care in Ontario over the last 30 years was 8.7% per year (Ontario Ministry of Finance 2004: 38). Even this figure is too low because severe restrictions by the province on the growth of health-care spending from 1992/93 to 1997/98 artificially reduced the annual average (see figure 1). This was a period of rationing, not sustainable cost control, that was characterized by a noticeable shortage of health-care resources indicated by rising waiting times, vocal political pressures from the public, and greater media attention to health-care issues. Notably, following these periods of artificial spending restraint, health-care spending resumed its historical trend of growth. It appears safe to view the spending restraint of the period from 1992/93 to 1997/98 as an aberration in the history of the last 30 years of public health care in Ontario and, if the long-term trend is computed without including that period, the average annual nominal increase would reach as high as 10.8% per year.

Nevertheless, given that the long-term trend in spending growth, either including or excluding the 1990s period of retrenchment, is higher than the most recent five-year growth trend, the use of the latter represents a more cautious estimate of actual trends. Actual Ontario public spending on health care increased nearly $10 billion over the last five years, going from $19.7 billion in 1998/99 to $28.9 billion by 2003/04. This amounts to

Figure 1: Public spending on health care in Ontario, 1974–2004



Note: the figures for 2002/03 and 2003/04 are forecasts and will be slightly higher after all of the data is collected.
Source: CIHI 2003.

a five-year average nominal increase of about 8% per year (Ontario Ministry of Finance, 1999–2003, 2004; CIHI, 2003: table 1.1.1). The increase between 2002/03 and 2003/04 reached 9.6% in nominal terms and was as high as 10.9% between 1999/00 and 2000/01 (CIHI, 2003: table 1.1.1).

In real terms, adjusted for inflation, Ontario's average annual growth in government spending on health care from 1999/00 to 2003/04 was 5.9% per year (CIHI, 2003: table 1.1.1). Yet, the budget assumes that public health-care spending will increase from $28.9 billion in 2003/04 to $32.9 billion by 2007/08, an average nominal increase of only 3.3% per year. This means that the government is estimating that public spending on health care will grow by only 1.4% in real terms after adjustment for the government's own projection of a future average annual inflation of 1.9%. This is 4.5% lower than recent growth trends, an unrealistic expectation. Therefore, the analysis in this publication will assume that recent growth trends, which are also reflected in the trend over the longer term, will continue into the foreseeable future because they result from the structure of the full-insurance public monopoly of Medicare and should be expected to continue unless fundamental structural reforms are enacted.

Moreover, the analysis in this publication does not include the impact of an aging population on future health expenditures and the growth in public-health spending assumed here should therefore be considered cautious, given that 50% of per-capita, lifetime health expenditures occur after the age of 65 (Brimacombe et al., 2001). The budget itself acknowledges the impact of aging on health spending but does not specify its impact on government projections for future health spending. **[3]**

Projections of government revenue

The Ontario Ministry of Finance's 2004 Budget (Ontario Ministry of Finance, 2004) states that total provincial revenues from all sources, including taxes, federal transfers, and other sources, for 2003/04 reached $68.25 billion (interim estimate). Total revenue from all sources is expected to rise to $78.36 billion by the end of 2004/05 (Ontario Ministry of Finance, 2004: 70, table A3). This large jump in the rate of growth in revenue is a one-time occurrence caused partially by the introduction of the new Health Premium and partially by a one-time electricity liability elimination; it will not necessarily be repeated in later years unless the amount of the premiums is raised significantly. **[4]**

According to the Ontario Ministry of Finance's 2004 Budget, average annual nominal growth in total revenues from all sources will be 3.8% per year (2006/07 to 2007/08) after the one-time electricity liability elimination in 2004/05, the full phase-in of the new Health Premium, which will be complete as of the end of 2005/06, and the introduction of other new tax measures (Ontario Ministry of Finance 2004: 106). Using the budget's own projected annual average provincial rate of inflation of 1.9% per year calculated over four years from 2004 to 2007, the real annual growth in government revenues between 2006/07 and 2007/08, adjusted for inflation, will be 1.9% per year unless government assumptions about economic growth are exceeded or additional tax measures are introduced in future budgets (Ontario Ministry of Finance, 2004: 106).

These figures are calculated directly from the budget's numbers for expected total revenue from all sources and measure the average percentage change from 2005/06 to 2006/07 and 2006/07 to 2007/08. The budget's numbers include the extra revenues from the new Health Premium, which are based on the government's own assumptions about the impact of the growth in provincial GDP on tax revenues. In fact, as indicated in table 1, the government's own expectations for revenue in these years is based on a nominal growth in GDP reaching 5.3% per year by 2007, a growth rate nearly equal to what will be the seven-year high of 5.6%, which occurred in 2002, and nearly 1% higher than the seven-

Table 1: Ontario Economic Highlights (Annual Average %)

	2001	2002	2003	2004	2005	2006	2007	7-year Average
Real GDP Growth	1.8	3.6	1.3	2.3	3.2	3.3	3.4	2.7
Nominal GDP Growth	2.8	5.6	3.2	4.1	5.0	5.2	5.3	4.5
CPI Inflation	3.1	2.0	2.7	1.9	2.1	1.9	1.8	2.2

Note that figures for years 2004, 2005, 2006 and 2007 are projections.
Sources: 2004 Ontario Budget: 83. Budget data from Statistics Canada and Ontario Ministry of Finance.

year average of 4.5%. Therefore, the government's expectations of revenue have not been underestimated and the analysis in this publication should be seen as conservative.

