Arithmetic failure and the myth of the unsustainability of universal health insurance

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ince its inception, the sustainability of Canada's universal health insurance (medicare) has been a concern. A search for "sustainability" and "unsustainability" on the *CMAJ* Web site yielded some 40 editorials, papers, letters, synopses, and reviews. Arguments for or against sustainability are usually supported by health care data of a variety of types, such as costs, 1 percentage of gross domestic product (GDP)²⁻⁴ and proportions of provincial government spending. 5

For example, McKinnon⁵ has argued for the unsustainability of medicare using the ratio of health care spending to government income. Her argument can be summarized in 3 points: government health care expenditure is an increasing proportion of total government program spending; it is increasing faster than government income; and when projected as percentage of income over the next 20 years, the trend appears to be unsustainable.

More-or-less the same criteria are used in the Ménard report⁶ on the sustainability of government spending in Quebec on health and social care. This report laid the foundation for part of the recent white paper⁷ on the Chaoulli Supreme Court judgment by Quebec's Ministère de la Santé et des Services sociaux.

I shall examine McKinnon's 3 points in terms of data from Quebec.

Governmental spending in health care

Point 1: Data from the Quebec Ministry of Finance (Figure 1).^{8.9} show that from fiscal years 1975/76 through 1994/95, government health care expenditure was stable at about 32% of program spending (i.e., government budgetary expenditures minus debt-servicing costs). Since then, government health care expenditures have increased from 33.1% in 1994/95 to 38.3% in 2004/05. Thus, increases in rates of government health care expenditure relative to program spending go back no more than 10 years.

Sustainability of medicare — a Canadian national pastime, according to a 2000 *CMAJ* editorial¹⁰ — should be assessed, not by means of data on total government expenditures on health care, but with data on medicare expenditures. Provincial governments fund health-related services other than those of hospitals and physicians. These have been financed through a mix of government funding, out-of-pocket payments and copayments with private insurance companies. "Medicare" expenditures in Quebec, which were 22.7% of program spending in 1975/76, reached 26.1% in 2005/06; as a percentage of government revenue, however, they decreased from 24.3% to 23.9% over the same period (Figure 1).

Point 2: From 1975/76 to 2005/06, government health care expenditure varied between 28.8% and 33.8% of Quebec government income (Figure 1). The average annual increase from 1997 to 2005 was 5.6%, during which time the increase in government revenue averaged 4.4% annually. On a longer scale, these expenditures increased at an average annual rate of 6.8% over the last 30 years, barely above the rate of increase of government income during the same period: 6.6%. Governmental expenditures on health care and revenues both declined in relative terms during the last 8 years of the 30-year period — revenues somewhat more than health care expenditures, in line with income tax reductions introduced at the end of the 1990s by the Landry government. In 2005/06, these reductions represented some \$5-billion in lost revenue.

Point 3: Projections of future spending require data that are comprehensive and reliable. For example, projections of rates of increase of government health care expenditure over income have generally used data from the provincial ministries of finance. Government budgets result, however, from a mix of accounting rules and political statements on financial matters. In their annual budgets, provincial governments report neither total expenditures nor total health care expenditures. The estimate by the Canadian Institute for Health Information of the percentage of government health care expenditure in Quebec relative to program spending in 2003/04 was 32%; that estimated by Quebec's Ministry of Finance was 37%. Thus, long-term trends can differ widely, depending on the data source.

