Health Spending in Saskatchewan: Recent Trends, Future Options

Mr. Daniel Hickey
SIPP Government of Saskatchewan Senior Fellow
2005-06

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Mr. Dan Hickey, the 2005-06 Government of Saskatchewan Senior Fellow, examines the facts of provincial health spending and financing in an effort to better understand current and future policy challenges for Saskatchewan. Mr. Hickey's time at SIPP was cut short as he assumed a new position in health care administration in the Province of New Brunswick in 2005. Despite leaving the one-year appointment early to take advantage of this new opportunity, Mr. Hickey submitted his research findings and we are pleased to publish it and make it available to the policy community.

Mr. Ian Peach
Director, Saskatchewan Institute of Public Policy

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Overview

> *…[A]s currently structured, Canada's publicly funded health care system is not financially sustainable. Accordingly, there is a need to undertake major reform in the way physician and hospital services are funded in order to preserve and enhance the publicly funded health care system.…*
> M. Kirby, The Health of Canadians: The Federal Role, Final Report.

Although popular, discussions centring on the sustainability of our publicly funded, universally accessible health system are, in one sense, not particularly helpful to the current health policy discussion in that the debate presumes the existence of an explicit or generally understood financial threshold beyond which the system is not able to be maintained on a permanent basis.

No such threshold is commonly acknowledged, or routinely cited, and jurisdictions may – as has been the pattern and practice over the last thirty years – allocate an ever increasing share of their collective resources to supporting the health sector, thereby rendering the question of the sustainability of the health system to some extent moot, if not confusing to the general public.

On the other hand, the discussion of sustainability is beneficial in that it focuses our attention on the phenomena of escalating health costs, and the implicit trade-offs made – and to be made – in the funding of health care rather than other worthwhile social endeavours. This is in fact the premise underlying much of the sustainability debate, that is, the costs of health care are at present substantial and increasing at a significant rate such that the situation will be detrimental to the maintenance of other important sectors of society (education, public infrastructure, economic development, social services) at some imminent or future date.

The debate is further complicated by the fact that due to the nature and structure of our existing system, we do not collectively and deliberately choose our consumption level of health care – in many ways and instances, it merely occurs. Thus, from a larger public policy perspective, the implications of and alternatives to increased health spending are not well defined or widely understood, and the opportunity for public discussion limited.

While the sustainability debate then involves a broader and somewhat more subjective discussion (i.e. to what extent is health spending precluding the proper development of other valued public endeavours), an appeal to the *facts* of provincial health spending and financing is of assistance in better understanding the current and future policy challenges facing Saskatchewan. The summary conclusions may be presented as follows:

- Contrary to claims of funding reductions, provincial expenditures on health services and products have increased by substantial amounts over an extended period of time.

- More specifically, health spending has increased over the last thirty years in both absolute and relative terms, exceeding growth in the provincial economy, population, inflation and general government revenues, and has contributed to higher provincial deficits and debt.
- Within this historical trend of rising provincial expenditures, three distinct periods of provincial spending are evident – escalating costs (1975 to 1990), spending restraint (1990 to 1996) and renewed expenditures (1996 onwards). Despite various attempts at system reform during the period, health spending has proven largely resistive to provincial efforts to reduce growth on a permanent basis or long-term basis. And while additional health spending has provided for higher overall service levels, system pressures (e.g. accessibility) continue to exist and persist.
- Although provincial spending in all major health programs has increased, Saskatchewan ranks at present among the lower category of provinces in terms of share of overall resources (gross domestic product) spent on health care. Further, the proportion of costs borne by the private sector (individuals and private firms) has declined marginally and is lower in Saskatchewan than most other jurisdictions.
- In contrast, health spending represents an increasing demand on the public purse, growing as a portion of total government revenue and operating expenditure. The trend of rising health spending as a share of provincial government revenues merits particular attention and, in select areas, the majority of recent incremental spending has been for fee and compensation increases.
- Notwithstanding the substantial increases in provincial government health expenditures, Saskatchewan spends less on a per capita basis than most other jurisdictions. Further, and based on the existing health system structure and delivery system, health costs are expected to increase over the next twenty years and future financing will present a challenge for Saskatchewan, and other provinces, to manage.
- In considering future financing, health use and need is not uniform, and is concentrated among a relatively small portion of the population. The uneven distribution of need is the essential rub of health financing – how best to provide funding to an expensive (and increasingly costly) system under a third party arrangement having in which the risk of illness, and the use of services, is not equally shared but focused among relatively less advantaged individuals and groups.
- The methods of financing are however limited and few in number, and differ by the extent to which health use – and costs – are distributed across our population. But because health use (and need) is not homogeneous, changes in the funding mechanism will be beneficial to some, and detrimental to others.

This paper will examine the two related issues of health expenditure trends and available financing options. The material is divided into five main parts. The first section assesses total (public and private sector) health spending over the 1975 to

2004 period using three standards or measurements – as a share of provincial gross domestic product, as measured in current (prevailing) prices, and as measured in constant (inflation adjusted) dollars.

The second section examines changes in the mix of provincial spending between public (government and government agencies) and private (individuals and private firms) sources, while the third part of the paper analyzes developments in provincial government expenditures. Population projections, and the anticipated effects of population changes on future health spending, are the focus of the fourth section, and an examination of health financing options – and their public policy implications – is presented in the final portion of the paper.

Total Health Expenditures

> *A sound understanding of the Health System's finances is important to an informed debate about the issues facing the Health System. Those issues pertain to the affordability of programs and services, and the maintenance of Saskatchewan's health care infrastructure….*
> Provincial Auditor Saskatchewan, 2002 Fall Report – Volume 2.

Total health expenditures (spending by public and private sources[1]) in Saskatchewan have increased dramatically and significantly over time, as it has in other provinces and in industrialized countries. Rising costs have in turn prompted questions of, and uncertainty regarding, the long-term sustainability of our current universally accessible, publicly funded health system.

The timing and magnitude of provincial spending changes may be assessed by the use of three general economic measures – total spending as a share of provincial gross domestic product (the total value of goods and services produced in a given year), health spending as presented in nominal (or current) dollars and expenditures as measured in constant (or inflation adjusted) dollars.

Each measure provides us with a slightly different, but complementary, view of changes in provincial spending on health services and products. Gross domestic product (G.D.P.) reflects the size of the provincial economy, and reference to total health spending as a proportion of G.D.P. indicates the share of our collective resources being directed to health care. Nominal (current) health expenditures describe the actual dollars spent on health care in a given period and are the standard most commonly referenced and used by the general public. And as increased expenditure on health care is in part the result of general price inflation, constant (real) health expenditures adjusts for price changes and indicates spending changes due to variations in the level and volume of services provided to provincial residents.

In analyzing expenditure information, an extended time span (1975 to 2004) is selected as the review period. Trends evident in shorter, or more recent, time periods (five to ten years) may not be fully indicative of long term directions in health spending. For this reason, a review period of approximately thirty years is used whenever possible and permitted by data sources.

Gross Domestic Product

> *Historically, there has been a powerful and direct relationship between increasing health care spending and the overall growth in the economy, with costs for health care services increasing slightly more than increases in the nation's wealth.*
>
> R. Romanow, Commission on the Future of Health Care in Canada.

Gross domestic product is a measure commonly used in examining health expenditure developments and the related question of health sustainability – the rationale underlying the analysis is if health spending outpaces the rate of economic growth, and as a result an ever increasing and large share of our collective resources are committed to health care, the economy may not be able to support this expenditure level on a permanent basis.

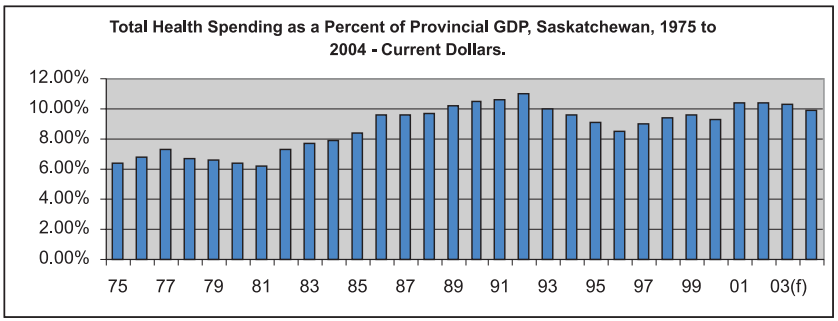
Despite the weakness inherent in the proposal (no explicit expenditure level is commonly acknowledged beyond which the system is unable to be maintained, and society – should it so choose – may simply direct additional resources as a priority consideration to health care from other areas, thereby addressing or avoiding the question of sustainability), reference to G.D.P is a useful yardstick to measure developments in provincial health expenditures.

In considering provincial G.D.P. and health expenditures, three trends are evident. First, combined expenditures by provincial public and private sectors on health services (total health expenditures) tend to follow changes in the provincial economy – increasing during times of economic growth, and slowing or contracting during recessionary conditions.

The relationship between spending and income is discussed later in this paper (see *National and provincial reviews*). However, it is suggested here that this connection is in part attributable to the major role played by the provincial government sector in health spending[2], and the relatively high priority attached by provincial administrations and the general public to supporting the health sector. Thus, as public revenues increase due to an expanding economy, a portion is directed to health care as the program area of largest government expenditure. Conversely, when economic growth and public revenues decrease, health funding is effected, but not necessarily in a proportionate manner.

The relationship between economic growth and health expenditure is however not a perfect one. As noted by Brimacombe, there is no one-to-one relationship between economic growth and revenues accruing to governments, and thereby public monies available for expenditure on health or other social programs (Brimacombe et al. 2001, 5). Further, and during much of the 1980's, government operating spending was supported not purely by economic growth and corresponding public revenues, but in part by a succession of budget deficits and growing government debt. As a result, the magnitude and timing of changes in total health spending and G.D.P. are not identical, and certain lags and discrepancies occur, but the general patterns of development are similar and related.

In terms of the second G.D.P. related trend, it is noted that total spending on health care is increasing at a rate faster than economic growth and, as a result, is consuming a larger share of our overall provincial resources. As illustrated in the graph on the next page, total health spending as a percentage of G.D.P. has increased from 6.4 percent in 1975 to 10.4 percent in 2002 (an increase of 4 percentage points).



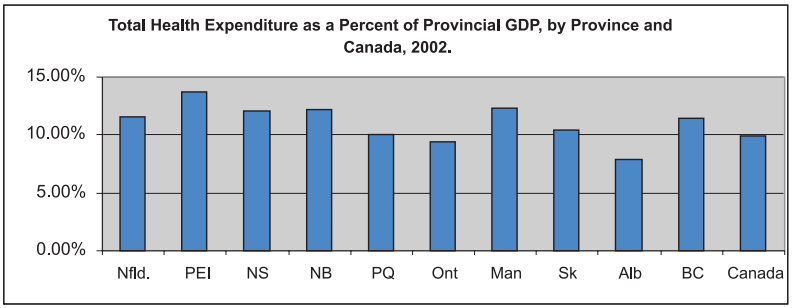
Source: Saskatchewan Bureau of Statistics (2005), and CIHI (2004)

The growth in health spending as a share of G.D.P. is not uniform, and fluctuations in the proportion are observed throughout the review period. Health spending as a share of G.D.P. spiked during the six year period of 1988 to 1993 (peaking at 11 percent in 1992), declined precipitously thereafter and increased again in recent years (1996 onwards). Because this particular measure incorporates changes in two factors (health spending, and G.D.P.), the variations are attributable to differing growth rates in the numerator (health spending) as well as the denominator (G.D.P.). The matter of health spending changes is discussed further in the two sections below (see *Current health expenditures*, and *Constant health expenditures*).

