Sustainable Healthcare for Seniors:
Keeping it Public

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Sustainable Healthcare for Seniors:
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by Greg Flanagan
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Executive Summary

The government of Alberta has consistently used the threat of the aging baby boomers to undermine confidence in the sustainability of public healthcare. According to the Alberta government, "In coming years, Alberta's healthcare system will face increasing pressure from an aging population, new medical advances and the rising cost of prescription drugs. Without making changes, Alberta's public healthcare system will not be sustainable."

The government has established a commission to review demographic trends and the implications of aging for seniors supports. The anticipated outcomes will include "strategies that encourage future seniors to plan for self-reliance and independence."

This report peels back the rhetoric to evaluate the real situation for seniors healthcare in the province. The objectives are to shed light on sustainability, and to consider what will be needed in the next 20 years to maintain the optimum health and wellbeing of seniors.

The report includes an independent demographic analysis of the growing number of seniors in Alberta, and a calculus of their added costs to the healthcare system. It will place this into the context of an economic analysis of affordability, putting Alberta's healthcare costs in perspective, using international, national, and provincial considerations of affordability. Finally, the report presents recommendations for both an improved healthcare model for seniors and reductions in health expenditures in the long-term.

However, the motivation for reform is better health, not cost savings.

Demographics: An Aging Population

We have all heard of the coming tsunami of seniors in Canada as the baby boom generation ages. We have also been inundated with warnings that public healthcare will become unsustainable due to rising costs in general and the aging population in particular.

Demographic analysis is the study of populations, their composition, and how they change over time. Demographics have been influenced greatly by the implementation of population health and individual healthcare: birth rates, infant mortality, death rates, and longevity, for example.

Models predicting population are often wrong, especially the further into the future they attempt to predict. However, in the case of

Alberta, population and age distribution should be relatively easy to predict. Changes in the birth rate, while considerable over time, have been gradual and death rates overall have been relatively stable. Historically, Alberta's net migration has had little effect on the population mean age.

Of course, any of these factors could change. For instance, net migration could change the age distribution of the population in the future either by self-selection (Alberta baby boomers retiring to BC), or through explicit government policy. As another example, some suggest that life expectancy may begin to decline due to growing rates of obesity and type II diabetes. This reinforces the caution of predicting too far in to the future.

Nonetheless, with the best evidence available, a robust demographic model predicts that the proportion of seniors in the Alberta population will increase by almost 50 percent within 10 years, and double in the next 20 years. Clearly, this demographic conclusion is important in anticipating healthcare costs.

Costs to the Healthcare System

Seniors incur greater than average healthcare costs, and costs escalate with age. The reality is that as we age health needs increase. Illness, time with a physician and hospital use, care services, medical lab services, and pharmaceutical usage are highly correlated with age. Healthcare costs start to rise after age 55 and costs become significantly higher for seniors over 65. Similarly, overall healthcare system costs will increase due to Alberta's aging population.

Seniors currently account for approximately 35 percent of total public healthcare expenditures. Assuming we maintain current standards of healthcare, considering the costs among population age groups, Alberta's growing seniors population is likely to cost the healthcare system 30 percent more in real per capita terms over the next 20 years. This will require an annual increase above inflationary costs and costs associated with population growth of approximately 1.32 percent a year.

However, as discussed below, the current state of healthcare, especially for seniors, is inadequate. Thus, although it is possible to boost savings by better managing our resources, it is more probable that healthcare expenditures will need to increase more than 1.32 percent per year, at least in the short run.

Can this be managed financially?

Sustainability

It is clear that the Alberta government is obsessed with the affordability or sustainability of the publicly funded health system. Consider the following, a typical government statement: "there is no question that long term sustainability is a major challenge of Alberta's publicly funded health system."

In reality, the introduction of Medicare in the 1960s stabilized Canadian healthcare expenditures, which had been on a runaway trajectory similar to the United States. Canadian innovation in public financing of health has kept healthcare affordable while the United States has continued on its escalating trajectory with largely private funding.