Revenue growth will be slower in the period from 2006/07 to 2007-08 than in that from 2004/05 to 2005/06 because the one-time effective contribution to the rate of revenue growth caused by the electricity liability elimination and the booster effect from the introduction of the new Health Premium will have been exhausted. While tax revenues grow faster than other sources of revenue, the growth in total revenues from all sources is slower because revenues from other sources (e.g., transfers, crown corporations, health premiums, etc.) remain virtually unchanged from year to year.

The government's own estimates of future revenue will be used in this analysis because they include the new revenue generated by the Health Premium and it is outside the scope of this publication to estimate future revenue growth.

The effect of the new Health Premium

According to the *2004 Ontario Budget: The Plan for Change* (Ontario Ministry of Finance, 2004), the Ontario Health Premium will be assessed as illustrated in table 2. When the Health Premium has been fully implemented,

> individuals with incomes below $20,000 would pay nothing; individuals with modest incomes would pay $300 per year; and individuals with higher incomes would pay a maximum of $900 per year. The first premium level would be phased in at six per cent of taxable income in excess of $20,000, with the full premium payable at taxable income of $25,000. For example, an individual with taxable income of $22,000 would pay $120 in 2005. Each subsequent increase in premium level would be phased in over the first $600 of taxable income in that range at a rate of 25 per cent. The phase-in rates for 2004 would be one-half the rates for 2005. As a result, the premium for 2004 would be $60 for an individual with taxable income of $22,000. (Ontario Ministry of Finance, 2004: 115)

The revenue expected by the government from this new measure is $1.6 billion in the 2004/05 year. Revenue in 2005/06 and thereafter will be higher because each of the premium levels will double as of next year generating about $2.5 billion per year on average (Ontario Ministry of Finance, 2004: 106) However, if the distribution of tax filers is considered within each of the income categories across which the new Health Premium is applied, the maximum revenues that can be expected appear to be much lower than government estimates. Table 3 shows the estimated number of Ontario tax filers in 2004 for the ranges of taxable income used to apply the new Health Premium.

Table 2: Assessments under proposed Health Premium

Taxable Income	2004 Taxation Year	2005 and subsequent Taxation Years
up to $20,000	$0	$0
$20,000–$36,000	$150	$300
$36,000–$48,000	$225	$450
$48,000–$72,000	$300	$600
$72,000–$200,000	$375	$750
more than $200,000	$450	$900

Source: 2004 Ontario Budget

Table 3: Number of Ontario tax filers in selected income categories in 2004 taxation year

Taxable income	Estimated number of tax-filers
up to $20,000	3,995,000
$20,000–$36,000	2,125,000
$36,000–$48,000	1,195,000
$48,000–$72,000	1,295,000
$72,000–$200,000	650,000
more than $200,000	85,000
Total	9,345,000

Source: Data supplied upon request by Diana Wright, Manager, Personal Income and Payroll Tax Policy Unit, Ontario Ministry of Finance, May 26, 2004.

The new Health Premium is not a rate applied to income in the traditional sense but a percentage within a category up to a maximum dollar amount, the amount depending on which income bracket one falls into. Therefore, actual revenue generated has an upper limit within each income category and so the design of the premium means that it is not truly indexed to income once the premium reaches its cap within each particular income category. The premiums are designed so that most people, but not everyone, in each income category will have to pay the full premium. While very few (those within the first $600 of each bracket) will pay less than the full amount, no one will pay more than the maximum dollar amount for their income bracket because of the graduated cap.

In an attempt to remain conservative in this analysis, this study calculates the maximum expected revenue that the government will receive from the new Health Premium by assuming that everyone in each income category will pay the maximum premium. Table 4 calculates the maximum total revenue for government expected from the population of tax filers that falls into each of the income brackets, assuming everyone paid the maximum premium applicable to that group. The table shows that in the first year of implementation, if everyone in each income bracket pays the maximum premium, total revenues are less than government estimates but this one-year shortfall can be explained by the fact that the budget operates on a fiscal year ending March 31, while the Health Premium will be applied on a calendar-year basis. Therefore, the effect of the 2005 increase in premium levels falls partially in the 2004/05 budget year boosting total revenues from the measure to the budget's estimate of $1.6 billion in 2004/05.

Thereafter, everyone would have to pay the maximum premium in each income bracket just to equal the government's anticipated revenue returns from the measure of