Because health spending at present represents a somewhat smaller portion of G.D.P. than in prior years, one may argue the health system is therefore able to be maintained for the immediate future by the provincial economy. This ignores two points. First, the expenditure levels serving as the basis for comparison (1988 to 1993) were provided for in part by provincial government budget deficits and growing government debt. In short, current spending was supported by future debt and created a liability for later Saskatchewan residents. Second, given the imperfect relationship between economic growth and government revenues, what may appear manageable from the perspective of G.D.P. (health spending as 10 percent of provincial income) presents far greater challenges in terms of public financing (health costs constituting 41 percent of government program spending). The issue of provincial government health expenditures is examined later in the paper (see *Government Expenditures*).

Finally, while health spending as a share of the provincial economy has increased, Saskatchewan has apparent additional fiscal capacity – in comparison with most other provinces – to accommodate additional health expenditures. Based on 2002 data, Saskatchewan ranks in the lower grouping of provinces with respect to the share of G.D.P. directed to health care (graph on next page) – Prince Edward Island and Manitoba devote the highest portion of their overall economic resources to

health care (13.7 percent and 12.3 percent respectively), while Alberta and Ontario devote the lowest (7.9 percent and 9.4 percent respectively). This comparison should be used with a certain degree of caution and qualification as the ranking is, in part, attributable to differences in the relative size of the respective provincial economies, and other factors (e.g. infrastructure costs and economies of scale in larger provinces, population distribution, etc.).



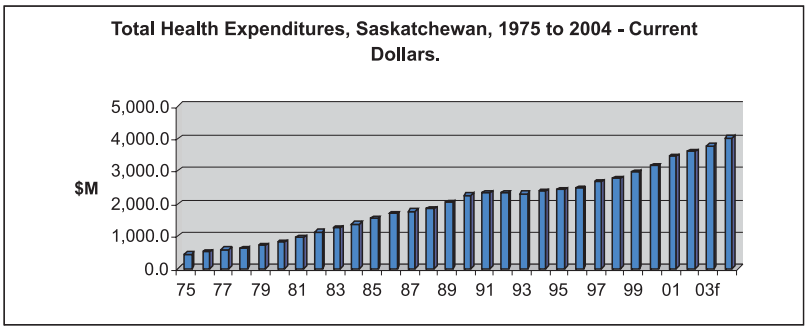
Source: CIHI (2004)

Current Health Expenditures

> *What is needed to fix the problem (of waiting times) is not an influx of privatized health care…but merely for the government to return our health-care system to a realistic level of funding.*
> Letters to the Editor, Regina Leader Post, June 2005.

Newspaper headings regularly suggest the health system is in a state of crisis, and much of the problem is attributed to reductions or cutbacks in health funding. The customary yardstick used in this particular discussion is annual changes in current expenditures for select, or recent, periods of time. However, using a longer and more continuous time period as the basis for comparison, the actual situation is shown to be quite different.

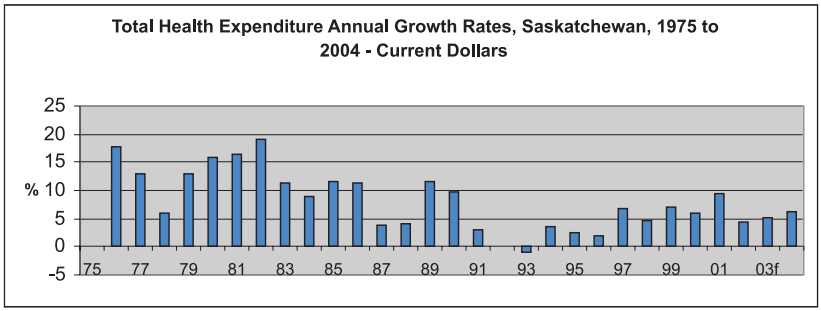
Over the period 1975 to 2002 and based on Canadian Institute for Health Information (CIHI) data[3], total expenditures by provincial public and private sources on health services and products (as measured in current dollars[4]) increased from $441.2 million to $3,592.5 million, for an average annual increase of 8.2 percent. Total health spend-



Source: CIHI, 2004

ing is expected to increase to $3.8 billion (an increase of 5.2 percent) and $4.0 billion (an increase of 6.3 percent) in 2003 and 2004 respectively (graph on previous page).

From a historical perspective then, and contrary to occasional public claims, provincial health spending has not decreased but rather has increased by a substantive amount on a regular basis over an extended period of time. Within this general trend of rising provincial expenditures, three periods with distinctive patterns of health spending may be observed (graph below):



Source: CIHI, 2004

- *Escalating costs (1975 to 1990)*: The fifteen year period is characterized by substantial and regular increases in health spending, with ten of the fifteen years reporting increases in excess of 10 percent. In comparison to the historical growth rate of 8.2 percent, the average annual percentage increase in health spending for the period was 11.6 percent (3.4 percentage points higher).

  This pattern of escalating health costs occurred amidst rather tumultuous conditions in the Saskatchewan economy – as noted by the various budget addresses for the period, high interest rates, high inflation, restricted economic growth, declining federal transfers and the emergence of government deficits were major factors affecting the provincial economy during this time. The issue of price inflation was a significant consideration, and much of the increased health spending for the period is in fact attributable to general inflationary pressures (see *Constant health expenditures*).

  Notable areas of incremental public expenditure during this particular period included the establishment of new provincial programs (prescription drug plan, children's dental care, aids to independent living, hearing aid plan), investment in capital facilities (construction and renovation of facilities in a number of communities, major regeneration projects in tertiary centres) and program operating expenses increases (hospital and medical services, long term care).

- *Spending restraint (1990 to 1996)*: In contrast to the high annual growth rate in the previous period of 11.6 percent, total health expenditures declined dramatically to an annual rate of 1.7 percent over the following six year term.

This development was largely the result of decreased public sector expenditures due to provincial government efforts to address problems of growing deficits and debt by curtailing funding to health and other social programs. Specific initiatives undertaken in the health sector as part of the restraint measures included public wage mandates for collective agreements, reduced program operating grants, hospital closures (particularly in rural areas), facility consolidations, reform of health delivery system, termination of certain provincial programs (children's dental care) and reductions in benefit coverage (prescription drug plan, optometric and chiropractic services).

- *Renewed spending (1996 to 2002)*: In recent years, provincial health spending has resumed its upward trajectory, albeit at a reduced rate from that of the 1975 to 1990 term. For the period 1996 to 2002, spending by the private and public sectors on health services and products increased by an average annual rate of 6.3 percent, with increases ranging from a low of 4.4 percent in 2002 to a high of 9.4 percent in 2001. Increases of 5.2 percent and 6.3 percent are forecasted for 2003 and 2004 respectively.

  The trend since 1996 has been described by sources as due to 'reinvestment' by governments in health care following the period of fiscal restraint in the early and mid-1990's. However, the term is somewhat misleading as it implies that some of this 'reinvestment' has been directed towards the re-establishment of programs and benefit coverage affected by earlier budget reductions. This has not occurred, and the additional resources have been spent on select areas within the residual health programs and services.

Constant Health Expenditures

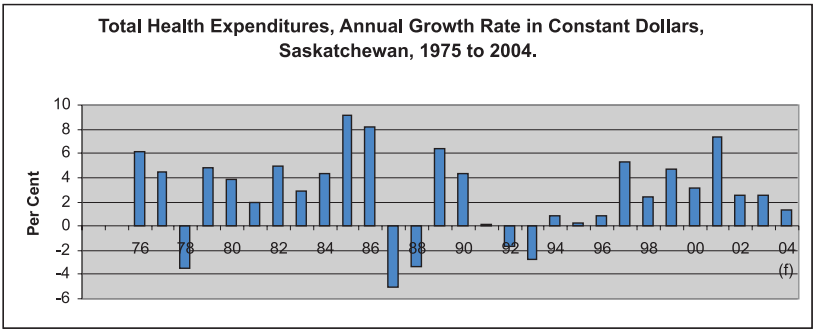
> *Health care now accounts for forty-four percent of our operating expenditures. The increased funding exceeds the growth of our economy and the rate of inflation.*
> H. Van Mulligan, 2004-05 Saskatchewan Budget Address.

As suggested by the quote, analyzing health spending relative to changes in inflation is another common measure by which to gauge the progress of health spending. The comparison allows the reader to discern whether health spending has kept pace with, or exceeded, general price increases.

The common interpretation of the measure is that if health spending falls below inflation, health programs may be in jeopardy because health spending is not keeping pace with price increases affecting the sector. Conversely, if health spending exceeds inflation, sources view the finding as a further indication of the unsustainable nature of the health system because expenditures are surpassing increases in the general cost of living.

In addition, by holding constant the costs of health services and products, real expenditure data indicate variations in health spending due to changes in the level and volume of health services provided to provincial residents.

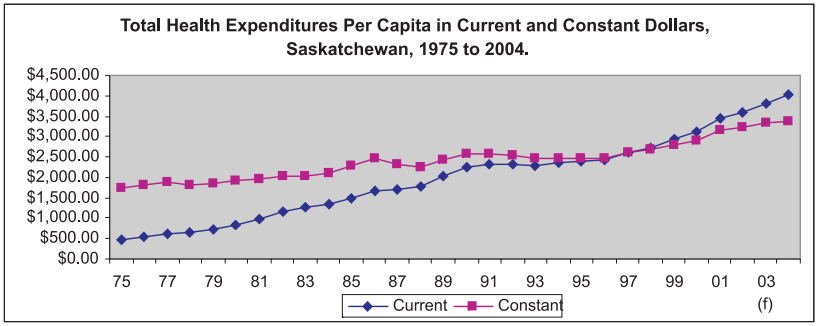
As noted earlier, and when measured in current dollars, total provincial health expenditures increased in each and every year during the 1975 to 2002 period. However, when price changes are taken into account[5], the level of provincial expenditures actually declined in five of the twenty-two years (graph below). Compared to the nominal annual growth rate of 8.2 percent, real (net of inflation) expenditures on health services and products increased by an average annual rate of 2.7 percent over the review period. Notwithstanding the difference in growth rates between the two measures, health spending in Saskatchewan increased in real terms (net of inflation) over the review period, with the same three distinctive periods of provincial health spending evident using constant dollars as a measure of health spending as revealed earlier through use of current dollars.



Source: CIHI (2004)

Our constant expenditure analysis may be refined further by taking into consideration changes in the size of the provincial population. Health expenditures are affected by the size, and composition, of the population served by the health system. Real per capita health expenditure is then a useful standard for assessing expenditure developments as it holds constant the effects of two factors (population size, and inflation) on health spending.

Using this particular measure, total per capita health expenditures increased from $1,743 in 1975 to $3,237 in 2002, reflecting an average annual increase of 2.4 percent over the twenty-seven year period. As the provincial population increased slightly during the review period (increasing by approximately 83,000 individuals or 9 percent), the real per capita growth rate is similar to, but somewhat lower than, the real annual average annual increase (2.7 percent). Regardless of the choice of measurement (current or constant per capita expenditures), health spending exhibits a strong upward trajectory over the review period (graph next page).



Source: CIHI (2004)

Changes in the real per capita health expenditure levels (average annual increase of 2.4 percent) also suggest that, at the aggregate level, the volume of health services in Saskatchewan has increased by a considerable amount over the twenty-seven year period. More specifically, the fact that health spending has exceeded changes in both inflation (wages) and population indicates incremental resources have been directed towards funding increases in the level and volume of services provided to provincial residents. Trend data for major individual programs (medical services, prescription drugs), and previous provincial utilization studies (Gormley 1990), substantiates this observation of increased service levels.

Higher service levels may also result from health sector productivity improvements and gains. Available data, and research, does not describe the relative contribution of each factor (increased spending, productivity improvements) to overall service levels. However, contrary to occasional public claims of reduced health services, expenditure data and other sources suggest that provincial health services have expanded at a fairly constant and substantial rate over an extended period of time.