Sustainability is a matter of whether the people of a jurisdiction can afford a given level of care. The relevant financial ratios in this analysis are healthcare expenditure to GDP, debt to GDP, and healthcare expenditure to total public expenditure.

Healthcare Expenditure to GDP

Of course, there is no standard as to what the people of a jurisdiction should spend on healthcare. This will depend on their wishes. However, national income will be the budget that limits their spending.

Alberta has the highest GDP of any province, but healthcare spending in GDP terms in Alberta is low by any comparison – a fraction of the Canadian average. It is extremely low using international comparisons, and in particular in comparison to the US, which has the highest ratio of health spending to GDP in the world (60 percent higher than Canada's).

Public healthcare expenditure in Alberta is a very low fraction of overall income, currently at approximately four percent of GDP. The current level is also low compared to the level in the mid-1990s, and has remained relatively stable over the last 10 years.

GDP has grown at an annual rate of 4.2 percent per capita in the last decade, far outstripping the projected increase in healthcare costs of 1.32 percent. At these rates of GDP growth and healthcare expenditures, healthcare expenditures would fall in relation to GDP.

Clearly from a GDP measure of the productivity, income, and the wealth of Albertans, current healthcare expenditures are affordable and sustainable. Moreover, Albertans could spend much more on healthcare and remain low compared to other jurisdictions in Canada and abroad.

Debt to GDP

Canada is by far in the best fiscal shape of all the G8 nations, with the lowest debt/GDP ratio, one that has steadily declined in recent years with government surpluses and robust growth in GDP. With a low debt/GDP ratio Canadian healthcare expenditure (as a ratio of GDP) is easily manageable in comparison to other countries. Alberta is even better off, as it has no deficits or debt and has been running large surpluses every year since 1996. In fact, Alberta has been accumulating large net financial reserves since 1999.

Health Expenditure to Total Expenditures

Although healthcare spending has been rising as a proportion of the overall provincial budget, it has not been rising as a proportion of GDP. Instead, government expenditure has been cut in relation to GDP. Under Premier Klein's tenure, government's share of the overall economy fell from 22 percent of GDP to 12 percent – a 45 percent reduction.

Despite what government officials might argue about the sustainability or affordability of the healthcare system, there is no need for the Alberta government to raise either royalty or tax revenues – now or in the foreseeable future – in order to appropriately fund Medicare. Alberta's annual surpluses are more than adequate to cover the costs, and again this year high oil and natural gas prices have Alberta on track for a record surplus.

However, if Albertans decided to increase taxes there is considerable tax room to do so. Alberta is the only Canadian province without a sales tax, and in 2000 Alberta cut income taxes – mainly for the wealthiest – foregoing over $2 billion dollars a year in revenues. Although Alberta need not raise revenues to pay for healthcare improvements, it has the tax room to do so.

Thus unsustainability claims seem less a genuine concern, and more a smokescreen for a particular ideological perspective. The Klein era was one of diminishing the public sector share of the economy and attempting to reduce healthcare costs wherever possible. This effort has paid off only in demolishing or privatizing public assets, increasing the inefficiencies in healthcare, and overextending healthcare workers.

It is clear that healthcare costs will occur, and they will likely increase. Reducing public expenditure will not make them go away; it would only shift them to personal out-of-pocket expenses, for those who can afford it, and private insurance for those who have it. Or it will drive costs into the implicit realm (costs not accounted in exchanged dollars) where it increases stress on caregivers, increases absenteeism from work, and reduces productivity and GDP. Most importantly, shifting costs will undermine the highly valued universality and equity aspects of Medicare.

Improving Seniors Healthcare

Expanding healthcare expenditures by 1.32 percent per year to address the growing seniors population will not be enough. Continuing the status quo in health services is not sufficient for seniors, nor is it good enough for healthcare in general.