Table 4: Maximum projected revenue from Ontario's new Health Premium

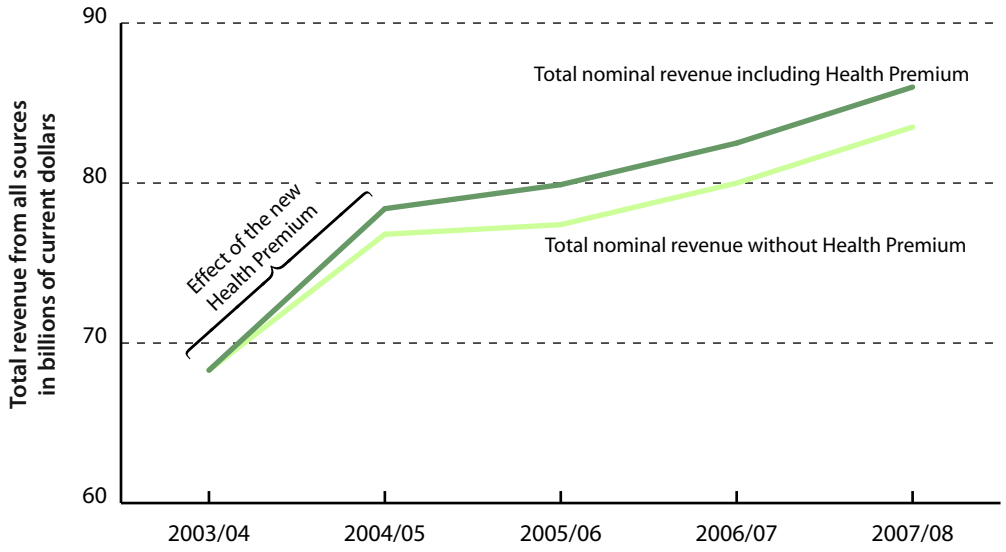
Income Categories	Number of tax-filers in 2004	Maximum premium 2004/05	Total revenue 2004/05	Maximum premium after 2005	Total revenue after 2005
up to $20,000	3,995,000	$0	$0	$0	$0
$20,000–$36,000	2,125,000	$150	$318,750,000	$300	$637,500,000
$36,000–$48,000	1,195,000	$225	$268,875,000	$450	$537,750,000
$48,000–$72,000	1,295,000	$300	$388,500,000	$600	$777,000,000
$72,000–$200,000	650,000	$375	$243,750,000	$750	$487,500,000
more than $200,000	85,000	$450	$38,250,000	$900	$76,500,000
Total	9,345,000		$1,258,125,000		$2,516,250,000

Note: Figures in table calculated as if all tax-filers in each income category were to pay the maximum premium.
Source: Author's calculations.

$2.5 billion annually. Given that some people will pay less than the full premium in their income bracket, the government's projections are probably somewhat overstated but not likely by a large degree since the full premium is phased in over each income category once the first $600 above the bottom of each bracket is reached. This design significantly reduces the numbers of people paying less than the maximum premium in each income bracket (Data supplied upon request by Diana Wright, Manager, Personal Income and Payroll Tax Policy Unit, Ontario Ministry of Finance, May 26, 2004). Nonetheless, it is apparent that government is not underestimating the revenue that can be expected from this tax measure and the analysis in this publication is again shown to be cautious.

More importantly, because income indexation is capped within each category, it is apparent that the revenues generated from the new premiums will not grow as fast in later years as they will between 2004/05 and 2005/06. This means the tax raises the floor of the revenue base but probably will not affect the proportional rate of growth in overall revenues in later years (roughly illustrated in figure 2 by the shifting of the expected revenue line upward slightly, while the slope stays the same). Growth in total revenues after the introduction of the premium is dependent on "bracket creep" within the premium schedule and growth in GDP affecting other revenue streams (among other factors), if higher tax rates or new revenues are not introduced. The effect of "bracket creep" as inflation pushes incomes through higher brackets will make the burden of the premiums fall more heavily on lower income groups over time if the income brackets are not indexed to inflation.

Figure 2: Effect of the new Ontario Health Premium on future revenues



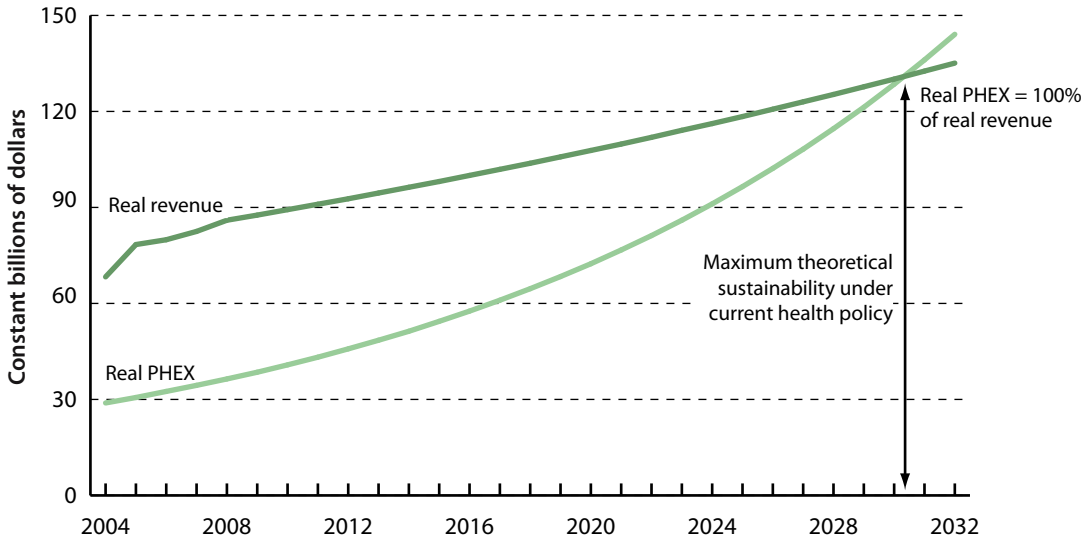
Note: All figures include one-time electricity liability elimination, 2004/05
Source: Author's projections based on figures in Ontario Ministry of Finance, 2004.

Can public health-care financing in Ontario be sustained?