Public and Private Sector Expenditures

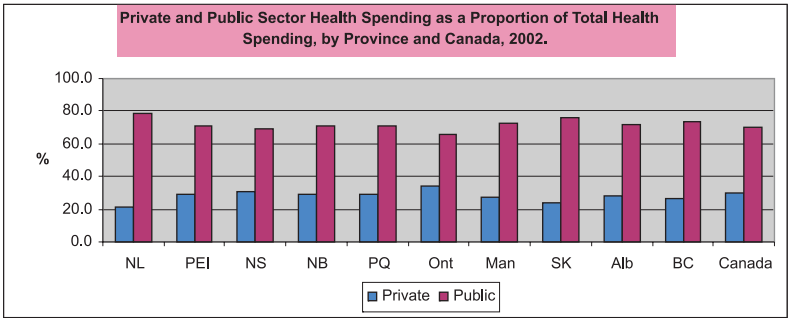
> *If we depend only on provincial and federal general revenues to support health care, we have few options other than rationing services. But if we're prepared to open up other sources of revenue, we have an opportunity to improve access, expand health care services, and realize the potential of new techniques and treatments.*
> D. Mazankowski, Report of the Alberta Premier's Advisory Council on Health.

The health system is financed by both the public (government and government agencies) and private (individuals and firms) sectors[6], with much of the current health debate focusing on the feasibility and advisability of increasing private sector involvement and participation.

While health expenditures in Saskatchewan have increased dramatically, the proportion borne by the two sectors has remained surprisingly unchanged. This stands in marked contrast to developments at the national level, and in other provinces, where the private sector represents a growing share of overall health spending.

In 1975, health expenditures in Saskatchewan by private sources amounted to $112.6 million (25.5 percent of overall expenditures), with spending by public agencies totalling $328.6 million (74.5 percent of total expenditures). By 2002, spending by private sources had increased to $874 million (24.3 percent of overall expenditures), while public spending had grown to $2,718.4 million (75.7 percent of total expenditures).

As a result, the proportion of provincial health spending supported by individuals and private firms actually declined during the review period, albeit by a relatively small amount (1.2 percent). In contrast to Saskatchewan, the trend among other provinces is for the private sector to represent a larger, and generally increasing, share of overall spending. At present, Saskatchewan is second only to Newfoundland in terms of the relatively high share of health spending maintained and supported by public agencies (graph below).



Source: CIHI (2004)

In addition, while all major programs experienced spending increases of some magnitude during the review period, drug costs were the fastest growing area of provincial expenditure. Spending on prescription and non-prescription drugs constitutes the second largest category of health expenditures, exceeding provincial spending on physician services and long term care (table below).

Total Health Expenditures by Use of Funds, Saskatchewan, 1975 and 2002 - Current Dollars

	1975		2002	
	($'000,000)	(%)	($'000,000)	(%)
Hospitals	190.5	43.2	1014.2	28.2
Other institutions	51.3	11.6	474.3	13.2
Physicians	55	12.5	448.6	12.5
Other professionals	35.9	8.1	338.1	9.4
Drugs	35.5	8	511.8	14.2
Capital	23.3	5.3	110.2	3.1
Public health & administration	29.2	6.6	335.4	9.3
Other spending	20.4	4.6	359.9	10
Total	441.2	100	3592.5	100

Source: CIHI (2004)

Government Expenditures

> *The biggest single public-policy challenge faced by provincial governments is how to slow down the increase in health-care spending that is ravaging their budgets. None know how.*
> J. Simpson, Globe and Mail, June 2005.

Traditionally, provincial government budget documents speak of health expenditures in terms of changes in current funding levels or as a share of overall operating spending. In Saskatchewan, the General Revenue Fund (G.R.F.) is the source of provincial funds for public services, and the total government spending on health services is identified as a percentage of G.R.F. disbursements.

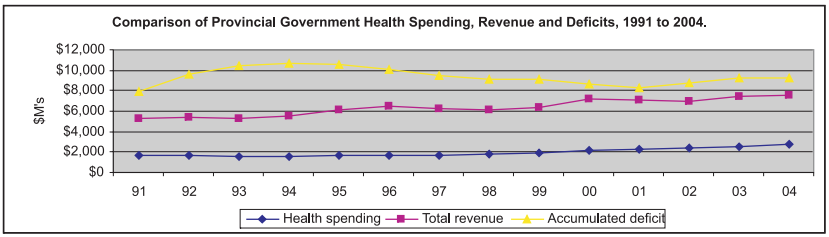
This practice has certain limitations as a substantial amount of government financial activity occurs outside of the G.R.F. (e.g. transactions involving other funds, Crown corporations, agencies, boards and commissions). Consequently, focusing on health spending as a proportion of the G.R.F. tends to overstate the impact of health's claim on the public purse.

As an alternative approach, sources such as the Provincial Auditor propose the use of a more complete set of financial statements (the Summary Financial Statements[7]) for analyzing government operations. However, as both standards are frequently referred to in the health policy debate, this paper will use both the Summary Financial Statements and the General Revenue Fund as sources for assessing developments in government sector health spending.

Summary Financial Statements

> *We believe that to maintain stability and confidence in the economy, we have to avoid significant tax increases and support social protection programs, even if this means an increase in the deficit.*
> B. Andrew, 1983-84 Saskatchewan Budget Address.

Using the Summary Financial Statements as our initial source (graph below), total provincial government revenues increased from $5.3 billion in 1991 to $7.6 billion in 2004 (increase of $2.3 billion, or an average annual increase of 2.9 percent). By comparison, government spending on health care increased from $1.6 billion to $2.7 billion during the same time period – an increase of approximately $1.1 billion (average annual increase of 4.0 percent).



Source: Provincial Auditor

Given these differing growth rates, health spending exceeded the average increase in government revenue by approximately 1 percent per year, resulting in health spending increasing as a share of overall government revenue from 31.2 percent in 1991 to 35.9 percent in 2004. The established trend is then for health care to represent a large, and growing, claim on available government resources.

However, focusing on changes in health spending vis a vis government revenue is somewhat misleading in that health and other public services have been supported on occasion during this period by means of deficit financing. More specifically, Saskatchewan's accumulated deficit[8] grew from $7.9 billion in 1991 to $9.3 billion in 2004 (an increase of $1.4 billion, or approximately 18 percent) with sequential annual deficits[9] incurred in two periods (1991-1994, and 2001-2004) and surpluses experienced in the intervening years (1994-2001).

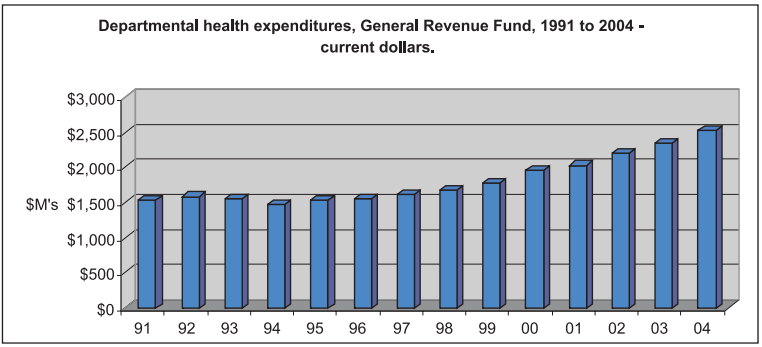
Increased government health spending has therefore occurred, in part, at the expense of higher provincial deficits and debt. To balance this point, it is to be noted the provincial economy has similarly grown such that as a percentage of G.D.P., the accumulated deficit actually declined from 37 percent to 25 percent over the thirteen year period. At present, Saskatchewan's accumulated deficit as a proportion of G.D.P. is fourth lowest among provinces and, as a result, Saskatchewan's finances are viewed as "stable" and "to compare favourably with other provinces" (Provincial Auditor 2004, 8 and 13).

General Revenue Fund

> *…the health sector will consume ever-higher proportions of the provincial budget. At some point the government will be forced to bring this escalation to a halt if it is to preserve any freedom to support other public policies and programs that contribute to health, such as education, economic development and housing.*
>
> K. Fyke, Saskatchewan Commission on Medicare.

This pattern of rising provincial government health spending is even more apparent, and dramatic, when the General Revenue Fund is used as the point of reference and comparison. In analyzing health funding through the G.R.F., government financial documents reveal or demonstrate a number of standard practices and conventions. These involve: (i) an emphasis and focus on input costs (funding) as the main measure of provincial health system support; (ii) government sector spending equated with expenditures by the Department of Health, and expressed in annual changes in nominal (non-inflation adjusted) expenditures; (iii) government health expenditures presented in both nominal terms and as a proportion of overall program spending; and (iv) in defining health spending as a proportion of the government budget, excluding debt costs[10] from the calculation. Thus, health costs are treated and explained by public budget documents in fairly narrow, and conventional, terms.

Using the above conventions for our analysis, departmental health expenditures grew by approximately $1 billion over the most recent thirteen year period (graph below), from $1.5 billion in 1991 to $2.5 billion in 2004 (an overall increase of 64.3 percent, or an average annual increase of 4.0 percent). Consistent with the earlier discussion of cycles in provincial health spending, relatively low growth rates (and expenditure reductions) occurred during the 1991 to 1996 period, followed by gradually escalating spending to 2004, with the end result that departmental health expenditures increased as a portion of government program spending from 33.9 percent in 1991 to 40.8 percent in 2004.



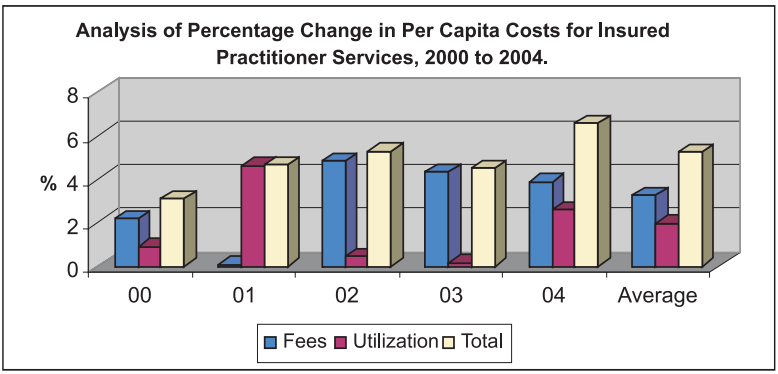
Source: Saskatchewan Public Accounts

Three general observations arise from this pattern of escalating government health spending. First, despite attempts at system reform, health costs have proven largely resistive to provincial efforts to reduce growth rates on a permanent or long-term basis. While historical growth rates were in fact reduced during the 1991 to 1996 period, government expenditures resumed thereafter their upward trajectory and have proceeded generally unabated notwithstanding various efforts to reform the system and affect expenditure trends (e.g. organization of service delivery into health districts and health authorities, establishment of Health Transition Fund, creation of provincial medicare commission, investment in health information network, primary care and quality initiatives, etc.).

Second, system pressures (access to services, health human resources) continue to exist, and persist, despite additional provincial revenues directed over extended periods to ameliorate these particular areas of concern. For example, the 1999-2000 provincial budget is described as providing "the largest new investment in health in the history of the Province" with the intent to "shorten waiting lists for surgeries" and to "recruit and retain the health care providers we need" (1999-00 Budget Speech). Subsequent budgets also similarly speak to the provision of incremental resources to "reduce wait lists for surgeries and to expand diagnostic services" (2004-05 Budget Speech, 13). Notwithstanding these investments, waiting lists and other issues continue to confront the health system in Saskatchewan and other provinces (Esmail 2005). This general situation has prompted sources to observe that from a historical perspective increased revenue to health care does not relieve, or resolve, particular systemic pressures (Prada 2004, 14).

