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# A First Look at the Numbers

At some point, every discussion of the condition and future of Canada's health care system must look at numbers. Numbers on spending, on waiting times, on access to care, on utilization of services and international comparisons of a whole range of numbers, notably numbers which are supposed to reflect the quality of health care systems. Many of these looks turn out to be rather uninformative, usually because they fail to define their terms.

Consider, for example, infant mortality. We're all familiar with the fact that the United States has the highest infant mortality rate among the Organisation for Economic Co-operation and Development (OECD) countries, by a considerable margin (7.0 deaths per live birth in 2002 as compared to 5.2 for the UK and 5.4 for Canada according to the OECD's Health Data Base), but not as many people are aware that the infant mortality rate depends on how you count live births. The OECD makes the point that in some countries; very premature births (i.e. babies which have a very low probability of survival) are not counted as live births. When we look at perinatal mortality (defined in the OECD data base as deaths per 1,000 total births, meaning that it includes foetal deaths, and therefore is not sensitive to whether a birth is counted as live or not) the US in 2002 had a rate of 6.9, Canada 6.3, the UK 6.8, the Netherlands go from an infant mortality rate of 5.0 to a perinatal mortality rate of 7.6, and Ireland, which had an infant mortality rate of 5.1 per 1,000 live births, had a perinatal mortality rate of 9.0. Numbers are revealing only if you know what the numbers you're looking at actually mean.

This paper is the first of several Consensus group working papers that will try to clear up some of the confusion about health care numbers. In keeping with our desire to clarify the public versus private debate, we start by looking at the numbers on public and private spending in Canada. (We will look at those infant death figures in more detail in a later paper where we will discuss

*Members of the Canadian Health Care Consensus Group (CHCCG) have come together to provide a platform for bold, reasoned and practical plans for genuine reform of the health system and to demonstrate that there is an emerging consensus among reform-minded observers about the direction that real reform must take. The CHCCG, coordinated by the Atlantic Institute for Market Studies, includes medical practitioners, former health ministers, past presidents of the Canadian Medical Association and provincial medical and hospital associations, academics, and health care policy experts, all of whom are signatories to the Statement of Principles.*

*This paper is one of a series of discussion papers prepared for the CHCCG, which are intended to contribute to that new debate. These papers do not represent official positions of the Consensus Group, and are not themselves consensus documents, but rather are intended to act as starting points for debate, some of which will occur on the Consensus Group's website ([www.consensusgroup.ca](http://www.consensusgroup.ca)). The first few papers will deal with aspects of the "public" versus "private" debate, while later ones will consider other issues that were raised in the Consensus Group's first official document.*

comparisons of the performance of different countries' health care systems.)

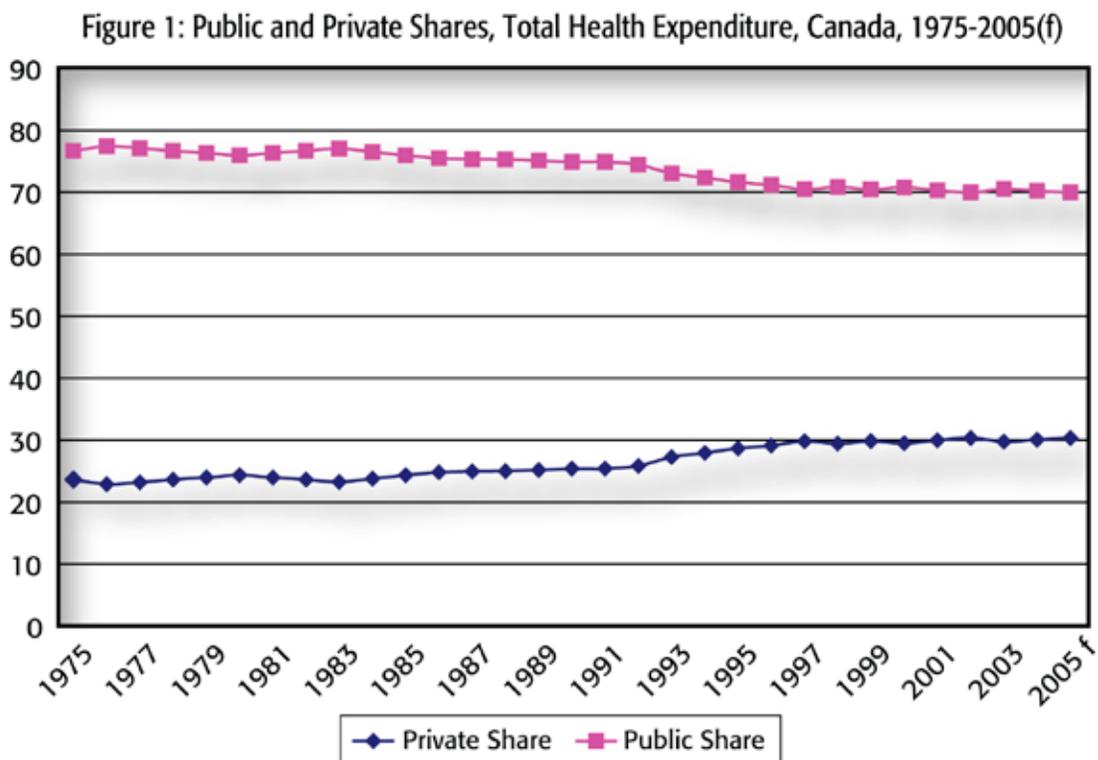
The first point to make in a discussion of data on public and private expenditure is that private and public can refer either to sources of health care funding or to the ownership of the suppliers of health care. The larger part of what gets measured as health care expenditure in Canada is publicly funded - the supply side is more difficult to characterize.