Future revenues from the Ontario Health Premium will probably be less than the government expects but, even using the budget's own estimates for revenue from the new measure, public health-care financing in Ontario cannot ultimately be sustained. If total provincial revenues and health expenditures are projected into the future, the sustainability of the current funding approach to Medicare can be assessed [5]. Using long-term analyses of public health insurance financing is a methodology endorsed by the Canadian Institute of Actuaries (CIA) as the proper way to estimate the financial sustainability of public health insurance. In fact, the CIA recommends projecting revenues and expenditures 20 to 75 years into the future. [6]

Figure 3 projects the future growth in total revenues and public spending on health care in Ontario 28 years into the future (year 2032). As the graph shows, the two lines intersect by the year 2030, even when new revenue generated from the introduction of the new Health Premium is included. This means that, if future revenues grow at rates close to government estimates and health expenditures continue to follow recent trends, provincially funded public health expenditures will rise from the currently budgeted 42% of total revenues in 2004/05 to about 50% of all revenues by 2013, over 60% by 2017, over 75% by 2023, and 100% of all provincial revenues by mid 2030. [7] And, this estimate does not include the anticipated effects of the aging of the population, which will further drive

Figure 3: Projected real growth in provincial health expenditures (PHEX) and total provincial revenues from all sources in Ontario, 2004/05–2031/32



Sources: Estimates of revenue growth based on 2004 Ontario Budget assumptions. Health spending growth rates based on historical trends for 1998/99 to 2003/04, CIHI 2003 National Health Expenditure Database.

up health expenditures and reduce revenues from taxes due to declining numbers in the workforce, causing the sustainability crash to come even earlier. [8]

When one considers that it is unlikely that the province will ever allow health-care spending to swallow 100% of total revenues since this would mean that spending on education, social assistance, transportation, policing, government operations, and payments on the provincial debt would have to be zero, the actual breaking-point for the public health-care system will come much earlier than 2030, if the current policy is continued.

The projection shown in figure 3 means that either revenues must continually increase at a much faster rate in the future or the growth in health spending must be restrained. However, exercising the option of raising future revenues through tax increases comes at a significant price for both individual wealth and the standard of living that must be soberly considered.

Raising taxes, cutting benefits

The source and mix of revenue mechanisms that will be used to fund future increases in public health-care spending in Ontario are likely to vary. By the government's own budget figures, the new Health Premium will only raise $1.6 billion in the first year and $2.5 billion in the second year (Ontario Ministry of Finance, 2004: 106), though the analysis above suggests this is probably an overestimate. Though $1.6 billion is more than the government's projected increase in health-care spending for the coming year, it is $1.2 billion less than the total increase in spending for public health care from the previous year—$26.1 billion in 2002/03 to $28.9 billion in 2003/04. It is reasonable to assume, therefore, that the new Health Premium will not be enough to keep up with increases in health-care spending on their own and taxes in general will have to be raised.

To see the implications of continuing to finance a public health-care monopoly like the Ontario Health Insurance Plan (OHIP) through tax measures, consider what the future cost of Ontario health premiums could rise to if governments want to keep public health-care expenditures (PHEX) at a constant percentage (42% in 2004/05) of all other existing revenues. If one assumes that the near future trends in revenue growth estimated by the budget will continue over the long-term without any additional tax measures and that 100% of the future increases (above 42% of all other revenues) will be paid for entirely from the new Health Premium, then to keep up with the increase in public health expenditures that has occurred on average over the last five years, Health Premiums must eventually rise far above the levels set in the 2004 budget, tripling by the end of the government's mandate in 2008/09, growing ten times as large only a decade from now, and continuing to balloon every year thereafter (table 5, figure 4). Note that this analysis applies the maximum premium within each income bracket to all tax-filers in that bracket and, thus, probably overestimates the revenue generated from these future increases. **[9]**

This hypothetical projection serves to illustrate the flaws in the design of the new Health Premium as well as the error in attempting to address problems in public health-care financing through tax increases instead of fundamental reforms that address the underlying cost drivers in the system. Tax increases of the magnitude projected above could undermine future economic growth, reducing the expected future tax base of the province, and lead to higher rates of unemployment, which, in turn, would create further demands for social spending by the province.

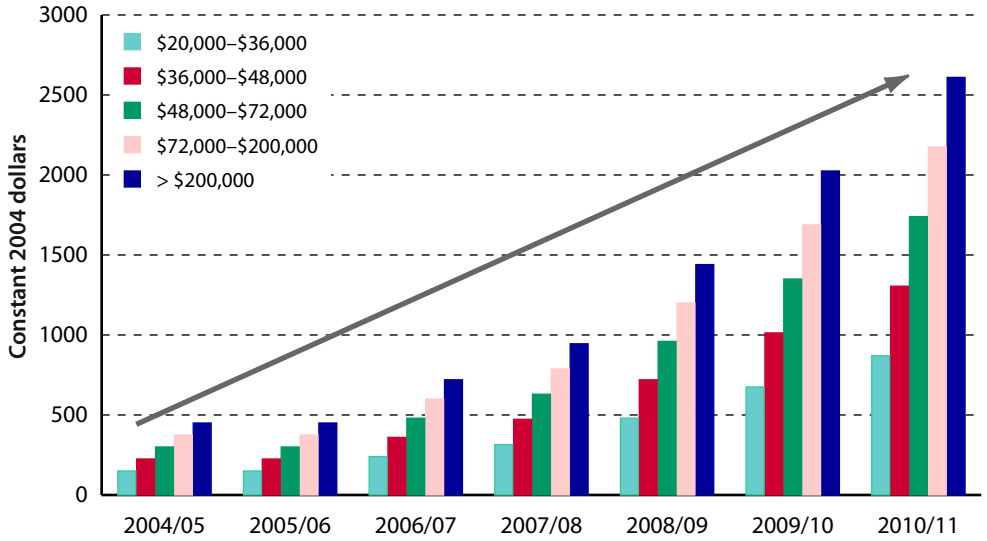
The other option the government has instead of raising taxes is to reduce the scope of coverage for public health-insurance benefits by de-listing previously covered services. In fact, the budget has adopted this strategy explicitly: "As an alternative to reducing service quality, the government will be discontinuing payment for selected services not mandated under the Canada Health Act including optometry for ages 20 to 64, chiropractic services and, with the exception of seniors served through home care and long-term care facilities, physiotherapy services" (Ontario Ministry of Finance, 2004: 20). However,