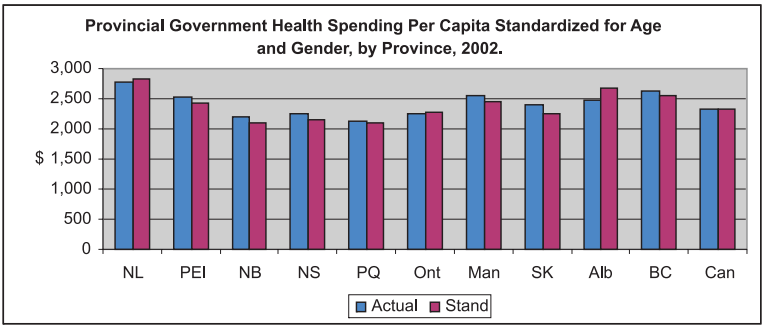
Finally, government spending increases have been directed not only to provide for additional services but also to allow compensation increases for various health professional groups. While negotiated increases were limited during the period of public sector spending restraint in the early 1990's, the costs of subsequent agreements increased and, in certain instances, exceeded growth in the provincial economy and general government revenue. For example, for the two largest health professional groups (nurses and physicians), the 1999 nursing settlement provided for a 13.7 percent total increase over three years (an average of 4.6 percent per year), while the most recent 2003 physician agreement resulted in a 25.5 percent increase over three years (an average of 8.3 percent per year). By comparison and as earlier mentioned, the historical annual government revenue growth rate for the period is 2.9 percent, with revenues fluctuating on a year-to-year basis.

Unfortunately, no standard trend data is available for the health sector quantifying the extent to which total provincial government expenditures have been directed for reasons of compensation and utilization (see also *Constant health expenditures*). However, for insured practitioner services[11], the preponderance of recent government funded increases has been for fee (compensation) changes. On average, per capita payments for insured practitioner services in the most recent four year period (2000 to 2004) increased by 5.2 percent, with 3.3 percent due to fee increases and 1.9 percent attributable to utilization changes (graph below).



Source: Saskatchewan Medical Services Branch (2004)

While provincial government sector health expenditures have in fact increased in both absolute and relative terms over the review period, Saskatchewan ranks among the lower grouping of provinces in spending per capita (graph below). Although universal coverage for insured services (medical, hospital services) is provided for under the Canada Health Act, differences exist among provinces with respect to overall health spending, and variations in per capita health spending are observed to occur. To provide a more consistent basis of comparison, provincial expenditures may be standardized to a common population. Using this particular measure, Saskatchewan ranks seventh among provinces in standardized government health expenditures per capita.



Source: CIHI (2004)

The resulting financial picture is not a particularly rosy one – health spending is consuming a large and growing share of available government resources, but despite this significant financial commitment, the province generally lags behind the health expenditure levels of other jurisdictions.

And as will be described in the next section, the consensus opinion is for health costs, and spending, to increase in the future - presenting a challenge for Saskatchewan to manage, particularly in situations of restricted or declining provincial economic growth.

Future Health Costs

> *Why are health costs so high, and so hard to control? Everybody knows the answer, or at least part of it. Spiralling costs have been driven by the aging of the population. As the baby boomers turn geriatric, the pressure can only get worse. And everyone is wrong. All the evidence points in a very different direction.*
>
> M. Barer, Lies, Damned Lies and Health Care Zombies.

As shown by the preceding sections and regardless of the choice of measurement (proportion of G.D.P., total or per capita expenditures, current or constant dollars), provincial expenditures on health services and products have increased by substantial amounts over an extended period of time. Further, and as stated in the above introductory quotation, health costs have also proven resistive to provincial efforts to reduce growth rates on a permanent and long-term basis. And although additional spending has provided for higher overall service levels, system pressures (service access, health human resources) continue to confound the health sector.

Having considered the issue of historical expenditures, the question may then be asked as to the nature of future health system costs, and how may they best be funded. Cost projections are examined in this section of the paper, and financing arrangements are considered in the final portion of the analysis.

Study Limitations

> *With health care expenditures expected to rise over the next twenty years, governments will have a difficult balancing act in terms of collecting public revenues and then allocating them among competing social programs and other important public initiatives.*
> G. Brimacombe, The Future Cost of Health Care in Canada, 2000 to 2020.

Estimates of future health expenditures are, in essence, projections of current trends and relationships into the future. There are, understandably, many uncertainties regarding the continuation, direction and magnitude of such trends – for example, the extent to which technological advancements (which by definition are largely unknown prior to inception and development) will influence future treatment protocols and, thereby, costs is not predictable with absolute certainty.

As a result, expenditure forecasts carry certain inherent limitations. Sensitivity analyses reveal a considerable confidence range around any projection of future health costs (Hogan and Hogan 2002). The imprecision and variability of expenditure projections are however not commonly acknowledged in the studies themselves and may be borne in mind by the reader when reviewing study results.

In addition, results differ among studies. This is largely due to the differing assumptions, timeframes, data sources and relationships used by the various forecast models. Rather than focusing on minor differences in quantitative projections, it is suggested that the benefit rests in considering commonalities, points of consensus and the strength of agreement among the alternative analyses of future health costs.

National and Provincial Reviews

> *Recent provincial/territorial health budgets have risen well in excess of inflation, population growth, or the economy….Even with modest changes in the pattern of service delivery, basic factors (population growth, aging, inflation, rising costs of current programs) are projected to increase health expenditures by approximately five per cent per year.*
> Provincial and Territorial Ministers of Health, Understanding Canada's Health Care Costs.

Having noted the somewhat intrinsic imprecision and variability of expenditure projections, there is a consensus among recent national (Romanow 2002, Kirby 2002) and provincial (Clair 2000, Fyke 2001 and Mazankowski 2002) reviews[12] that health costs will increase in future years. The reviews differ however on the magnitude and significance of the expenditure growth, with Kirby and Mazankowski anticipating substantive increases in health costs – and a corresponding need for fundamental change in financing arrangements – while Romanow and Fyke are more moderate in their cost projections and a related belief in health reform within the parameters of a largely publicly financed system.

More specifically, Romanow concludes that "health costs are likely to continue to increase" and "choices have to be made about how these costs will be managed" (Romanow 2002, 43). Kirby is of the contrasting opinion that "Canada's publicly funded health care system is not fiscally sustainable" and "there is a need to undertake major reform in the way physician and hospital services are funded" (Kirby 2002, 1). Similar differences in forecasts exist between the provincial reviews, with Mazankowski reporting that "by 2008, we could be spending half of the province's program budget on health" (Mazankowski 2002, 4) and Clair making the same observation that "spending on health and social services would account for more than 50% of Quebec's government program expenditures by 2010-2011" (Clair 2000, 141). Fyke does not express future health costs as a specific proportion of government expenditures but rather indicates estimated costs will exceed available revenues by "over $300M…by the end of four years" (Fyke 2001, 75).

The factors contributing to this expected cost growth are described by the literature in at least two ways. First and as briefly mentioned in an earlier section of this paper, health expenditures are viewed as a function of economic growth and income. Consequently, health expenditures have risen – and will continue to rise – as the national and provincial economy develops.

The relationship is commented on by Romanow, "health care is what economists call a superior good in that, as individuals, we tend to spend progressively more on health than other goods and services as our incomes go up" and "higher income is the single most important factor determining higher levels of health spending in all countries" (Romanow 2002, 43). Pollock provides a rationale for this association and attributes the connection between income and health spending to two factors – higher incomes lead to a higher demand for health services, and higher economic growth leads to higher wages and salaries which, in turn, results in cost pressures in a service sector such as health (Pollock 2001). Similarly, Carr and Ariste (and the references cited therein) note that real per capita G.D.P. is the most important factor in explaining health expenditure growth and conclude that "health expenditures in Canada will continue to rise as the economy develops and we become wealthier" (Carr and Ariste 2003, 17).

The argument may be made that if health spending grows as the economy develops, there is then little substance to the concern regarding the financial sustainability of our publicly funded system. This ignores two points. First, as illustrated earlier in the paper, health spending is increasing at a rate faster than general economic growth and, consequently, consuming an ever growing share of our collective resources. Second, provincial governments do not accrue or spend G.D.P., that is, there is no one-to-one relationship between economic growth and general government revenues. And it is suggested this trend of rising health spending as a share of provincial government revenues merits particular concern and attention.

A second and more specific approach to expenditure projections views health spending as a function of 'cost drivers' (identified variously as inflation, population growth, ageing and utilization) and 'cost accelerators'[13] (identified as new health technologies, increased incidence of chronic and new diseases, new

pharmaceutical products and changing public expectations). Using this particular approach, the provincial and territorial Ministers of Health project aggregate provincial government health expenditures to increase by approximately 5 percent per year over the period 2000 to 2027 (table below). The forecasting model assumes an inflation rate of 2 percent per year to cover changes in the price of health goods and health providers' remuneration, and a growth rate of 1 percent per year for other health care needs.

Decomposition of average annual growth rates (over five years) in provincial government base operating expenditures, Canada, 2000 to 2027 (percent)

	00-05	05-10	10-15	15-20	20-25	25-27	Total
Expenditure due to population growth	0.81	0.71	0.65	0.59	0.50	0.42	0.63
Expenditure growth due to ageing	0.76	0.88	1.00	1.04	1.24	1.28	1.01
Expenditure growth due to inflation	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Expenditure growth due to other factors	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total expenditure growth	4.6	4.7	4.7	4.7	4.8	4.8	4.7

Source: Provincial and Territorial Ministers of Health, 2000

A similar finding, and projection, is provided by Brimacombe. This particular study concludes that over the period 2001 to 2020, aggregate provincial government health expenditures will grow by an average annual rate of 5.2 percent. Of this growth, 2.1 percentage points per year is attributed to inflation, 1.4 percentage points to service volume increases and 1.7 percentage points to population changes (population growth: 0.8 percent, ageing population: 0.9 percent). Further, the analysis indicates provincial government health expenditures will increase from 31 percent in 2000 to 42 percent by 2020 as a share of total government revenues (Brimacombe et al 2001, 18). The calculation includes the additional federal contributions for health care announced in September 2000.

This theme of health expenditure growth as a rising share of future provincial government revenues is also found in a number of other independent studies. Using a methodology similar to Brimacombe, St. Maurice estimates health spending to increase as a share of total provincial government budgetary revenue from 38.5 percent in 2003-04 to 42.3 percent in 2014-15 (St. Maurice and Stewart 2004). A comparable conclusion is reached by Frank (Frank et al. 2003). In terms of individual provinces, Antunes reports in British Columbia, provincial government health expenditures are forecasted to increase – as a share of total revenue – from 38 percent to 53 percent by 2020 (Antunes et al. 2000(a)). Similarly, Ontario's health care spending is predicted to more than double over the next twenty year period and, as a share of total government revenue, to increase from 35.5 percent in 2000 to 46.6 percent (Antunes et al. 2000(b)). Finally, as referenced above, Clair and Mazankowski project future health care spending to exceed 50 percent of the Quebec and Alberta government program expenditures, respectively (Clair 2000, Mazankowski 2002).

There is then a strong consensus among national and provincial health reviews that, based on the existing health system structure and service delivery system, health spending will continue to increase in the future. A similar consensus, and conclusion, is noted as to the growth in health spending as a proportion of provincial government revenue and program expenditures.

From this analysis of future expenditures, three items merit specific comment. First, population ageing is frequently, and anecdotally, cited as the main contributor to future cost growth[14]. However, this view is not supported by the available evidence. In addition to the reports noted above (Provincial Ministers of Health 2001, Brimacombe et al. 2001), there are a considerable number of other research studies demonstrating ageing per se to be of secondary or minor importance in considering health service use and costs (Marzouk 1991; Barer et al. 1987, 1994; Hogan and Hogan 2002; King and Jackson 2003; CIHI 2005). According to these reports, ageing alone is expected to provide for an average annual growth in health expenditures of approximately 1 percent per year over the next thirty years. Ageing is then an important, but secondary, source of future health cost growth.

Second, and rather than population ageing, empirical studies suggest that increased utilization (per capita utilization) is the more significant consideration in examining health cost growth. As concluded by a Saskatchewan study of health service utilization for the 1978 to 1989 period, "the much discussed 'aging' of the population explained only a small portion of the increase in use of health care per person….The much more important question –at least in understanding utilization – is why the average person is using more health care at every age" (Gormley et al. 1990, 183). A similar conclusion, and question, is raised by Barer, "the common rhetoric which portrays the health care system as struggling to respond to overwhelming needs created by demographic change (and therefore requiring more resources) serves to divert attention from the real question: why are elderly people getting so much more health care" (Barer et al. 1994, 16).