The Financial Management System of Statistics Canada reports comparative data on the revenues and expenditures of provincial governments. These data include all government ministries, autonomous organizations, special funds, non-autonomous pension funds, universities, colleges and health care agencies. Thus, given Statistics Canada's analytical framework, all health care expenditures that stem from provincial health care policies, programs and delivery agencies are included. All provincial government revenues from what-

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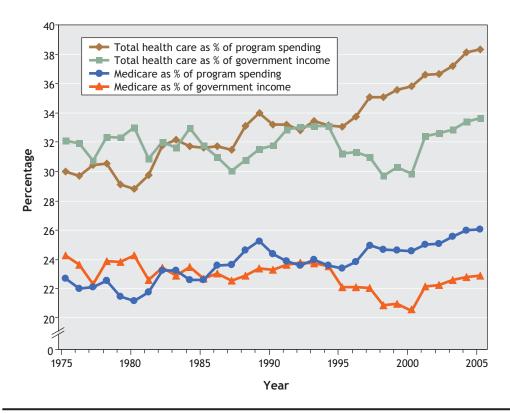


Figure 1: Medicare and total government health care expenditures in Quebec during fiscal years 1975–2006, as shares of program spending (government budgetary expenditures, less debt-servicing costs) and government income. Data points centre on fiscal years, which end on March 31. Sources: Ministère des Finances du Québec, 2006–2007 Budget Plan, Table 3.1.1; and Canadian Institute for Health Information, National Health Expenditure Trends, 1975–2006, Table B.4.4.

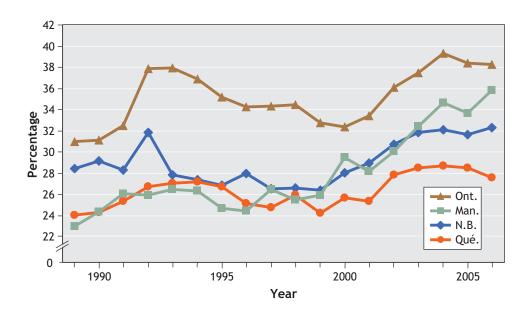


Figure 2: Trends in government spending on health care in Ontario, Manitoba, New Brunswick and Quebec, 1989–2006 (Financial Management System figures). Data on these provinces are from Statistics Canada, Table 385-0001: consolidated federal, provincial, territorial and local government revenue and expenditures, annual (2056 series). Available: http://cansim2.statcan.ca/cgi-win/cnsmcgi.exe?regtkt =&c2sub=&arrayid=3850001&c2db=&vec=&lang=e&sddsloc=&rootdir=cii/&resulttemplate=cii/cii_pick &array_pick=1&sddsid=&sddsdesc= (accessed July 5).

ever sources are also considered. These are the kinds of data needed to assess a government's financial commitment to health care in toto.

According to Financial Management System data for provincial and territorial government spending, health care spending for Quebec and Ontario over the 1990s was constant or declining relative to government income. Relative spending then increased in Ontario, only to slow down again, beginning in 2004. In Quebec and New Brunswick, rates of increase slowed from 2002. The trend in Manitoba has been rising since 1999. Comparison of data for Quebec (Figure 1 and Figure 2) shows important differences in trends as well as absolute values.

Conclusion

Accurate and agreed-upon definitions of government health care expenditure are needed in the assessment of trends. Both numerators and denominators must be selected in terms of the domains of health care being assessed. Medicare assessment requires medicare expenditure data in the numerator, and data on government total income from all sources in the denominator. Moreover, total governmental commitment to health care financing includes provincial, federal and municipal spending. The appropriate denominator here should be based on incomes from the 3 jurisdiction levels.

Statements by MacKinnon (that government health care spending in terms of income has increased in all jurisdictions)^{5,12} and by the *Ministère de la Santé et des Services sociaux* in the white paper on the Chaoulli judgment⁷ and Ménard report⁶ are not supported by the data. Neither is the argument¹³ that the problem is in the numerator (i.e., in government health care expenditures).

Clearly, different figures on government health care expenditure and their trends are obtained from different sources of data. There is a need for reliable and valid data on total government spending on health care, spending on medicare and total program spending, and government revenue. It can not be assumed that data from provincial ministries of finance, which were used by MacKinnon¹³ and the Ménard report,⁶ are appropriate for estimations of spending related to provincial health care policies.

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