Table 5: Required future cost of Ontario Health Premiums needed to keep public health care expenditures (PHEX) at a constant percentage (42% in 2004/2005) of all other existing revenues

Income Categories (2004 Ontario Budget)	Number of 2004 Tax-filers	Required multiple of 2004-05 Health Premiums needed to cover public health expenditure (PHEX) deficit										
		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
		n/a	1	1.6	2.1	3.2	4.5	5.8	7.5	8.8	10.5	12.4
		Projected Future Premiums in 2004$										
< $20,000	3,995,000	0	0	0	0	0	0	0	0	0	0	0
$20,000–$36,000	2,125,000	150	150	240	315	480	675	870	1080	1320	1575	1860
$36,000–$48,000	1,195,000	225	225	360	473	720	1013	1305	1620	1980	2363	2790
$48,000–$72,000	1,295,000	300	300	480	630	960	1350	1740	2160	2640	3150	3720
$72,000–$200,000	650,000	375	375	600	788	1200	1688	2175	2700	3300	3938	4650
> $200,000	85,000	450	450	720	945	1440	2025	2610	3240	3960	4725	5580
		Projected Revenues from Future Premiums in Billions of 2004$										
< $20,000	3,995,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$20,000–$36,000	2,125,000	0.3	0.3	0.5	0.7	1.0	1.4	1.8	2.3	2.8	3.3	4.0
$36,000–$48,000	1,195,000	0.3	0.3	0.4	0.6	0.9	1.2	1.6	1.9	2.4	2.8	3.3
$48,000–$72,000	1,295,000	0.4	0.4	0.6	0.8	1.2	1.7	2.3	2.8	3.4	4.1	4.8
$72,000–$200,000	650,000	0.2	0.2	0.4	0.5	0.8	1.1	1.4	1.8	2.1	2.6	3.0
> $200,000	85,000	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5
Total	9,345,000	1.3	1.3	2.0	2.6	4.0	5.7	7.3	9.1	11.1	13.2	15.6
		Accumulated PHEX Deficit in billions of 2004$										
			1.2	2.0	2.6	4.0	5.6	7.3	9.1	11.1	13.2	15.5

Source: Author's calculations.

Figure 4: Projected cost of Ontario health-care premiums, 2004/05–2010/11



Note: Projections based on holding funding for public health care to the currently budgeted 42% of all other sources of revenue. Those earning less than $20,000 per year do not pay premiums.

given that public spending on health-care services provided by health professionals other than physicians in Ontario is consistently equal to only 1.4% of total public spending on health care in each of the last five years (table 6), any cost savings from this measure are bound to be small. And, in any case the cost savings generated by this strategy were more than compensated for by a new list of government spending items (see table 7). It appears, therefore, that the government has de-listed some non-physician services in order to shuffle funds onto other priorities without reducing the overall growth in spending.

Table 6: Public spending in Ontario for health professionals other than physicians, 1999–2003

	Annual spending in millions of current $	Percentage of total public health-care spending	Annual change	Annual inflation rate in Ontario	Annual real change
1999	331.5	1.4%	2.9%	1.9	1.0%
2000	354.2	1.4%	6.9%	2.9	4.0%
2001	381.0	1.4%	7.6%	3.1	4.5%
2002	409.8	1.4%	7.6%	2.0	5.6%
2003	429.9	1.4%	4.9%	2.7	2.2%
Average	n/a	n/a	6.0%	2.5	3.5%

Source: Canadian Institute for Health Information (CIHI) 2003. National Health Expenditure Database.

Table 7: Selected New Ministry of Health Spending in Ontario 2004/05 to 2007/08

Selected New Spending Items	Additional Costs as Stated in 2004 Ontario Budget
Ontario Health Quality Council established	$1 million 2004/05, growing to $2 million by 2007/08
Support primary care from the Change Fund	$111 million 2004/05
Community Health Centres (CHCs)	$14 million 2004/05.
By 2007/08, an additional 95,700 Ontarians annually with care in their homes and another 6,000 clients each year will receive end-of-life care.	Total funding $1.3 billion in 2004/05, increasing to $1.7 billion in 2007/08: minimum increase = $400 million.
Fund a not-for-profit agency to help patients and their families acquire medical equipment for home use.	$10 million 2004/05.
Community mental health services will be expanded to serve an additional 78,600 patients annually by 2007/08, for these services.	Included in $463 million 2004/05, growing to $583 million 2007-08: minimum increase = $120 million.
Manage infectious disease control and increase the share of public health costs covered by the Province from 50% to 75% by 2007.	Included in $273 million 2004/05, growing to $469 million 2007/08: minimum increase = $196 million.
Three new vaccines will be added to the children's immunization program in 2004/05.	$156 million 2004/05 to 2007/08.
Aboriginal Healing and Wellness Strategy.	$5 million 2004/05.
School-based children's breakfast programs.	$4 million annually.
Projects under the e-Health initiative.	$78 million 2004/05.
Increase postgraduate training positions for international medical graduates from 90 to 200.	$12 million 2004/05, growing to $25 million 2007/08: minimum increase = $61 million.
Increase the number of clinical education spaces for nurse practitioners from 75 to 150 spaces.	$2 million annually beginning in 2005/06.
Support nurses who mentor trainees.	$2 million annually.
12,000 bed lifts for hospitals and long-term care facilities will be purchased and installed.	$60 million in 2004/05.
Total New Spending before Unspecified Items Below	**Approx. $706 million 2004/05 to 2007/08**