Finally, there is a sense of inevitability among discussions of future health expenditures – that rising health costs are to a large extent unavoidable and their occurrence to be regular and unfailing. The preceding analysis indicates this to be not necessarily the case, and that certain of the factors contributing to higher costs (e.g. per capita utilization, provider compensation) are a result of decisions and responses by the health system itself. This is not a new conclusion, but one made previously by other sources (Barer et al. 1994, Fyke 2001).

Saskatchewan

> *We are at the very earliest of stages in the life cycle of ideas that challenge conventional wisdom. It took 15 years for the public and leaders to be convinced that deficit financing was unsustainable. It will take at least 10 years to change public attitudes about health care.*
>
> J. Frank, Adam Linton Memorial Lecture, Ontario Medical Association**.**

Two studies, with contrasting methodologies and differing conclusions, have been published on future Saskatchewan health expenditures. The first report is by the provincial and territorial Ministers of Health and provides results specific to Saskatchewan as part of a national review of future health expenditures. As described earlier in this paper, the particular methodology projects the costs of existing health services to the year 2026 based on changes in four factors – population growth, ageing, inflation and 'other' health care needs.[15]

Average Annual Growth Rates in Health Expenditures, Provinces, 1999-00 to 2026-27 (percent)							
	2000-2005	**2005-2010**	**2010-2015**	**2015-2020**	**2020-2025**	**2025-2027**	**2000-2027**
Nfld	3.6	3.9	4.4	4.4	4.3	4.0	4.1
P.E.I.	3.5	4.0	4.5	4.4	4.6	4.4	4.2
N.S.	3.8	4.1	4.4	4.4	4.5	4.3	4.2
N.B.	3.7	4.0	4.2	4.2	4.3	4.1	4.1
Que.	4.4	4.4	4.4	4.3	4.4	4.3	4.4
Ont.	4.9	4.8	4.9	4.8	4.9	4.9	4.9
Man.	3.6	3.8	3.9	4.1	4.3	4.3	4.0
Sask.	3.4	3.4	3.5	3.7	3.9	3.9	3.6
Alb.	5.3	4.9	4.8	4.8	5.0	4.9	4.9
B.C.	5.1	5.2	5.3	5.3	5.3	5.3	5.3
Canada	4.6	4.7	4.7	4.7	4.8	4.8	4.7

Source: Provincial and Territorial Ministers of Health 2000

According to this study, Saskatchewan's health expenditures are expected to grow by an average annual rate of 3.6 percent over the 27 year period of 1999-00 to 2026-27. As is acknowledged by the study, and because a number of relevant factors (prescription drugs, new technologies) are excluded from the methodology, the projections are in fact quite conservative and to all intents and purposes serve as a baseline projection for future health expenditures.

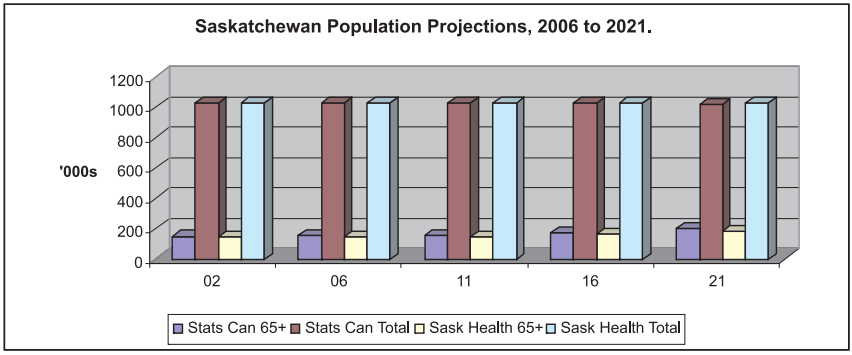
With respect to Saskatchewan, the study underestimates by a substantial margin the actual health spending experienced to date. For the period 1999-00 to 2003-04, actual provincial government health costs grew by an average annual rate of 6.5 percent. In contrast, the Ministers of Health study projects an average annual growth of 3.4 percent during this period (above). The variance between projected and actual spending is attributable to the omission of certain key factors (prescription drug costs) from the study methodology, as well as the underestimation of other cost pressures (e.g. compensation settlements for health provider groups during this period have far exceeded the assumed inflation rate of 2 percent).

The report of the Saskatchewan Commission on Medicare provides an alternate approach to projecting future provincial spending. The Commission forecasts future health expenditures based on historical growth rates. More specifically, the Commission study compares the 'status quo requirements'[16] of the health system (calculated to be 6.5 percent per year) with the forecasted growth in government revenues (noted as 3 percent per year), and identifies the existence of a 'health gap' (the amount by which health spending exceed available revenues) of over $300 million by the end of four years. The Commission concludes that in the absence of

major reform, the health system will continue to consume an ever increasing share of the provincial budget.

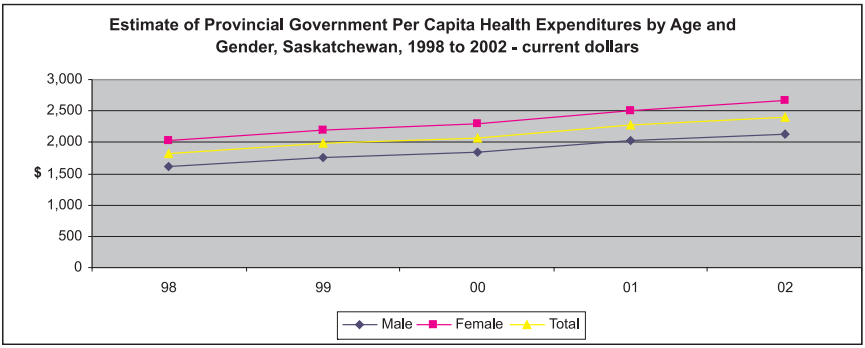
The two studies are similar in that both reports project health spending to continue to increase into the foreseeable future, but differ in the magnitude of the increase (6.5 percent versus 3.1 percent) and the forecast period (4 years versus 26 years). In that the Commission's observations more closely resemble the recent experiences of the provincial health sector, we may view its projections to be a more accurate barometer of future provincial spending growth.

In discussing future expenditures, two other areas merit brief mention – population changes and health service utilization. On the matter of demographics, the Saskatchewan population is expected to grow older and to decrease marginally in overall size. According to Statistics Canada data, the provincial population is anticipated to decrease by approximately 1 percent over the next fifteen years (from approximately 1.026 million in 2006 to 1.019 million in 2021), while the number of residents 65 years of age and older are expected to grow – from 150,000 (14.6 percent of the total population) in 2006 to 198,600 (19.5 percent of the overall population) in 2021. Comparable trends, but slightly different absolute numbers, are projected by Saskatchewan Health (Saskatchewan Health 2002) (graph below). As noted in our earlier discussion on ageing and health costs, the increase in provincial seniors' population will be an important factor in future health expenditure growth.



Source: Saskatchewan Health (2002)

While demographic changes are an important factor in discussing future provincial health costs, the more significant consideration is the rising utilization and cost of health services across all age groups. For Saskatchewan, this trend was observed and highlighted in the 1990 study on health utilization growth (Gormley 1990). The pattern of rising per capita health costs is still strongly evident among provincial residents (graph next page).



Source: CIHI (2004)

Alternate Financing

> *The best policy for Canada is to adapt the European model, which has for decades allowed for strong public health systems with parallel private ones….In essence, the Europeans have been able to offer a universal health care system using a more efficient way of organizing the split between public and private health care.*
> J. Mintz, Health Care: Go European, C.D. Howe Institute.

The interest in alternate sources of health financing is occurring against a background of conflicting forces – restricted public resources, rising health costs, future expenditure growth, competing needs and a general societal desire to ensure equitable access to health services. As observed by the Quebec health commission review, "a sort of impending rupture or confrontation can be seen in this; the supply of science is pushing the values of solidarity and equity to their limit" (Clair 2000, iii).

It may be noted that additional health funding does not necessarily result in more care, better health or greater satisfaction with the health system. Previous studies have demonstrated that in the case of the United States, high expenditure levels have not contributed to better health outcomes or more care, and where more services have been made available, the additional medical services have not resulted in longer life, greater independence or improved quality of life (Branswell 2003; Payne 2003).

Assessing the necessity of providing more money for health is not the intent of this paper. Rather the focus is on determining the options available in financing health care and their associated implications. However, as part of this discussion, it is noteworthy that providing additional resources to health care as a result of any revised financing mechanism will not necessarily correct current problems or provide more care and greater satisfaction. Often the promise, and the experience, of health care differ.

Financing Options

> *Medicare is facing a dangerous time. Chunks of it are being turned over to the for-profit sector….The for-profit health care industry wants health care turned into a commodity for sale. We're moving fast away from the vision on which Medicare was founded.*
>
> N. Riche, Conference on the Future of Health Care.

In light of the frequent, and often acrimonious, public debates regarding health financing, one may assume that the funding issue is hopelessly complex. In fact, this is not the case. The payment options are, in reality, few in number and their implications rather clear and apparent.

Under the generic health services model, health providers provide care to patients and, in return, receive payment from patients or third parties. Given the nature, complexity and cost of modern health systems, payments to service providers are in most instances not by individuals but rather by agents acting on behalf of the patients (the agents may be either public or private entities) – in essence, the financing arrangement involves public or private agencies receiving monies from individuals, pooling these resources and providing payment to health providers for the provision of care and treatment (Mossialos and Dixon 2002, 3).

Two important points fall out of this model. First, the financing of modern health care systems is essentially an insurance arrangement – individuals guard against the risk and cost of illness by providing contributions to third party agencies who, in turn, underwrite the cost of any future illness and provide payment to service providers when required. The third party agency acts to protect "a population against the financial risk of falling ill" (Ibid 3).

Second, and as a result of this third party payment mechanism, "in modern health care systems people pay for the care of other people, not their own" (Evans 2002a, 3), that is, individual contributions are pooled by third parties and, from this collective resource, payments are made. What remains undetermined, and distinguishes the various financing schemes, is who is insured (a whole population or group of people) and how the contribution is determined (based on illness or ability to pay) and collected.

Not all examinations of health financing follow this model. For example, one examination of health funding options in Canada is based on the concept of the public sector as the sole financer – or one of many financers – of insured services. According to this particular analysis, four general financing options exist: (i) public sector as sole financer of comprehensive range of health services (ii) public sector as financer of basic core services, with mandatory or voluntary coverage of other services (iii) public sector as one of the many financers of basic core services alongside private sector financers (complementary or competing) and (iv) public sector with a limited role in financing health services (Deber et al. 1998, 444-46).

While this analysis provides some insight into the breadth and scope of health care financing, it more accurately depicts the main funding agents (public and private agencies) and the degree and nature of their involvement in funding certain

services (core and comprehensive) as opposed to the particular way in which resources may be appropriated from individuals or society to pay for health care.

The model devised by Evans (2000a, 2002) is of greater assistance and relevance to our area of interest. According to the author, revenue for health care may be obtained in four ways: through (i) taxation (ii) compulsory or social insurance contributions (iii) out-of-pocket payments and user charges and (iv) voluntary or private insurance premiums. Each of these potential revenue sources is briefly described and considered in the section below.

One dynamic, however, confounds our assessment of payment mechanisms. This is the fact that health use – and need – is not uniform, but rather is concentrated among a relatively small portion of the population – these groups tending to be the elderly, chronically ill and lower income. This occurrence is not a new phenomena but one that has been noted and commented on by a number of previous reports and studies (National Forum on Health 1997; Mustard et al. 1998; Advisory Committee on Population Health 1999; Laroche 2000; Evans 2002). As noted by the Alberta health commission, "the likelihood of going to hospital increases with age, having a lower income (and) having less than a secondary education…." (Mazankowski 2001, 15).