Ultimately, of course, financing and supply have to be considered in tandem, if only to make clear both the interaction and the distinction between them. To begin with, though, it doesn't hurt to consider them separately, and try to get a few definitions straight. This paper presents a few simple facts about financing, while companion papers look at issues surrounding public or private provision of care.

It's often stated that, back in the first few years of Medicare, really meaning the early to mid '70s, about one-third of health spending in Canada was privately funded; that in the next few years the share of private funding in total spending fell to the low twenties and that in recent years the private share has risen again to roughly the level it was when Medicare was brought in. Figure 1 shows the share of total health care spending paid for out of public and private funds from 1975 on.<sup>1</sup> (This assumes, of course, that we define tax-financed spending as coming from the public purse. One of the greatest barriers to reform of the Canadian health care system is the notion that the government pays for everything. In reality, governments take money from some private citizens and transfer it, either in cash or in kind, to other private citizens. Public policy debate would be much more fruitful if we were to ban all references to the government paying for care and recognize that Medicare is a mutually funded structure, and acknowledge that when we demand that the government pay for something we want, we are really demanding that it force our friends and neighbours to pay for that thing. We shall return to this point in a later paper.)

Figure 1 seems to support the view that private spending is somehow crowding out public

funding. One group of authors<sup>2</sup> referred to this appearance in the unfortunately emotive term "passive privatization." In fact, Figure 1 does nothing more than remind us that the shares have to add up to one. Suppose, for example, that we all decided to have cosmetic dentistry and to pay for it out of our own pockets. Obviously, private health spending would rise, since dentistry is included in measured health care spending in Canada. At the same time, even if no other elements of spending, public or private, changed by so

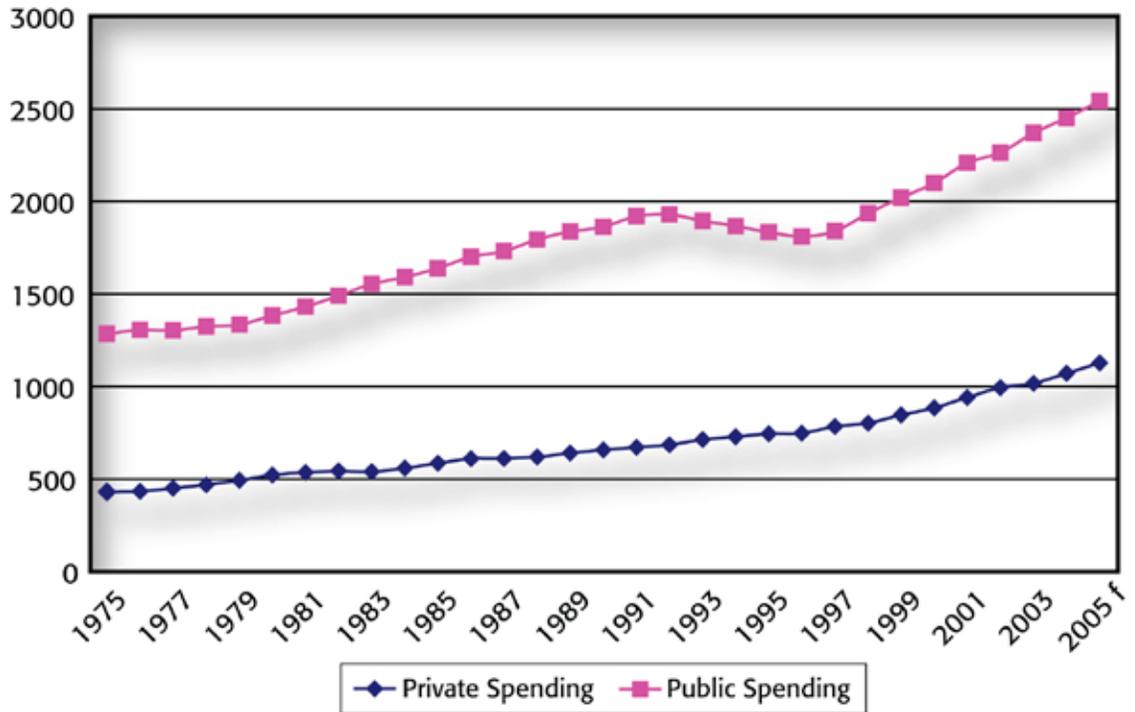


much as a penny, the share of public spending in total spending would fall. It's simple addition.