An additional 3,760 long-term care beds and a 3% increase in the comfort allowance for residents of long-term care facilities.	Included in $2.5 billion budgeted for 2004/05: specific increase for this item this year unknown.
Additional 9,000 cataract surgeries annually.	Not specified in budget.
Nine new MRI/CT sites by 2005/06.	Not specified in budget.
Increase the number of cardiac procedures by 36,000 per year.	Not specified in budget.
Provide 2,340 additional joint replacements per year.	Not specified in budget.
Perform 425 extra organ transplants per year.	Not specified in budget.
Expand dialysis treatments by 529,000 annually by 2007/08.	Not specified in budget.
Total New Ministry of Health Spending for one year (2004/05)	**$2.2 billion** (Ontario Ministry of Finance, 2004: 43, 112)

Source: Ontario Ministry of Finance 2004.

Policy solutions

Perpetual tax increases and reductions in health-insurance coverage appear to be an inevitable result of the structure of the health-care system in Ontario. The policy of continuing to operate the health-care system as an egalitarian, tax-financed, government monopoly in health insurance and medical services must be reconsidered. The continued sustainability of such an approach is in serious doubt. The public health-care system has two main identifiable flaws undermining its sustainability.

Absence of responsibility for health-care consumers

Under Medicare, medical services are fully insured from the first dollar spent on patients. It is precisely this full-insurance design that creates the potential for over-use because there is little economic incentive for patients, as consumers of health-care services, to restrain their own demand for medical services or scrutinize the care prescribed by their physicians if they are not paying directly for any of it. The reality of the over-use of health care under full-insurance schemes like Canadian Medicare has been scientifically confirmed in the literature about health economics and insurance beyond any serious doubt. [10]

Recently, Ontario Premier Dalton McGuinty recognized that over-use is a problem under public health insurance when, in a speech to the Detroit Economic Club, he said that provincial health spending "simply can't keep up with demand" (Brennan and Benzie, 2004). The Premier's comments appear to recognize that under the Canadian health-care regime, public demands for health-care services are not linked to the cost of providing those services and that this is leading to public expenditures that are out of control.

The introduction of sound private-sector insurance principles (like consumer responsibility for a portion of the costs at the point of service) are necessary to make Canadian health-care sustainable. This would include ideas like user fees, deductibles, and co-payments, which have been successfully implemented by the public health systems of almost every other modern industrialized country (Esmail and Walker, 2004), and are part of proper insurance design in the market.

Canadian research has demonstrated the viability of introducing a deductible for the public health-insurance plan that could reduce unnecessary use by rationalizing demand for health services and, thereby, also reducing waiting times. This kind of reform could also result in significant financial savings to governments by reducing current revenue needs and by restraining the growth rate in future public health-care expenditures. The approach could also be combined with publicly subsidized medical savings accounts for those earning low incomes that would retain for this group the same incentives for responsible demand as the non-subsidized population. For instance, using individual-level

data on the use of physicians' services by the population of Nova Scotia in 2001, Skinner (2002b) modeled the effect of introducing a deductible for public health insurance alongside publicly subsidized MSAs for low-income earners. The savings projected for Nova Scotia's population of nearly 1 million were conservatively estimated at a minimum of $88 million (2001 dollars) per year. If the projections for Nova Scotia are roughly extrapolated to Ontario's population of over 12 million, the savings to the province could reach $1.1 billion per year (2001 dollars). Moreover, the incentives introduced by the deductible would restrain the rate of growth in health spending and the resulting reduction in the demand for services could also significantly reduce waiting lists.

Absence of choice for health-care consumers

That Canadians lack the freedom to obtain medical services outside the public monopoly means there is no politically sustainable way to develop the extra capacity to meet current and future demands. Canadians are prohibited by the provisions of the Canada Health Act (CHA) from paying privately for core medical services that are covered by the provincial public health-insurance monopolies. This prohibition means that, where the public sector cannot, or will not, create the capacity to serve consumer demand for these health services, the needs and preferences of patients will go unsatisfied, as manifested in political decisions to restrict public insurance coverage for some health services and make patients wait longer for remaining services. The substandard quality of care that results is only sustainable as long as Canadians are willing to accept it. However, the consequences of continuing this policy are measurable.

The most recent research indicates that waiting times for medical services in Canada are much longer than in other countries and grow worse every year. The median wait in 2003 was 17.7 weeks from a general practitioner's referral to treatment by a specialist (Esmail and Walker, 2003: 3). Waiting times for access to diagnosis using advanced medical technologies are also remarkably long. In 2003, patients were forced to wait over one month for CT scans, almost three months for an MRI, and more than three weeks for an ultrasound (Esmail and Walker, 2003: 4). In general, waiting times in 2003 were more than 90% longer than they were ten years before (Esmail and Walker, 2003: 5). Research indicates that Canadian waiting times exceeded the clinically recommended maximum 92% of the time (Esmail and Walker, 2003: 5). Studies have shown that Canadian waiting times significantly exceed those of many other OECD countries and research indicates that longer waits can lead to adverse health outcomes for patients (Esmail and Walker, 2003).