This uneven distribution of need is the essential rub of health financing – how best to provide funding to an expensive (and increasingly costly) system under a third party arrangement in which the risk of illness, and the use of services, is not equally shared but focused among less advantaged individuals and groups.

Taxation

> *There is no single equation that gives the optimal balance between low-cost and high-quality health care. Switzerland's system gives the private sector a prominent role and is expensive. Sweden's is primarily publicly funded and performs with a high level of co-ordination, regulation and communication. Despite their differences, both countries surpass Canada in health performance.*
> G. Prada et al., Understanding Health Care Performance of Leading Countries.

Broadly defined, taxes are charges levied by governments on individuals, households or firms. Taxes assume a multitude of forms, but are generally divided into two categories: direct taxes (personal income tax, corporate tax, property tax) and indirect taxes (taxes on consumed goods and services, such as sales tax). Direct taxes are generally described as "progressive" (progressive taxes take a larger portion of the income of people or firms reporting higher incomes), while indirect taxes are considered to be "regressive" (they take a larger share of the incomes of lower income groups) due to the fact that lower income groups tend to spend more on heavily taxed items. Private insurance is viewed to be regressive because premiums are charged on the basis of risk, not income (Evans 2000b).

Due to a combination of two factors – the distributive nature of general taxation (generally higher contributions from higher income individuals) and the uneven health utilization pattern (higher use by a small number of individuals and groups), publicly financed health systems are characterized as funding from the 'many, healthy and wealthy' to the relatively 'few, sick and poor' and, as a result, are described as appealing to the principles of equity, fairness and access. For these reasons, progressive taxation is considered by many sources "to be the most effective way to fund health care in Canada" (Romanow 2002, 31).

The above is not meant to imply that tax-based financing is without its critics, or criticisms. Some persons have argued that our national health system relies too heavily on taxation and greater use should be made of the private sector (discussed below). For example, the Standing Senate Committee on Social Affairs, Science and Technology concluded that private contributions and insurance improved the scope and quality of health care for residents, "the evidence suggests that a contribution of direct payments by patients, allowing private insurance to cover some services…and an expanded role for the private sector in the delivery of health services are the factors which have enabled countries to achieve broader coverage of health services for all their citizens" (Kirby 2001, 66).

The provision of private insurance within a publicly funded system has also been supported recently by the Supreme Court of Canada. In its decision on Chaoulli v Quebec, the Court concluded "that where the public system fails to deliver adequate care, the denial of private insurance subjects people to long waiting lists and negatively affects their health," "jeopardizes the right to life, liberty and security of person" and "is therefore not in accordance with the principles of fundamental justice" (Supreme Court of Canada 2005, 80 and 81).

Social Health Insurance

> ***…****the most regressive taxes in common use are poll taxes or head taxes, requiring each person to pay the same amount regardless of income level. The proportion of income paid through such poll taxes thus falls dramatically as income rises….In Canada, these poll taxes are called health insurance premiums.*
>
> R. Evans, Health Care Financing and the In-egalitarian Agenda in Canada**.**

Social health insurance contributions are described as being usually compulsory, shared between employer and employee, not related to risk but assessed on earned income and collected by an agency independent of government. Social health contributions are regarded as providing benefits in terms of improved accountability, transparency and perceived independence given its status as a non-government agency (Mossialos and Dixon 2002, 16-17).

The deficiencies of this payment mechanism are, however, numerous and involve restricted access to health services by the non-employed, less emphasis on preventive and public health care and greater reliance on medical and hospital treatment, presence of a narrow revenue base and the creation of perverse economic

incentives (promotion of part-time employment to avoid employer contributions, reduced labour force mobility, higher labour costs and unemployment rates) (Deber et al. 1998; Mossialos and Dixon 2002).

Some authors have included 'health care premiums' within their discussion of social insurance premiums (Evans 2002a). Although in the Canadian setting, health premiums are assessed by provincial governments (e.g. Alberta, British Columbia) – and as a result do not meet the strict definition of social health insurance contribution (collection by an agency independent of government) – they do bear a number of similarities to social insurance arrangements (compulsory, related to employment, shared between employer and employee, not risk based). Critics of premiums as a source of health financing have commented on its lack of progressivity, as well as the fact that health coverage is not dependent on premium payment, are difficult and expensive to administer, and monies spent on health care are not related to the revenue raised by premiums. Finally, premiums constitute a rather narrow revenue base, and health expenditures far exceed the monies raised through this particular financing mechanism.

Private Health Insurance

> *We conclude, based on the evidence, that prohibiting health insurance that would permit ordinary Canadians to access health care, in circumstances where the government is failing to deliver health care in a reasonable manner, thereby increasing the risk of complications and death, interferes with life and security of person….*
> Supreme Court of Canada, Chaoulli v Attorney General of Quebec.

Discussion of private insurance is problematic because the payment scheme embraces a wide range of different arrangements – it may be substitutive (an alternative to the public scheme), supplementary (allow for quicker access to services) or complementary (coverage for services excluded from the public system). In addition, it may differ as to the calculation of risk and premium fees (individual, group or community based) and the status of provider groups (profit or non-profit) (Mossialos and Dixon 2002, 19).

Private insurance is not a concept foreign to the Canadian health system. As mentioned earlier in the paper (see *Public and Private Sector Expenditures*), considerable reliance is placed on private insurance, and out-of-pocket payments, for the financing of non-insured services. Its continuing attractiveness to an oft-criticized public system rests on two features – as an alternative source of additional health funding, and as a 'safety valve' for the public system (to provide quicker access to services with lengthy queues as per the Supreme Court decision on Chaoulli). A third but less mentioned benefit of private insurance is its perceived ability to encourage more responsible use of health services and to avoid unnecessary treatments. The contradiction between this last observation and the other perceived benefits (i.e. private insurance can provide additional funding, or allow for fewer services, but it cannot do both) has been observed and commented on in the health literature.

While its advantages are attractive to some (Ramsay 1998; Mintz 2005), private insurance as a health financing mechanism has its limitations. Private insurers contribute to increased costs (through higher administrative costs, marketing and underwriting expenses), lower or ineffective cost control (particularly in the case of for-profit care) and higher provider incomes, but not necessarily more health care. Further, when implemented on a wide scale, private insurance provides for adverse risk selection (firms avoid insuring people at high risk of needing health services, or shifting high cost patients to other agencies), differential access and possible service quality (between those with and without health insurance) (Deber et al. 1998; Evans 2002a, 2002b; Woolhandler et al. 2003).

Medical savings accounts are a form of private insurance popular of late in the health literature. Under this payment system, individuals contribute a portion of their income to an account and subsequently use these monies to purchase required health services. The premise is medical savings account will instil market forces and discipline into the health system, and encourage individuals to avoid unnecessary services and obtain the best services at the best possible price. Assessments of medical savings accounts have pointed to the fact that the concept has received little implementation in developed health systems, rests on the faulty assumption of perfect consumer information and discretionary health use, creates hardship for those with lower incomes or high needs and contributes to higher system costs and spending (as a result of government's role in covering catastrophic health costs and non-insurable groups (Evans 2002; Mossialos and Dixon 2002).

Out-of-Pocket Payments and User Charges

> *We have in the medical profession today an opinion that the cure of over-utilization in prepaid comprehensive care is a combination of deterrents, deductibles, and co-insurance now given the sophisticated name of 'patient participation'…I know of no published work in Canada or the United States which would indicate that patient participation has any worthwhile influence on utilization.*
>
> Dr. W.B. Stiver, Canadian Medical Association Journal.

Out-of-pocket payments involve expenditures by individuals, and households, on health services and products. At the national level, out-of-pocket payments represent the largest area of private expenditures (approximately 54 percent) and are concentrated in the areas of institutional care (long term care), professional services (dental and optometric care) and drugs (prescription drugs and over-the-counter products) (table next page).

Private Sector Health Expenditures By Source and Use of Funds, Canada 1999 ($ Millions)				
Institutions	**Households (Out-of-Pocket)**	**Insurance**	**Non-Consumption***	**Total**
Institutions				
▪ Hospitals, long term care	2,812.3	602.7	1,171.5	4,586.4
Professional Services				
▪ Dental care	2,869.6	3,507.5	-	6,377.1
▪ Vision care	1,701.4	428.3	-	2,129.8
▪ Other services	1,145.0	551.4	-	1,696.4
Health Care Goods				
▪ Prescription drugs	2,302.0	3,386.5	-	5,688.5
▪ Over-the-counter drugs	1,640.8	-	-	1,640.8
▪ Personal health products	1,575.3	-	-	1,575.3
▪ Other health care goods	177.8	49.7	-	227.5
Other Spending				
▪ Capital, research, admin	-	1,299.7	952.9	2,252.6
Total	14,224.4	9,825.8	2,124.4	26,177.4

*Non-consumption includes non-patient revenue to hospitals (donations, investment income, etc.). Source: CIHI (2001)

Even though the amount of out-of-pocket payments are high (totalling $14.2 billion), they represent a relatively small percentage of overall health costs (15.8 percent), with this portion being lower than that of most OECD countries (Romanow 2002, 26). Efforts to increase individual payment as a means of health financing are contrary to the operations of modern health systems (payments made to service providers by third party agencies) and shifts funding from a population based, risk sharing approach to payments by individuals, thereby placing greater financial cost on the poor and sick.

User charges are an example, or form, of out-of-pocket expenditure. Like private health insurance, user fee (direct charge, point-of-service charge) is a rather broad term encompassing a host of different initiatives. How much you pay can vary (charges may be high or low), when you pay can vary (charges can be paid at receipt of service, or at the end of a fiscal period), who keeps or collects the charge can vary (payment can be retained by the service provider, health agency or remitted to government), what services the charges apply to can vary (a charge can be levied against hospital, physician, ambulance, optometric or other health services) and how you pay can vary (a charge may take the form of a flat fee, deductible or co-payment) (Stoddart et al. 1992).

Despite its many forms, user fees have three common (but not necessarily consistent) objectives – to raise revenue for the health sector, to discourage unnecessary use of services and to provide for individual choice or priority access to the health system. Similar to the criticism levied earlier with respect to private insurance, the inconsistency in user fees proposing to both increase funding and decrease services (at the same time) is noted in the literature.

While a part of the current health system, the expansion of user charges as a means of health financing is opposed by a number of sources. It is observed that user charges will tend to contribute to increased (not decreased) health expenditures, will shift the balance of payments from the public to the private sector, will encourage participation by consumers in supplementary private insurance and will in effect serve as a tax on illness, with a disproportionate effect on the chronically ill and poor. Further, it is advanced that there is no substantive evidence to suggest that patients are the principal generators of inappropriate care or that user charges will serve as an effective deterrent (Barer et al. 1979; Barer et al. 1993; Deber et al. 1998).

There is little to commend user fees as an alternative source of health financing. As concluded by the recent national commission, "one of the key features of the Canada Health Act was its effective ban on user charges for hospital and physician services. Given what we know about the impact of even relatively low user fees, the Commission feels that this was the right decision then and remains the right decision today" (Romanow 2002, 28).

Summary

Modern health systems share a number of common characteristics – they serve as an insurance arrangement, involve both public and private sectors, are predominately publicly financed and most from taxation, and (with the notable exception of the United States) offer universal coverage to its citizens.

It may be argued that the preponderance of public investment in health financing is indicative of the importance of health care and the values of a compassionate society – a desire to lessen the consequences of ill health among those so afflicted (Taylor 1987, 416). However, it may also be observed that this value is not absolute but tempered by the existence of other worthwhile ventures and financial circumstances, that is, the presence of a mixed financing system (public and private) is recognition of the fiscal limitations of the public sector (given other competing demands) to be the sole financer of such an area. This tension between values, costs and fiscal ability is reflected in the discussion, and choice, of financing methods.

Assessments of our health system have tended to reflect the values approach. The National Forum on Health described public financing of medically necessary services as appropriate for reasons of equity and security and, most recently, the Commission on the Future of Health Care expressed its support for progressive taxation as the distributive nature of this financing approach was viewed to be more closely aligned with the held values of equity and access. The Saskatchewan health commission offered an analysis and conclusion similar to, and consistent with, these national studies. In addition to the criterion of values, public financing is also cited as optimal for reasons of cost control and lower system expenditures.