What is needed is a more than doubling of long-term care facilities and assisted living spaces, an increase in home care and palliative care, an improved process of delivering and monitoring pharmaceutical use, a much greater number of staff and higher quality of training for staff, increased standards and their universal enforcement, and greater regulation of private and voluntary providers to ensure public standards and fees are maintained across the board.

There are some opportunities to more appropriately target the use of public resources. For example, increasing the number of long-term care beds would free up much more expensive acute care beds. The reality, however, is that greater per capita funding in addition to that required to maintain current standards will be necessary.

The approach of shifting more costs on to the individual decreases the efficiency and effectiveness of the healthcare system and also diminishes equity. Today's and tomorrow's seniors expect that healthcare will be there for them when they need it at an appropriate level; that it be accessible, affordable, and of top quality; and that they need not burden others, especially family, in their later years.

In order to reduce overall costs and improve the wellbeing of seniors, some healthcare services should be returned to the public realm. Increasing the public explicit expenditures beyond the status quo is likely inevitable.

Freedom from the fear of healthcare expenditures in old age will allow for improved creativity, productivity, and income to a greater extent than any age-related cost increases.

Specific Recommendations

It is clear that the healthcare for seniors requires a considerable injection of new resources right now, both to serve current seniors better and to be prepared for the substantial future increase in the senior population cohort. Specifically, the government of Alberta should:

- Build more long-term care units. Alberta needs a building program started now that will continue until at least another 14,000 beds are in place and staffed by 2025.
- Increase sub-acute beds and services for patients, who after an acute hospital stay has ended are not able to return home.
- Increase hospice and palliative care services as the number of people dying in Alberta will double over the next 20 years.
- Increase educational places for healthcare professional programs, including specialized geriatric training.
- Hire more staff graduates of these programs. There are far too few medical professionals now and more are required.
- Increase resources for on-the-job training.
- Improve working conditions for medical professionals.
- Improve care standards and their enforcement across public, voluntary, and private services.
- Control and regulate housing costs of continuing care residents in all settings.
- Introduce "Phase 2" Medicare for seniors now, including an increase in public home care resources, improved access, integration and coordination of medical and other care and support services, and improved management and supervision of alternative therapies, particularly pharmaceutical treatments.

More than any other jurisdiction, Alberta has the resources and the opportunity to implement an ideal Medicare system – publically administered and paid. There have been enough studies, and now it is time to implement Phase Two of Medicare. With our wealth, there has never been a better opportunity. The model can then be exported to the rest of Canada and even the rest of the world. What greater legacy could there be?

Introduction

The government of Alberta has consistently used the threat of the aging baby boomers to undermine public confidence in the sustainability of public healthcare. The government is embarking on a review of demographic trends and the implications an aging population may have on seniors supports. The 2007 business plan for the Ministry of Seniors and Community Supports states that one of its top priorities is the establishment of a demographic planning commission is to provide analysis and proposals to prepare for the needs of an aging population and ensure facilities and supports are available to seniors. The priorities for that read as follows:

> *A planning commission will be established to support the government's efforts in planning and preparing for an aging population. As part of this strategic priority, the province will improve its capacity to identify and forecast the needs of future seniors. This will contribute to the province's ability to develop strategies that encourage future seniors to plan for self-reliance and independence.*

In addition, the priorities for the Ministry as identified by the premier include bringing forward an updated plan to expand long-term care and improve standards of care. After some delay the Commission has now been established.[1]

Shifting Demographics

Seniors currently make up approximately 10 percent of Alberta's total population. The Alberta government anticipates that by 2031 one in five Albertans will be a senior. The seniors population is growing at a faster rate than the rest of Alberta's population, resulting in an aging population. The government is predicting that the aging of the population should be relatively gradual until 2011 after which it will accelerate as baby boomers begin to turn 65. The government is also predicting that this will cause problems of sustainability in healthcare. According to the Alberta government, "In coming years, Alberta's healthcare system will face increasing pressure from an aging population, new medical advances and the rising cost of prescription drugs. Without making changes, Alberta's public healthcare system will not be sustainable."[2]

1 *Alberta prepares for an aging population Demographic Planning Commission will advise on the needs of future seniors* May 29, 2008.