Alternatively, if patients, as health-care consumers, were free to purchase health services in the private sector, this would act as a pressure relief valve for demands on publicly financed services. In contrast to the redistributive tax financing of Medicare, a

parallel private sector in health care is more likely to be politically sustainable because (1) those using it will voluntarily fund it, as they will receive the full benefit of the dollars they spend and can hold health-care providers accountable by exercising consumer choice, and (2) it will be funded by those with the greatest ability to pay for it, without diverting resources from the public system or increasing burdens on users of the public system (Skinner, 2002a).

Other symptoms of non-sustainability

Examining the history and future growth of public-health expenditures and government revenues in Ontario indicates that the current Medicare system is ultimately unsustainable except at tremendous future cost for the people who live in the province. To make matters worse, the basic infrastructure of the Canadian health system also already faces serious operating deficits and future capital liabilities for modernization. According to the Ontario Hospital Association, the average and median age of the province's hospital buildings is 40 and 37 years, respectively, while the average age of an American hospital is nine years (OHA, 2003). This international comparison indicates an urgent need for the upgrading and replacement of out-dated facilities and equipment if Ontarians want to receive the same levels of health-care modernization enjoyed by their American neighbours.

What would be the cost of upgrading Ontario hospitals to achieve the same modernization found in American hospitals? The OHA conservatively estimates that the total replacement value of all hospital facilities in 2002 was between $15 billion and $16 billion and of major equipment and other assets about $5 billion to $6 billion. Ontario does not currently have the funds to pay for this modernization of its basic health-system infrastructure but it cannot obviously wait indefinitely. According to the OHA, 11% of the total required and planned capital investments needed in Ontario for modernization do not even have an identified source of funding, thus putting even currently planned investments in new technology and medical equipment at risk (OHA, 2003). More recent comments from the OHA are that the Ontario budget, even with the introduction of the new Health Premium will only provide an additional 4.3% per year in funds for hospitals while hospital operating costs are going up by more than 8% per year (Canada NewsWire, 2004). Adding these other liabilities of the health system to the impossibility of sustaining ongoing costs significantly worsens the prospects for sustaining the current health-care system in Ontario.

The analysis in this publication is reinforced in recent reports published by other health-care policy experts. For instance, a group comprising Claude Castonguay, former Quebec health minister; Michel Clair, chairman of the Quebec government's committee on health reform in 2001; Carole Deschambault, the head of the Maisonneuve-Rosemont hospital in Montreal; Dominique Tessier, a family physician; and Marcel Villeneuve, former head of the Montreal health region, says the Quebec government cannot afford to keep up with rising health costs that could push its bill to almost $33 billion in 10 years. And, this is if costs rise at just 5% per year, which the group says is the most optimistic scenario.

According to the report,

> [e]ven if federal health contributions rise by five per cent a year, Quebec will still be looking for $2 billion out of its own resources in 10 years' time to meet health care's basic financial needs.

Instead, the group says growth in health spending should be limited to increases in Quebec's Gross Domestic Product. The balance should come from other sources including users of the health system.

...

With tax rates already high in the province, the group says Quebecers should not be subject to a health premium like Ontario has done. Instead, they list a number of measures to get health-system users to pay more. For example, they suggest patients pay $49 a day for hospital stays (with protection for those with low incomes) to share non-medical costs such as food, laundry, and maintenance services. These costs amount to 7.6 per cent of hospital budgets or about $890 million a year. In addition, they would like to see hospitals being able to charge for optional services (e.g., room service).

The group counsels greater use of private diagnostic clinics, and favours tax incentives to encourage more investment in new diagnostic equipment. Furthermore, they suggest patients be allowed to use these clinics for non-medically necessary services. The public health system would pick up 50 per cent of the tab and the other half would be paid by the patient. While patients would be paying for faster service, and essentially accessing two-tier care, the group believes this would free up diagnostic space in the publicly run system.

...

The group describes the current health system as paralyzed, obsolete and illogical. They say health providers are fed up, and attempts at change are viewed with skepticism, even cynicism. While they wish the government well with its reorganization of health regions into local area networks, the group says this change will do absolutely nothing to reduce costs. **[11]**

Conclusions

The new Ontario Health Premium as described in the 2004 Ontario budget is not structured like a true insurance premium. Normal health-insurance premiums, like those used to finance life, automobile, and home insurance, are designed to cover the cost of all expected future benefit payments to members of an insurance plan. Insurance premiums, therefore, are designed to link the expected use of insurance benefits to the future cost of providing those benefits and, thereby, partially create a financial incentive for the insured to avoid claiming insurance benefits unless absolutely necessary.

But Ontario's new Health Premium does not link health-care costs to a person's potential use of the system. Instead, the new premium is partially linked to a person's income level and capped at a maximum dollar amount within selected income groups—in fact, it is estimated that nearly 4 million people will not have to pay it all. The new premium will have no effect on making health-care consumers more responsible about their demands for medical services in Ontario because it will not link the cost of care to an individual's use of care prospectively, retrospectively, or at the point of service and, therefore, will have no impact on controlling the demonstrably unsustainable growth in the costs of the health system. Furthermore, because the new premium is not fully indexed to the expected growth in government spending on health care, it will not cover the additional future costs of health care and is, therefore, an inadequate means of making public financing more sustainable over the long term on its own.