Our analysis shows the methods of financing to be limited and to represent a continuum of options differing by the extent to which health risk is distributed and shared across a population or group. The confounding factor is that health risk is not uniform but rather concentrated among a relatively small portion of the

population, with the affected individuals tending to be less financially advantaged. Changes in the financing mechanism of health care will therefore be beneficial to some, and detrimental to others.

Which approach is best? In a perfect world, and recognizing the uneven distribution of need, progressive taxation is the best approach. But we live in an imperfect world of defined resources and competing needs, and in this situation, the mixture of public and private participation is the most tenable approach for overall system financing, with single source public financing of the most important and necessary services to ensure equity and accessibility.

However, as suggested earlier in the paper, the apparent problems of the health sector have little to do with the amount of funds or the methods of financing, and are more appropriately directed at the organization, regulation and operation of the health system itself.

Table I. Total Health Expenditure and Gross Domestic Product Saskatchewan, 1975 to 2004 - Current Dollars				
Year	Total Health Expenditures ($'000,000)	% Change	Provincial G.D.P ($'000,000)	% Change
1975	441.2	0.00%	6,839	0.00%
1976	520.3	17.93%	7,668	12.12%
1977	587.4	12.90%	8,081	5.39%
1978	622.4	5.96%	9,299	15.07%
1979	703.5	13.03%	10,636	14.38%
1980	815.7	15.95%	12,729	19.68%
1981	949.0	16.34%	15,386	20.87%
1982	1,130.0	19.07%	15,481	0.62%
1983	1,257.6	11.29%	16,324	5.45%
1984	1,371.3	9.04%	17,448	6.89%
1985	1,528.8	11.49%	18,274	4.73%
1986	1,703.6	11.43%	17,798	-2.60%
1987	1,767.8	3.77%	18,486	3.87%
1988	1,837.6	3.95%	18,964	2.59%
1989	2,052.9	11.72%	20,189	6.46%
1990	2,252.2	9.71%	21,505	6.52%
1991	2,319.8	3.00%	21,837	1.54%
1992	2,325.4	0.24%	21,215	-2.85%
1993	2,301.9	-1.01%	22,904	7.96%
1994	2,382.4	3.50%	24,716	7.91%
1995	2,439.5	2.40%	26,791	8.40%
1996	2,487.3	1.96%	29,238	9.13%
1997	2,653.1	6.67%	29,377	0.48%
1998	2,774.1	4.56%	29,550	0.59%
1999	2,967.2	6.96%	30,929	4.67%
2000	3,145.7	6.02%	33,765	9.17%
2001	3,442.6	9.44%	33,222	-1.61%
2002	3,592.5	4.35%	34,498	3.84%
2003(f)	3,780.0	5.22%	36,821	6.73%
2004(f)	4,016.5	6.26%	40,462	9.89%

Source: Table B.1.1, Total Health Expenditure by Province and Canada, CIHI, 2004, Saskatchewan Provincial Economic Accounts, Comparison of G.D.P., Saskatchewan Bureau of Statistics, May, 2005

Table 2. Total Health Spending as a Percent of Provincial G.D.P Saskatchewan, 1975 to 2004 - Current Dollars			
Year	**Total Health Expenditures ($'000,000)**	**Provincial G.D.P ($'000,000)**	**Health Spending as Percent of G.D.P (%)**
1975	441.2	6,839	6.45%
1976	520.3	7,668	6.79%
1977	587.4	8,081	7.27%
1978	622.4	9,299	6.69%
1979	703.5	10,636	6.61%
1980	815.7	12,729	6.41%
1981	949.0	15,386	6.17%
1982	1,130.0	15,481	7.30%
1983	1,257.6	16,324	7.70%
1984	1,371.3	17,448	7.86%
1985	1,528.8	18,274	8.37%
1986	1,703.6	17,798	9.57%
1987	1,767.8	18,486	9.56%
1988	1,837.6	18,964	9.69%
1989	2,052.9	20,189	10.17%
1990	2,252.2	21,505	10.47%
1991	2,319.8	21,837	10.62%
1992	2,325.4	21,215	10.96%
1993	2,301.9	22,904	10.05%
1994	2,382.4	24,716	9.64%
1995	2,439.5	26,791	9.11%
1996	2,487.3	29,238	8.51%
1997	2,653.1	29,377	9.03%
1998	2,774.1	29,550	9.39%
1999	2,967.2	30,929	9.59%
2000	3,145.7	33,765	9.32%
2001	3,442.6	33,222	10.36%
2002	3,592.5	34,498	10.41%
2003(f)	3,780.0	36,821	10.27%
2004(f)	4,016.5	40,462	9.93%

Source: Table B.1.1, Total Health Expenditure by Province and Canada, CIHI 2004, Saskatchewan Provincial Economic Accounts, Comparison of G.D.P., Saskatchewan Bureau of Statistics, May 2005

Table 3. Total Health Expenditure as a Percent of Provincial G.D.P, by Province and Canada 2000 to 2002 - Current Dollars

Year	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask	Alta	B.C.	Canada Average
2000	12.1	12	11.3	11	9.4	8.8	11.9	9.3	6.7	10.2	9.1
2001	12.7	13.1	11.5	11.8	9.9	9.2	12.2	10.3	7.2	11.1	9.6
2002	11.7	13.7	12.1	12.2	10	9.4	12.3	10.4	7.9	11.5	9.9

Source: Table B.1.3 Total Health Expenditure as a Percent of Provincial GDP, by Province and Canada, CIHI, 2004

Table 4. Total Health Expenditures, Annual Growth Rate in Constant Dollars Saskatchewan, 1975 to 2004

Year	Constant Dollars* ($'000,000)	% Change	Per Capita Spending ($000,000)	% Change
1975	1598.7	0.00%	1742.61	
1976	1696.7	6.13%	1821.27	4.51%
1977	1772.7	4.48%	1876.31	3.02%
1978	1710.3	-3.52%	1796.68	-4.24%
1979	1792.3	4.79%	1867.96	3.97%
1980	1862	3.89%	1924.84	3.05%
1981	1899.3	2.00%	1946.24	1.11%
1982	1994.4	5.01%	2020.08	3.79%
1983	2053.2	2.95%	2049.32	1.45%
1984	2144.1	4.43%	2111.4	3.03%
1985	2342.1	9.23%	2283.93	8.17%
1986	2535	8.24%	2462.9	7.84%
1987	2407.6	-5.03%	2331.31	-5.34%
1988	2327.3	-3.34%	2263.9	-2.89%
1989	2476.5	6.41%	2429.82	7.33%
1990	2582.6	4.28%	2564.35	5.54%
1991	2585.6	0.12%	2578.65	0.56%
1992	2542.1	-1.68%	2532.11	-1.80%
1993	2470.7	-2.81%	2453.85	-3.09%
1994	2491	0.82%	2467.49	0.56%
1995	2499.2	0.33%	2464.43	-0.12%
1996	2519.8	0.82%	2472.57	0.33%
1997	2653.1	5.29%	2605.98	5.40%
1998	2716.3	2.38%	2669.59	2.44%
1999	2843.2	4.67%	2802.01	4.96%
2000	2932.1	3.13%	2909.53	3.84%
2001	3146.3	7.31%	3145.84	8.12%
2002	3223.9	2.47%	3237.23	2.91%
2003(f)	3307.8	2.60%	3326.34	2.75%
2004(f)	3351.9	1.33%	3367.42	1.23%

* Expressed in 1997 dollars.

Source: Table B.1.4 Total Health Expenditure by Province, 1975 to 2004, Constant Dollars Table B.1.5

Table 5. Public and Private Sector Health Expenditures as a Proportion of Total Health Expenditures by Province and Canada, Select Years - Current Dollars

Year	Nfld.		P.E.I.		N.S.		N.B.	
	Private	Public	Private	Public	Private	Public	Private	Public
1975	22.4	77.6	27.0	73.0	21.2	78.8	22.6	77.4
1980	33.8	66.2	38.5	61.5	22.5	77.5	26.2	73.8
1985	25.1	74.9	29.2	70.8	23.1	76.9	26.7	73.3
1990	20.1	79.9	27.3	72.7	26.3	73.7	25.9	74.1
1995	23.3	76.7	31.9	68.1	30.1	69.9	27.2	72.8
2000	21.7	78.3	30.7	69.3	30.0	70.0	28.8	71.2
2001	21.1	78.9	32.0	68.0	30.4	69.6	28.9	71.1
2002	21.0	79.0	28.8	71.2	31.1	68.9	29.1	70.9

Table continued below….

Table 5. (Cont'd) Public and Private Sector Health Expenditures as a Proportion of Total Health Expenditures by Province and Canada, Select Years - Current Dollars

Year	Que.		Ont.		Man.		Sask.	
	Private	Public	Private	Public	Private	Public	Private	Public
1975	21.2	78.8	24.7	75.3	22.3	77.7	25.5	74.5
1980	18.5	81.5	27.9	72.1	23.9	76.1	20.5	79.5
1985	21.0	79.0	27.7	72.3	24.1	75.9	21.8	78.2
1990	24.4	75.6	27.2	72.8	21.5	78.5	20.4	79.6
1995	26.8	73.2	32.0	68.0	25.2	74.8	25.4	74.6
2000	27.7	72.3	33.2	66.8	25.8	74.2	24.3	75.7
2001	28.3	71.7	33.7	66.3	25.9	74.1	24.9	75.1
2002	28.9	71.1	34.3	65.7	27.0	73.0	24.3	75.7

Table continued below….

Table 5. (Cont'd) Public and Private Sector Health Expenditures as a Proportion of Total Health Expenditures by Province and Canada, Select Years - Current Dollars

Year	Alb.		B.C.		Canada	
	Private	Public	Private	Public	Private	Public
1975	23.6	76.4	28.1	71.9	23.8	76.2
1980	22.9	77.1	28.1	71.9	24.5	75.5
1985	20.4	79.6	26.5	73.5	24.5	75.5
1990	24.7	75.3	26.9	73.1	25.5	74.5
1995	29.6	70.4	25.4	74.6	28.7	71.3
2000	29.2	70.8	26.3	73.7	29.6	70.4
2001	29.2	70.8	26.0	74.0	29.8	70.2
2002	28.6	71.4	26.4	73.6	30.3	69.7

Source: Table B.2.3 Private Health Expenditure as a Proportion of Total Health Expenditure, by Province and Canada, 1975 to 2004 – Current Dollars
Table B.3.3 Public Sector Health Expenditure as a Proportion of Total Health Expenditure, by Province and Canada, 1975 to 2004 – Current Dollars

Table 6. Provincial Government Health Expenditures, Revenue and Accumulated Deficits, Summary Financial Statements, Saskatchewan, 1991 to 2004 - Current Dollars

	1991	1992	1993	1994	1995	1996	1997
Total revenue	$5,308	$5,410	$5,313	$5,562	$6,085	$6,423	$6,225
% Change		1.92%	-1.79%	4.69%	9.40%	5.55%	-3.08%
Health spending	$1,659	$1,641	$1,614	$1,553	$1,622	$1,623	$1,682
		-1.08%	-1.65%	-3.78%	4.44%	0.06%	3.64%
Total expenditures	$6,060	$7,086	$6,213	$5,843	$5,944	$5,860	$5,680
Accumulated deficit	$7,879	$9,555	$10,455	$10,736	$10,595	$10,032	$9,487

Table continued below….