Figure 2 gives us a better handle on what's actually been happening to public and private spending. It shows real per capita public and private spending on all kinds of health care in Canada. The real, per capita bit means that the spending has been adjusted for population growth (since population growth will tend to cause the total level of health spending to rise) and for the general increase in the cost of living (since in inflationary periods everything costs more dollars, even if our incomes have gone up by exactly the same amount, meaning that really nothing has changed). The numbers haven't been adjusted for the increase in the cost of health care, just for the increase in the Consumer Price Index, so they shouldn't be taken as representing increases in quantity of health care services – even after the inflation adjustment they are expenditure series. The question of how increases in spending are distributed between increases in quantity of care and increases in the price of care is a separate issue.

One thing that's clear from Figure 2 is that what happened in the early '90s, the period when the private sector share of total funding took an upward step, was not a sudden acceleration in private spending – private spending continued to grow at exactly the same rate as it had been growing. What happened was an absolute cut in public spending. From about 1992 to 1996, real public per capita spending on health care declined steadily. That was, of course, the period

Figure 2: Private and Public Real Per Capita Spending Levels, Total Health Expenditure, Canada, 1975-2005(f)



when provincial governments were doing things like closing hospital beds<sup>3</sup> in order to bring spending under control. And the reason they did this was not because they were following some ideologically driven agenda, nor because the private sector was applying irresistible pressure. It was because the public health care spending of the '70s and '80s hadn't really been publicly funded at all - it had been borrowed,<sup>4</sup> and in the '90s the bills came due. Governments suddenly found themselves having to face up to two previous decades worth of health care costs, as well as to current costs, and no amount of fuming about guys in red suspenders in New York could change that fact. The drop in public spending on health care in the early '90s was strictly the result of the very casual approach that government had taken to the funding of our health care system in the two preceding decades.

Of course, comparisons of public and private spending at this level are themselves misleading, since they don't tell us anything about what the two sources of funding are spending money on.

And even when we get into more detail on spending, how you interpret what's been happening can depend very much on which figures you look at.

Consider, for example, Figures 3 and 4. They show the shares of public and private spending devoted to different components of health care – Figure 3 is public spending and Figure 4 is private spending. The first thing that's obvious from these figures is that the two sectors spend on very different items. Hospitals and physicians are the two big items in the public budget, while physicians are a pretty negligible item in the private budget and hospitals, while larger, are still not a dominant item. Hospital and physician care are the two types of care included in what we generally refer to as Medicare, and they are still predominantly publicly funded. Even in the case of hospital care, which does enter private spending, we're not looking at crowding out. That hospital spending is predominantly such things as privately funded spending on private or semi-private hospital rooms. Historically the big share item on the private side has been dental spending, although prescription drug spending has topped dental spending in the past few years. Figures 5 and 6 give us detail on the real per capita level of spending

Figure 3: Shares of Public Expenditure on Health, Canada, 1975-2005(f)