2 Government of Alberta, Health and Wellness.

Adequacy of Care

After years of 'reform' following the release and implementation of the Broda report[3] in 1999, the Auditor General conducted an investigation into the adequacy of services offered to seniors. In the report released on May 9, 2005, he found that the basic service standards were out of date for long-term care facilities and the monitoring of compliance with standards was inadequate.[4] Across the province, facilities met only 69 percent of the (inadequate) care standards, and 89 percent of housing standards. In particular, the Auditor found that facilities were not meeting standards for: providing medication to residents, for maintaining medical records, and for the use of physical and chemical restraints; nor were they properly using resident care plans. Given the issues raised in this 2005 report, the government's reform program for services provided to seniors needs to be reassessed. More funding, better quality assessment and enforcement, and generally better care for seniors must be established now as planning for a greater number of seniors proceeds.

Purpose and Structure

This report was conducted to evaluate the situation for seniors' healthcare in the province of Alberta. The primary objective is to consider what will be necessary in the near future – the next 20 years – to maintain the optimum health and wellbeing of the province's seniors those in the age group 65 years and older.

This research project will parallel and complement the work of the government's demographic commission. The report will include an independent demographic analysis. It will provide a calculus of the potential extra cost to the healthcare system on an 'all other things constant' basis while placing into the context of an economic analysis of affordability. As well as a summary of health issues for Alberta's seniors will consider the issues of reform.

The report will also look into the needs of seniors and the adequacy of government plans for service provision, given the demographic and economic context. It also complements work that has been done by other groups monitoring services for seniors including analysis of the costs and benefits of public, non-profit and private for-profit options.

3 Broda, David, Chair, Long Term Care Policy Advisory Committee, Alberta Health and Wellness, *Healthy Aging: New Directions for Care, Long Term Care Review: Final Report of the Policy Advisory Committee*, Edmonton, November 1999.

4 Minister's Statement, *Report of the Auditor General on Seniors Care and Programs*, Edmonton, May 9, 2005, http://www.gov.ab.ca/acn/200505/17994672F749F-2CEC-49AE-B8AA505046524FA7.html

The data analysis in this report, both demographic and economic, will be used to support expansion of public healthcare facility – based or residential continuing care, home care, and other healthcare for seniors. This case is based on the data on need and affordability, and the principles of access and equity.

The study has four sections. Section One starts with an overview of the demographics the current population: its size, growth, sources of growth, and age components. The consensus has been that a particular age cohort – the baby boom generation – is dominating the demographics of Canada and most western nations. Rather than relying on other sources on this perspective, this study develops a model specifically from the demographic data on Alberta. Although Alberta has a lower age profile than the rest of Canada it is nonetheless true that Alberta's population is aging and there will be considerable growth in the seniors age cohort.[5] Section Two considers the costs of healthcare in Alberta and the current data on age-related healthcare costs. Section Three puts Alberta's healthcare costs in perspective, using international, national, and provincial considerations of affordability. The appropriate measures of 'sustainability' as well as the question of rising healthcare costs are addressed, while recognizing there is no right level of expenditure on healthcare. Section Four outlines seniors healthcare issues and the current state of healthcare services (including housing aspects). This section includes recommendations, for improved healthcare for seniors and suggests healthcare reforms which may reduce average health expenditures in the long term, through investments in home care expanding long-term care facilities, and enhancing healthcare in the public realm. However, the motivation for reform is better health for seniors – not cost savings.