If the new premium is expected to make an effective contribution to the sustainability of public health-care financing, the structure of the premium will have to be changed in the future. The new premium could be linked to an individual's potential use (risk rating) or actual use (experience rating) of the system as is done with all other types of insurance premiums. However, both of these approaches to health-care financing will likely be politically unacceptable as long as the public favours the redistribution of costs on the basis of income instead of use. Furthermore, even this reform would not be a complete solution to the problem of financing health care because it is inadequate as a mechanism for controlling demand on its own. As private-sector insurers have discovered, a combination of risk- and experience-rated premiums as well as front-end deductibles or other forms of user charges and co-payments are necessary to make the insured behave responsibly when demanding the benefits of insurance.

A more politically acceptable reform might be to convert the new Health Premium to a front-end, income-graduated deductible (user charge/co-payment). This approach would introduce price signals for individuals that would encourage consumer responsibility for health-care demands. Permitting the development of a parallel private sector for health care would also help relieve demands for service in the public system without any extra costs to taxpayers by restoring to individuals the freedom to voluntarily obtain private medical services through private payment outside of the provincial public health-care monopoly.

In any case, reality dictates which options are actually available and a fair analysis of trends in public health-care spending under the current policy indicates that, unless Ontarians agree to (1) significant yearly increases in the new premium, (2) higher rates on other taxes, or (3) further reductions in the scope of medical benefits and coverage under OHIP (or some combination of these), they will have to consider the introduction of proven demand-control mechanisms like (a) linking the premium level to an individual's expected personal use of the health system, (b) user fees and deductibles under the public health-insurance plan, and (c) the development of a parallel private sector that can relieve demands on the public system.

Simple economic reasoning suggests that options (1), (2), and (3) are themselves ultimately unsustainable because they do not address the fundamental problem of overuse that is the result of the full-insurance design of public health-care in Canada; and because taxes cannot be perpetually increased without incurring serious costs in economic stagnation, unemployment, and declining relative incomes and living standards. Therefore, policy makers should immediately investigate options (a), (b), and (c) as potential solutions to financing health-care services in Canada and consider changes to the Canada Health Act (CHA) that would permit provincial governments to experiment with these policy options.

Notes

1 According to budget notes (Ontario Ministry of Finance, 2004), this is an interim estimate.

2 Ontario Ministry of Finance, 2004: 71, table A3. While the expenses from the outbreak of SARS will be paid out of current expenditures, the Ministry accounts for them by shifting the expense to last year's budget using accrual accounting methods.

3 "Changing demographics, for example, affect future demand for health care services and the human capital required to provide these services. Ontario's seniors currently make up close to 13 per cent of the population, but account for about 50 per cent of Provincial health spending. The seniors' population in Ontario is expected to rise from 1.5 million in 2003 to almost 3.2 million in 2028" (Ontario Ministry of Finance, 2004: 111).

4 Ontario Ministry of Finance, 2004: 70, table A3. The 2004/05 estimates include a one-time gain of $3.9 billion in revenue from the elimination of an electricity liability and an annual $1.6 billion rise in total revenues from the new Health Premium that will raise the total revenue take from this measure to $2.5 billion for each subsequent year. The one-year nominal rate of growth in total provincial revenues from all sources is estimated to be 14.8%. Without the revenue boost of $3.9 billion from the one-time liability elimination, one-year nominal growth would be only 9%. If the revenue from the introduction of the Health Premium is excluded, the annual growth is reduced further to 6.8%. Other new tax measures also contribute to the increase.

5 This analysis is similar to a much more thorough methodological approach to the analysis of Ontario hospital financing used in Mullins, 2004.

6 Canadian Institute of Actuaries, 2003. The CIA recommends using a full actuarial analysis like that employed by private-sector insurance companies and in analyses of the Canada and Quebec Pension Plans. The analysis presented here is simplified for the purpose of demonstrating the fundamental flaws of current financing schemes and does not attempt a full actuarial accounting of revenues and expenditures, a method that would likely include factors like an aging population.

7 This finding lends support to an analysis by economist Bill Robson (2001), who showed that if provincial revenues stay constant as shares of provincial GDPs, health-care spending in Ontario goes from 33.8% of total revenues in 2000 to 40% by 2020 and well over 50% by 2040. It is assumed that Robson defines health care spending differently than the aggregate numbers used in the 2004 Ontario budget, which confirm that total public spending on health care currently takes 42.4% of total revenues from all sources exceeding Robson's projection 16 years early.

8 For the effects of an aging population on health-care expenditures, see Robson (2001). It should also be noted that growth in GDP that is higher than expected

would speed the growth in tax revenues and would, therefore, extend the sustainability of Medicare depending on the magnitude of change and assuming that the trend itself is sustained over time. The reverse is equally true.

9 The figures are calculated by multiplying the number of tax filers in each of the budget's income brackets by the maximum value of the premium for each bracket in future years if the same proportional weight per income bracket is maintained. All figures are stated in 2004 dollars.

10 For the most conclusive series of studies, see Newhouse et al., 1993.

11 Health Edition Online, 2004. The group's report, "Un système de santé à la mesure de nos moyens," is available from the website of La Presse: <http://www.cyberpresse.ca/opinions>.

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