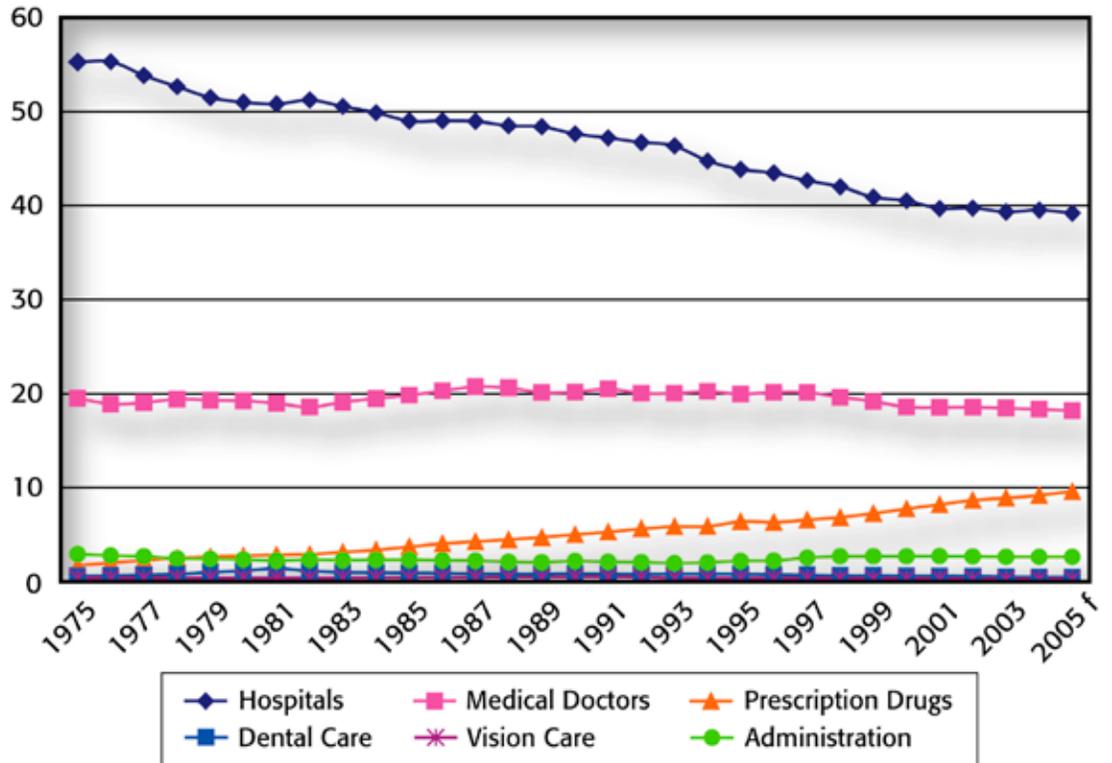
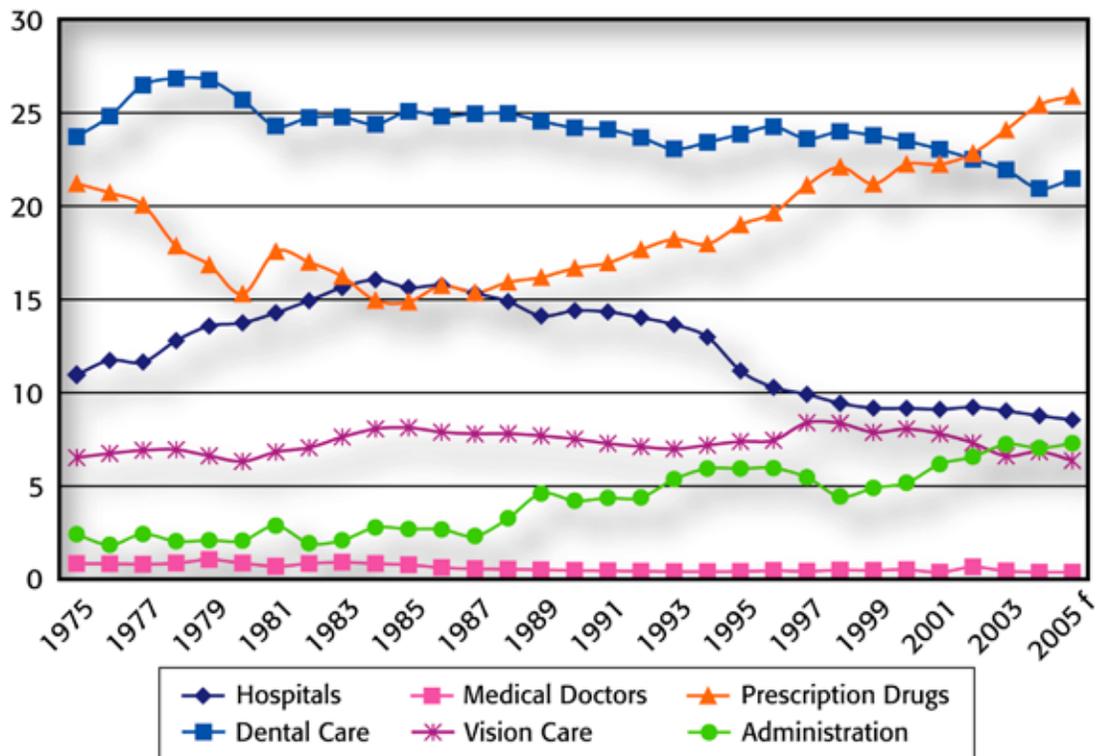


Figure 4: Shares of Total Private Expenditure on Health, Canada, 1975-2005(f)



underlying the shares in the previous two graphs, and again the picture that falls out of the levels figures is quite different from the one we might be tempted to read from the shares graphs. For example, in Figure 3, the share of public expenditure going to hospitals has been declining steadily since

1975. In Figure 5, though, we can see that while hospital spending has cycled around a fair bit, especially in that downturn in the early '90s, the general trend through the whole period has been up, not down. As for public spending on physician services, the share graph shows it taking up a pretty constant share of the public budget for health spending, while the levels graph shows a steady increase. In the private sector case, the share of dental spending has been drifting down, but the level has been increasing, and the slight U-shape in the share of private spending going to prescription drugs is the consequence of an initial flat spending level followed by an acceleration in more recent years.

We don't have room to go into it in detail here, but there is more to be gleaned from the prescription drug series. The public sector expenditure figure is in fact

Figure 5: Real Per Capita Public Expenditure on Health, Canada, 1975-2005(f)