5 Alberta's 10.1% of seniors in 2000 compares to a national average of approximately 13%. Every other province was between 15 and 40% higher. Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues, *Canada's Aging Population*, Minister of Public Works and Government Services Canada, Ottawa 2002

SECTION ONE: Alberta's Population – Demographics Matter

All of us age, one year at a time as the pundits like to say. As we age, on average, our personal healthcare needs increase in our senior years. However, more important to the future of healthcare is the question of how the age of the population changes over time. We have all heard of the coming tsunami of seniors in Canada as the baby boom generation ages. We have also been inundated with warnings that healthcare will become unsustainable due to rising costs in general and the aging population in particular. This section will analyze the current Alberta population and estimate the tendencies of the population's age. The next section will consider the nature of average health costs and how they relate to different age cohorts.

Demographic analysis is the study of populations, their composition and how they change over time. Demographic analysis can be of great value as a predictive tool in social science. However, one needs to be careful because as populations change so do many other variables which must be looked at when considering social change, including technology, human psychology, expectations, attitudes, economic factors, and political conditions. With this caution in mind demographic analysis has much to contribute to the discussion of healthcare and the best way to deliver it in the future. Demographics have also been influenced greatly by the implementation of population health and individual healthcare: birth rates, infant mortality, death rates, and longevity, for example.

Alberta's Population

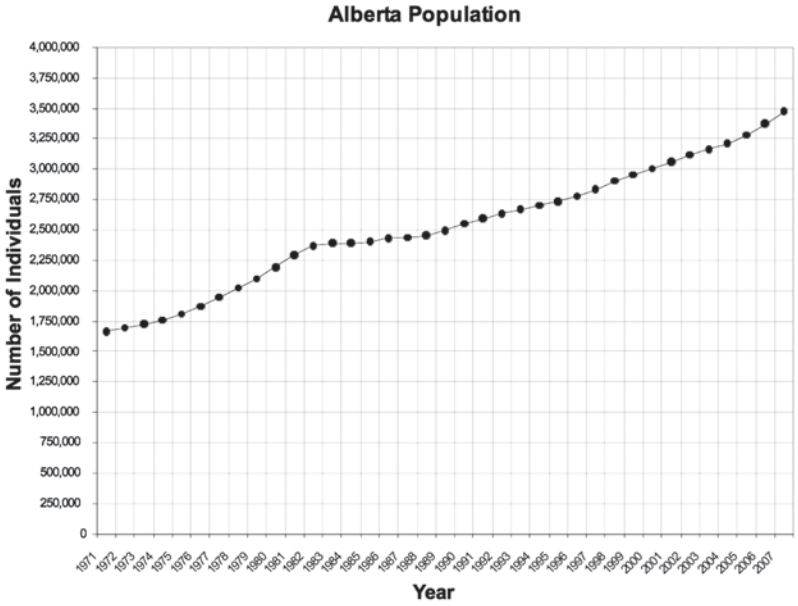
By 2007, the Alberta population had reached approximately 3.5 million. The province's population has grown at the highest rate in Canada. Both current Canadians and recent immigrants have been attracted to Alberta for many reasons: jobs, high incomes, low taxes, attractive cities with relatively good infrastructure, and a beautiful natural setting.

The population growth rate is a function of births, deaths, provincial migrants, immigrants, emigrants, as well as the number of temporary residents. Figure 1a) shows the population growth rate since 1971; Figure 1b) shows the components of this growth. It is interesting to note that the population grew at a strong rate between 1971 and 1982 then leveled off for a few years in the early to mid-1980s before continuing to grow from approximately 1987 to the present. The

population leveled off during the 1980s because births leveled off and because net migration was negative – that is more people left the province than entered.