Table 6. (Cont'd) Provincial Government Health Expenditures, Revenue and Accumulated Deficits, Summary Financial Statements, Saskatchewan, 1991 to 2004 - Current Dollars

	1998	1999	2000	2001	2002	2003	2004
Total revenue	$6,123	$6,301	$7,211	$7,091	$6,940	$7,476	$7,600
% Change	-1.64%	2.91%	14.44%	-1.66%	-2.13%	7.72%	1.66%
Health spending	$1,761	$1,931	$2,174	$2,223	$2,424	$2,558	$2,730
	4.70%	9.65%	12.58%	2.25%	9.04%	5.53%	6.72%
Total expenditures	$5,797	$6,232	$6,805	$6,630	$7,423	$8,130	$7,747
Accumulated deficit	$9,161	$9,092	$8,686	$8,225	$8,708	$9,284	$9,296

Source: Provincial Auditor, Fall Report - Volume 1, Appendix 2, 2002 to 2004

Table 7. Provincial government health and total program spending, revenue and accumulated deficits, General Revenue Fund, Saskatchewan, 1991 to 2004 - Current Dollars

Area	1991 ($000,000)	1992 ($000,000)	1993 ($000,000)	1994 ($000,000)	1995 ($'000,000)
Total Revenue	4,600	4,049	4,376	4,680	5,225
Department of Health expenditures	1,531	1,581	1,548	1,464	1,534
Total operating expenditures	4,521	4,371	4,229	4,078	4,215
Department spending as % of op. spending	33.86%	36.17%	36.60%	35.90%	36.39%
Servicing the public debt	474	502	739	873	882
Total expenditures*	4,995	4,873	4,968	4,951	5,097
Accumulated deficit	5,320	5,998	6,587	7,768	7,640

Table continued next page…

Table 7. (Cont'd) Provincial government health and total program spending, revenue and accumulate deficits, General Revenue Fund, Saskatchewan, 1991 to 2004 - Current Dollars					
Area	**1996 ($'000,000)**	**1997 ($'000,000)**	**1998 ($'000,000)**	**1999 ($'000,000)**	**2000 ($'000,000)**
Total Revenue	5,132	5,503	5,162	5,603	5,857
Department of Health expenditures	1,555	1,608	1,677	1,775	1,956
Total operating expenditures	4,264	4,302	4,372	4,830	5,077
Department spending as % of op. spending	36.47%	37.38%	38.36%	36.75%	38.53%
Servicing the public debt	849	794	755	745	696
Total expenditures*	5,113	5,096	5,127	5,575	5,773
Accumulated deficit	7,622	7,215	7,180	7,152	7,068

Table continued below….

Table 7. (Cont'd) Provincial government health and total program spending, revenue and accumulated deficits, General Revenue Fund, Saskatchewan, 1991 to 2004 - Current Dollars				
Area	**2001 ($'000,000)**	**2002 ($'000,000)**	**2003 ($'000,000)**	**2004 ($'000,000)**
Total Revenue	5,979	63,339	6,375	6,769
Department of Health expenditures	2,026	2,199	2,343	2,516
Total operating expenditures	5,257	5,721	5,762	6,165
Department spending as % of op. spending	38.54%	38.44%	40.66%	40.81%
Servicing the public debt	664	617	611	603
Total expenditures*	5,921	6,338	6,374	6,768
Accumulated deficit	7,011	7,009	7,008	7,054

*Total expenditures are the sum of the total operating (program) expenditures and costs incurred in servicing the public debt.

Source: Annual Statistical Report 2003-04, Medical Services Branch, Saskatchewan Health.

Table 8. Analysis of Percent Change in Per Capita Costs for Insured Practitioner Services Saskatchewan, 2000 to 2004

Year	Gross Payments ($000's)	Total Change In Per Capita Costs (%)	Change Due To Fee Increases (%)	Change Due To Utilization Increases (%)
1999-00	296,750	3.08	2.16	0.90
2000-01	305,074	4.67	0.06	4.60
2001-02	325,120	5.27	4.82	0.43
2002-03	342,007	4.51	4.34	0.16
2003-04	360,254	6.57	3.87	2.60
Average Annual Change (%)	4.98	5.25	3.27	1.95

Source: Annual Statistical Report 2003-04, Medical Services Branch, Saskatchewan Health.

Table. 9 Estimate of Provincial Government Per Capita Health Expenditures by Age and Gender, Saskatchewan, 1998 to 2002 - Current Dollars

Age	1998			1999			
	Both Genders ($ per capita)	Male ($ per capita)	Female ($ per capita)	Both Genders ($ per capita)	Male ($ per capita)	Female ($ per capita)	Both Genders ($ per capita)
<1	4,167	4,444	3,883	4,607	4,588	4,628	4,809
1 to 4	965	1,011	916	1,024	1,069	976	1,003
5 to 14	736	744	727	828	841	814	805
15 to 44	1,155	921	1,397	1,261	1,007	1,523	1,278
45 to 64	1,652	1,634	1,671	1,770	1,747	1,794	1,816
65 to 74	3,295	3,504	3,105	3,536	3,808	3,290	3,719
75 to 84	5,793	5,994	5,649	6,250	6,493	6,074	6,662
85+	11,991	11,118	12,440	12,469	11,690	12,864	13,870
Total	1,824	1,623	2,023	1,981	1,765	2,194	2,075

Table continued below….

Table. 9 (Cont'd) Estimate of Provincial Government Per Capita Health Expenditures by Age and Gender, Saskatchewan, 1998 to 2002 - Current Dollars

Age	2000			2001		
	Male ($ per capita)	Female ($ per capita)	Both Genders ($ per capita)	Male ($ per capita)	Female ($ per capita)	Both Genders ($ per capita)
<1	5,157	4,449	5,138	5,407	4,854	5,581
1 to 4	1,041	963	1,069	1,108	1,028	1,168
5 to 14	829	779	878	904	851	900
15 to 44	1,026	1,537	1,397	1,123	1,681	1,456
45 to 64	1,790	1,843	1,975	1,957	1,993	2,086
65 to 74	4,033	3,432	4,098	4,469	3,757	4,433
75 to 84	6,999	6,421	7,265	7,642	6,996	7,725
85+	12,560	14,530	14,547	13,306	15,166	14,987
Total	1,849	2,299	2,267	2,027	2,505	2,406

Table continued next page…

Table. 9 (Cont'd) Estimate of Provincial Government Per Capita Health Expenditures by Age and Gender, Saskatchewan, 1998 to 2002 - Current Dollars		
Age	**2002**	
	Male	**Female**
	($ per capita)	($ per capita)
<1	5,742	5,412
1 to 4	1,165	1,172
5 to 14	920	880
15 to 44	1,150	1,773
45 to 64	2,059	2,112
65 to 74	4,877	4,028
75 to 84	8,034	7,500
85+	13,809	11,566
Total	2,138	2,670

Source: Table E.1.1. Estimate of Total Provincial Government Health Expenditures by Age and Sex, by Province and Canada, 1998 to 2002 – Current Dollars

Table 10. Provincial Population Projections 2006 to 2021, Statistics Canada and Saskatchewan Health				
Year	**Stats Can**		**Sask Health**	
	65+	**Total**	**65+**	**Total**
2002	150,000	1,025,900	148,032	1,024,788
2006	152,100	1,027,000	146,950	1,024,370
2011	157,400	1,026,400	148,742	1,024,549
2016	173,600	1,025,100	161,482	1,025,324
2021	198,600	1,019,500	182,640	1,023,825

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ENDNOTES

[1] Total health expenditures include spending by the public and private sectors. The public sector includes government (federal, provincial and municipal) and government agencies (Workers' Compensation Boards, etc), and the private sector includes individuals and private firms.

[2] The public sector (government and government agencies) accounts for approximately 76 percent of total provincial health expenditures. Provincial government expenditures represent 88 percent of public sector expenditures, or 67 percent of total provincial expenditures on health care.

[3] CIHI health expenditure data are complied from a variety of sources, including survey information. Reported health expenditures are therefore properly considered as estimates of provincial health spending rather than actual expenditures.

[4] Current dollars refers to the price of spending in a particular period (prevailing prices).

[5] CIHI real (inflation adjusted) health expenditures are presented in 1997 dollars and are calculated using price indices for public and private expenditures in each province. Public sector spending is deflated using Statistics Canada implicit price indices for government expenditure, and private sector spending is deflated using the health component of the Consumer Price Index (CPI).

[6] Public payments are derived mainly from general taxation, and are directed towards "insured services" (hospitals and physicians) as well as other health programs (home care, long term care, prescription drugs). This latter group is comprised of services involving a mixture of public and private funding. Private expenditures involve out-of-pocket payments by individuals and disbursements by private firms. Services financed mainly from private sources include optometric care, dental care and non-prescription drugs.

[7] The Summary Financial Statements consolidate the financial transactions of the General Revenue Fund, other funds (Heritage Fund, Fiscal Stabilization Fund) and other government agencies. In the opinion of the Office of the Provincial Auditor, the Summary Financial Statements provide a full accounting of the financial affairs of all government entities and are the most appropriate source for assessing the financial operations of the Province.

[8] The accumulated deficit (net debt) is defined as the sum of all annual deficits and surpluses, and is equal to the difference between total liabilities and total financial assets of the Province.

[9] The annual surplus (deficit) is the difference between revenues and expenditures in a given year. The measure is considered to show the extent to which revenues raised in a particular year were sufficient or insufficient to meet expenditures incurred during the same period.

[10] The exclusion of debt costs (interest paid on the public debt) from the calculation of health spending as a share of government operating expenditures provides a smaller denominator and, consequently, results in health spending representing a larger portion of government spending than would otherwise by the case.

[11] Services provided by physicians, chiropractors, optometrists and dental surgeons covered and paid for under the Saskatchewan Medical Services Plan.

[12] Two reviews have been conducted at the national level

– The Commission on the Future of Health Care in Canada (Commissioner: R. Romanow), and The Health of Canadians

– The Federal Role (Chair: M. Kirby), and three studies at the provincial level, Report of the Alberta Premier's Advisory Council on Health (Chair: D. Mazankowski), Emerging Solutions

– Report and Recommendations of Quebec Clair Commission (Chair: M. Clair) and Saskatchewan Commission on Medicare

– Caring For Medicare (Commissioner: K. Fyke).

[13] Cost accelerators are defined as those major health care developments expected to increase spending in excess of basic cost factors, but not able to be quantified on a system-wide basis.

[14] The argument of population ageing as a major determinant of health use and cost is based on the observations that: (i) health use, and costs, increase with age and are particularly concentrated among persons 65 years of age and older (ii) the baby boom population (individuals born between 1947 and 1966) is particularly large and is approaching the age threshold of requiring more health services (iii) the ageing of the baby boomer population will therefore result in a significant rise in the number of seniors and the share of older age cohorts in the total population and, as a result, higher health use and costs.

[15] The cost methodology used in the Ministers of Health report is based on Statistics Canada population projections for each province to the year 2026, an assumed inflation rate of two percent per year and an 'other' growth rate of one percent for unexpected health care needs.

[16] The status quo requirements are considered to be the annual funding required by the provincial government to cover inflation, collective agreements, service growth and other existing cost pressures, but exclusive of new major services or personnel increases.

About the Author

Mr. Daniel Hickey began his career with the Government of Saskatchewan in 1980, and has served in the departments of Health, Finance and Executive Council, as well as with provincial health authorities. Prior to his appointment as Senior Fellow, Mr. Hickey was Executive Director, Medical Services Branch, Saskatchewan Health and, in 2001, participated as a member of the Saskatchewan Commission on Medicare. In his twenty-five years of public and health sector experience, he has dealt with a broad range of policy and program issues in the area of health management, provincial finance, program development and planning.

Academically, he has a number of recent publications in the areas of health care and public policy, including examination of the evolution of public drug benefits in Saskatchewan, the establishment of the Saskatchewan prescription drug plan and the funding and financing of provincial health services. During his term with SIPP, he was engaged in research on the effects of provider payment arrangements on service quality and health costs, and the distributive impact of health financing options on population groups. Born in Saint John, New Brunswick, Mr. Hickey holds a Bachelor of Arts (High Honours) from St. Francis Xavier University and the University of Durham, a Master of Public Administration from Queen's University and a Master of Business Administration from the University of Regina.

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