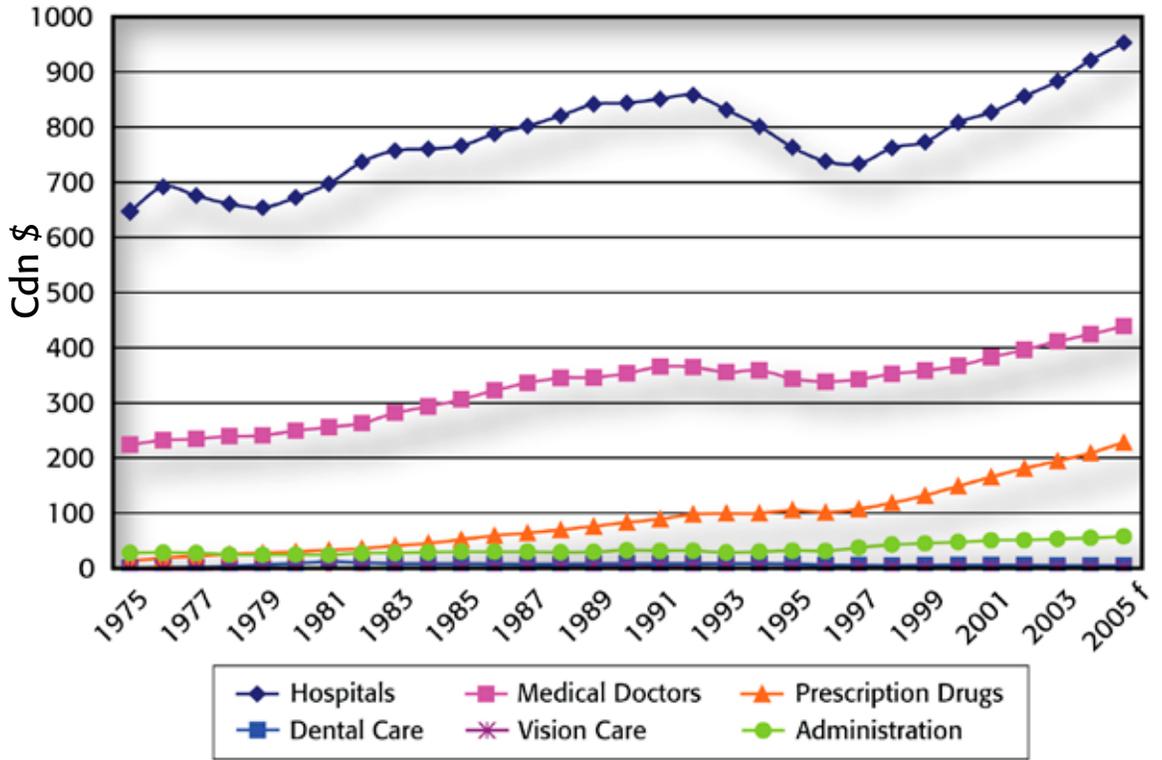
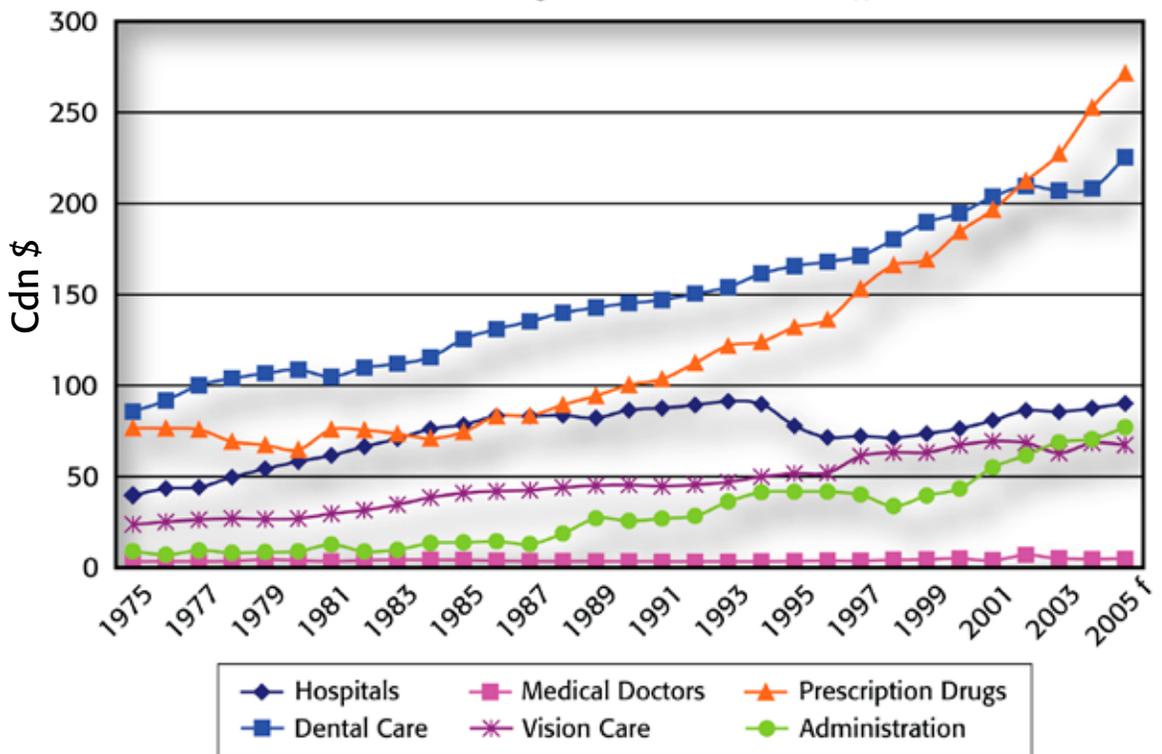


Figure 6: Real Per Capita Private Expenditure on Health Categories, Canada, 1975-2005(f)



an underestimate, since drug costs covered out of hospital budgets is included in hospital, not prescription drug, spending. One note – while most of the public debate on drug costs winds up focussing on the perfidy of drug companies driving the prices of drugs up, in Canada drug price indices have been pretty flat,<sup>6</sup> the increased expenditure has been primarily due to increased prescribing and switching to newer drugs.

There are other ways the public/private spending figures are looked at sometimes. For example, Figure 7 is an international comparison, with data drawn from the OECD Health Database,<sup>6</sup> of the share of total health spending that comes from private sources in eight OECD countries. Canada is pretty much in the middle of the pack with, as one would expect, the US at the top. More interesting, perhaps, is the Swiss series, which is well above the Canadian private share. Figure 8 shows another international comparison drawn from the OECD database, this time of public expenditure on health care per capita, converted from domestic currencies to US dollars using the GDP purchasing power parity price index. The series are grouped pretty tightly together (although this sort of statement can be misleading - how tightly together series like these are bunched on a graph depends in large part on the scales used on the axes). What's notable about this graph is the fact

Figure 7: Private Health Spending as Share of Total

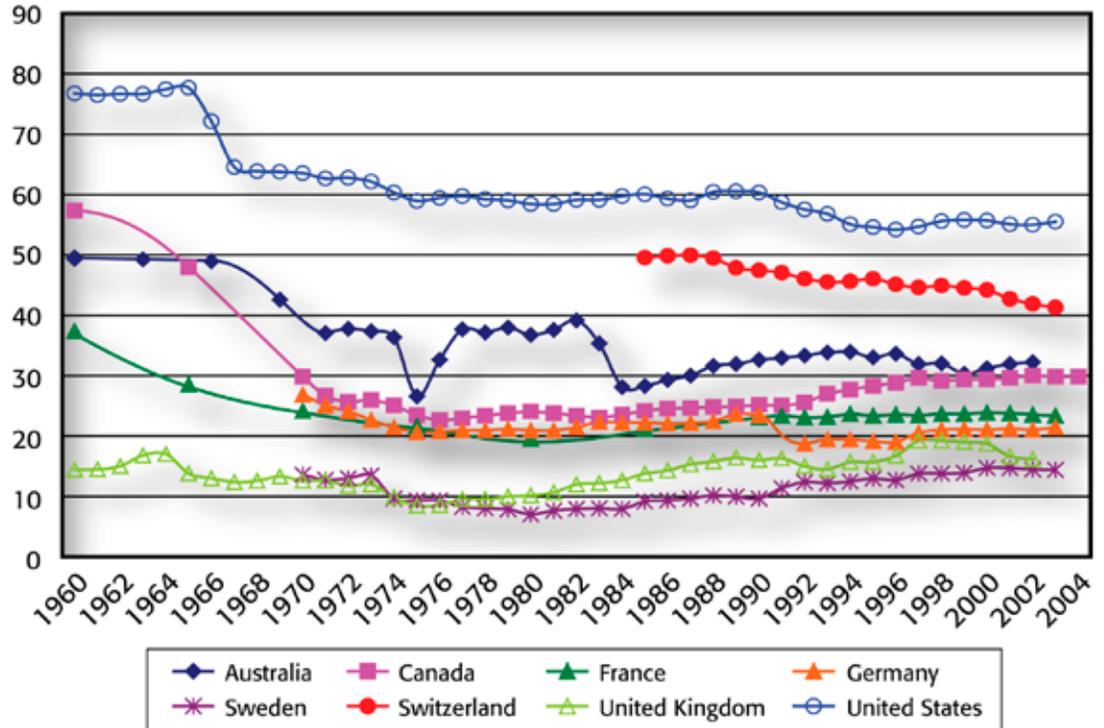
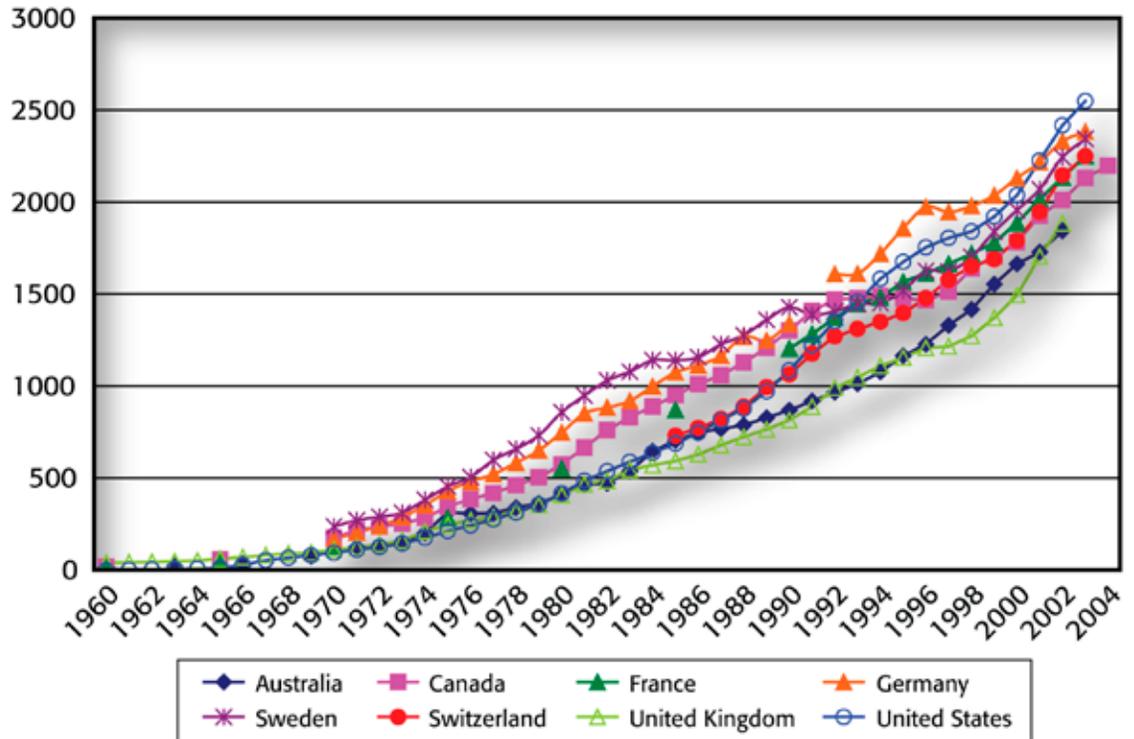


Figure 8: Public Spending On Health \$US(PPP)Per Capita



that in the last couple of years shown, the US figure is at the top of the series, meaning that the American government spent more per capita on health care than did any of the other countries. Note that this is per capita, not per beneficiary – we are not just looking at US spending on Medicare and Medicaid recipients here; the figure takes total publicly funded spending on health care and divides it by the total population. A favourite line of opponents of greater private sector involvement in health care is that in exchange for US tax levels (presumed lower than ours) we would wind up with US-type levels of public spending on health care. If those people ever actually looked at the numbers, instead of relying on their deeply held beliefs, they would realize that pointing to lower taxes and higher public spending on health per capita was perhaps not the best way to demonize the US system.

In short, most of the public-private spending debate in Canada is superficial, based on numbers that participants toss around but that they can't actually be bothered to look at in any detail. None of which is to say that Canada's public-private mix is perfect, of course.

The most obvious public-private funding issue that comes out of looking at these numbers deals with pharmaceuticals, which are not covered under Medicare unless they happen to be prescribed for a hospital in-patient, and for which public coverage under non-Canada Health Act programs varies dramatically from province to province. The fact that these drugs aren't covered under Medicare is a symptom of the ossified nature of our public funding system – they weren't included in public coverage back in 1968 because at that time drugs were a very small part of total health expenditure, mainly because there really weren't all that many drugs around and because, with the exception of antibiotics, there weren't that many drugs that could really do all that much for you. Certainly the “quality of life” drugs that we have today – drugs for the treatment of various forms of arthritis, for example – didn't exist when Medicare was being designed. Drugs were more likely to be part of the treatment for major illnesses, and since those major illnesses would almost certainly land you in hospital, covering hospital pharmacy costs out of public funds generally seemed sufficient.

Today, of course, the picture is quite different, and an increasing range of pharmaceuticals are not so much parts of a course of treatment in hospital as they are substitutes for in-patient treatment. Which raises another problem with the argument that substitution of private for public spending is bad – if increased private spending on pharmaceuticals kept people out of publicly funded hospitals, so that private spending went up, public spending went down, and health-related quality of life improved, would that be intrinsically a bad thing? Or if increased private pharmaceutical spending kept a significant number of individuals out of hospital and freed up beds for the treatment of sicker, more costly patients, so that hospital costs actually went up, would that be a bad thing? The superficial themes of the Canadian health care debate tend to die off pretty quickly when exposed to a bit of sunlight and thought.

The most serious misconception in the public-private funding debate as it has developed in Canada, though, is the view that anyone who favours a greater role for the private sector in the supply of care also favours a massive expansion of private funding, to the point of replicating the American system.

It's not safe to generalize too broadly, but it probably is safe to say that analysts who favour more room for individual initiative and enterprise on the supply side of the health care system range, in their views of financing issues, from wanting to expand public funding by bringing prescription drugs under the Medicare umbrella to wanting to permit parallel private financing on the model of France, the UK, and a whole range of other countries.<sup>7</sup>

It's probably also safe to say that there would be broad agreement among them that we have to

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take a long look at what's covered under Medicare and what should be left to private resources. Canada's not the only jurisdiction facing this question. Canadians are most likely to have heard of the Oregon experiment, but the Dutch considered this issue as part of the Dekker reforms in the late 1980s, and Britain's Institute for Public Policy Research (self-described as the UK's leading progressive think tank) published a monograph a few years ago considering, as the title put it, "What business the NHS should be in."<sup>8</sup> (Julia Witt has reviewed issues related to this question in an AIMS monograph entitled "How Should We Decide What To Cover Under Medicare?"<sup>9</sup>)

It's fairly safe to say that those analysts also don't support the establishment of monopoly in health care, either public or private, especially on the supply side, although on the financing side, even those who lean towards, if not single payer, at least a dominant public funder, are likely to object to the use of the power of a monopoly funder to stifle innovation in care.

More importantly, though, most analysis who favour greater supply side flexibility under Medicare probably also favour greater flexibility in the system as a whole, to ensure that a reformed system can adapt to new circumstances as they arise, especially with regard to unexpected things like dramatic changes in health technology. Far too many of the problems that preoccupy health planners today are unnecessary consequences of a system that, while innovative in its day, has been locked into inflexibility by policy makers who place preserving the form of Medicare ahead of preserving its function.

In this paper, then, we have tried to show that most of what has been said in public debate about public and private spending on health care in Canada is, at best, misleading. That's certainly true of arguments based on the relative shares of public and private spending in total Canadian health care spending. Contrary to what's often implied, an increase in the private sector share doesn't mean that the public sector's share is being eroded, it just means that spending on aspects of care that are not paid for out of the public purse is growing faster than is spending on publicly funded items. That by itself tells us absolutely nothing about whether public spending is too high, too low or just right.

It also doesn't tell us anything about causality, contrary to what's sometimes asserted in the literature. When you do the analysis properly, international evidence to this point does not support the view that increases in private sector spending have any particular effect on the level of public sector spending, unless (as in the Australian and, more recently, Dutch cases) governments have been making deliberate efforts to make some spending decisions much more the responsibility of private individuals. Not too long ago the government of Ontario removed from the list of Medicare-covered services regular eye exams for certain age groups in the population. That would have caused private spending to increase and public spending to fall, but the causality would have run not from private to public but from public to private.

Public sector spending is determined not by the level of private sector spending but by the imperatives of the government budget. When budgets are flush, governments spend. When the tax money isn't coming in they might, for a while, try to maintain program spending by borrowing, but as our federal and provincial governments discovered in the 1970s and '80s, that's a short-term expedient. Eventually the bills have to be paid. It's hardly headline news to say that government-funded programs go through cycles of feast and famine, and it's also no real stretch to suggest that when famine hits, cuts tend to be made in a manner that takes very little account of how the more vulnerable segments of the relevant population will be affected. What we need to be concerned about is not what percentage of total health care spending is labelled public and what private. What we need to be concerned about is how we can build a health care system whose most critical elements have some reasonable degree of protection from swings in the public treasury's fortunes. As we'll argue in a later paper, one of the first steps in making our

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universal health care system stable, so that we can count on its being there when we need it, is to take control of large parts of spending out of the hands of politicians.

That, however, is an argument for a later paper in this series. This paper has really been by way of introduction to a few issues, and hopefully has given a bit of suggestion as to what the flavour of later papers will be. If there's one message that should be taken away from this paper it's that the state of the Canadian health care debate is such that all statements about numbers should be scrutinized very carefully. Unfortunately, much of the math that appears in Canadian health policy debate is badly done. Fortunately, none of the math's really hard. These days, the first question for anyone who wants to take that debate seriously has to be: do the numbers really mean what they're said to mean?

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## Endnotes

1. The data for most of the figures in this paper come from publications of the Canadian Institute for Health Information
2. Carolyn Hughes Tuohy, Colleen M. Flood and Mark Stabile (2004): How Does Private Finance Affect Public Health Care Systems? Marshaling the Evidence from OECD Nations. *Journal of Health Politics, Policy and Law*, 29(3):359-396
3. Canadian Institute for Health Information (2005): *Hospital Trends in Canada*, ISBN 1-55392-599-8 (PDF), online at [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=PG\\_374\\_E&cw\\_topic=374&cw\\_rel=AR\\_1215\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_374_E&cw_topic=374&cw_rel=AR_1215_E)
4. See Brian Ferguson (2002): *Expenditure on Medical Care in Canada: Looking at the numbers*. AIMS, online at <http://www.aims.ca/healthcare.asp?typeID=1&id=161&fd=0&p=1>
5. Canadian Institute for Health Information (2005): *Drug Expenditure in Canada 1985 to 2004*, ISBN 1-55392-596-3 (PDF) online at [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=PG\\_375\\_E&cw\\_topic=375&cw\\_rel=AR\\_80\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_375_E&cw_topic=375&cw_rel=AR_80_E)
6. Details of the 2005 release of the OECD Health database are available online at [http://www.oecd.org/document/30/0,2340,en\\_2649\\_37407\\_12968734\\_1\\_1\\_1\\_37407,00.html](http://www.oecd.org/document/30/0,2340,en_2649_37407_12968734_1_1_1_37407,00.html)
7. OECD Health Working Papers looking at private health insurance in a number of countries that also have comprehensive national health insurance programs of various sorts can be found online at [http://www.oecd.org/document/25/0,2340,en\\_2649\\_37407\\_2380441\\_1\\_1\\_1\\_37407,00.html](http://www.oecd.org/document/25/0,2340,en_2649_37407_2380441_1_1_1_37407,00.html)
8. Bill New (2000): *What Business is the NHS In?* Institute for Public Policy Research, London, details online at <http://www.ippr.org.uk/publicationsandreports/publication.asp?id=116>
9. Julia Witt: *How Should We Decide What to Cover Under Medicare?*, available online at <http://www.aims.ca/healthcare.asp?typeID=1&id=165&fd=0&p=1>