Figure 1

a)



b)

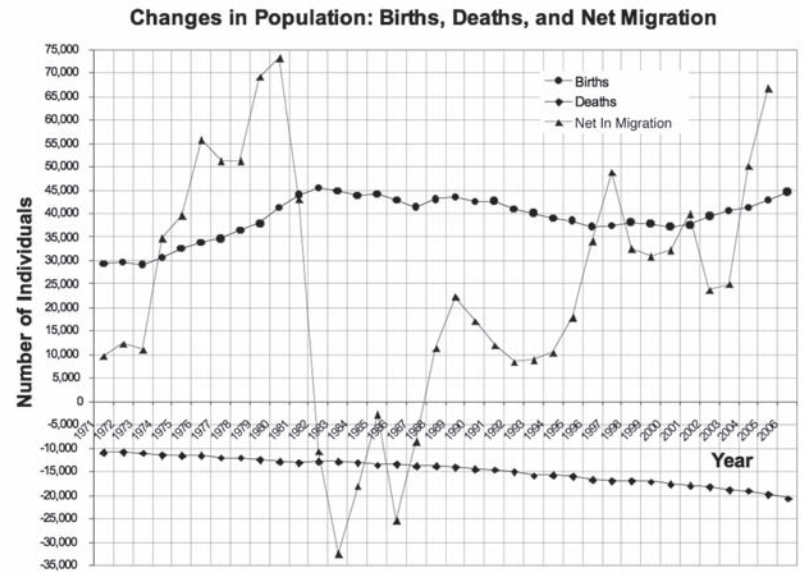
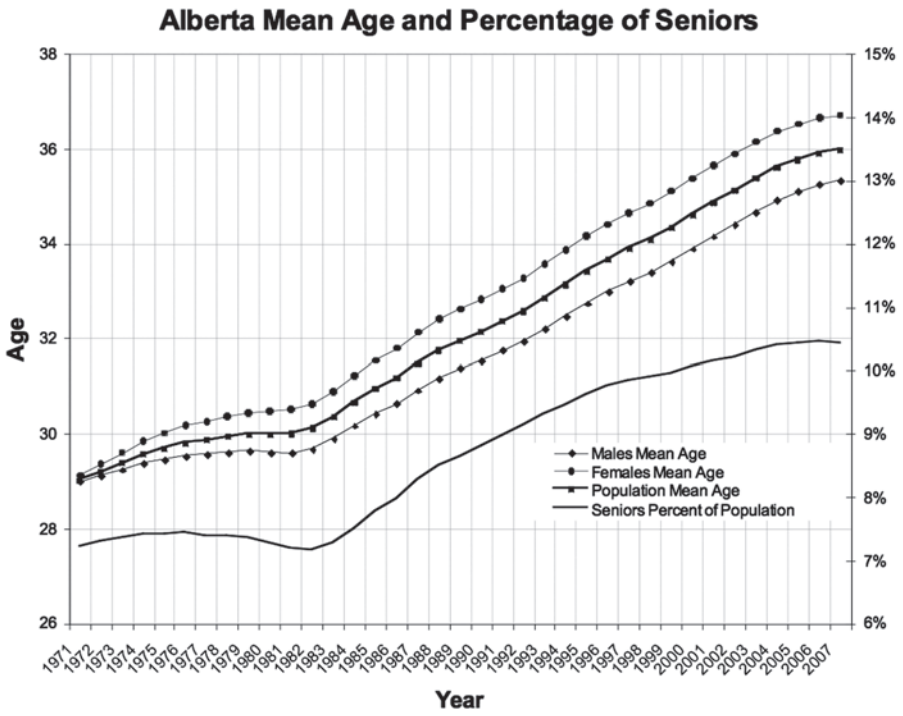


Figure 1 shows the general population trends in Alberta. The most important demographic characteristics for our purposes are the mean age of the population and the percentage of the population in the category of seniors, those aged 65 and over. Figure 2 illustrates the changes in these two characteristics. The average (mean) age has increased in the 36 years shown. It has risen substantially from slightly greater than 29 years (29.14 for females and 29.02 for males) to almost 36 (36.72 for females and 35.25 for males).

Figure 2



As one might expect, when the population mean age is rising, the proportion of seniors in the population also rise. The lower line, using the right hand scale, shows the proportion of seniors in the population. This percentage was slightly more than 7 percent through the 1970s and into the mid 1980s and then rose to the current 10.4 percent. The change in the mean age has been tapering off in the last few years as has the percentage of seniors in the population.

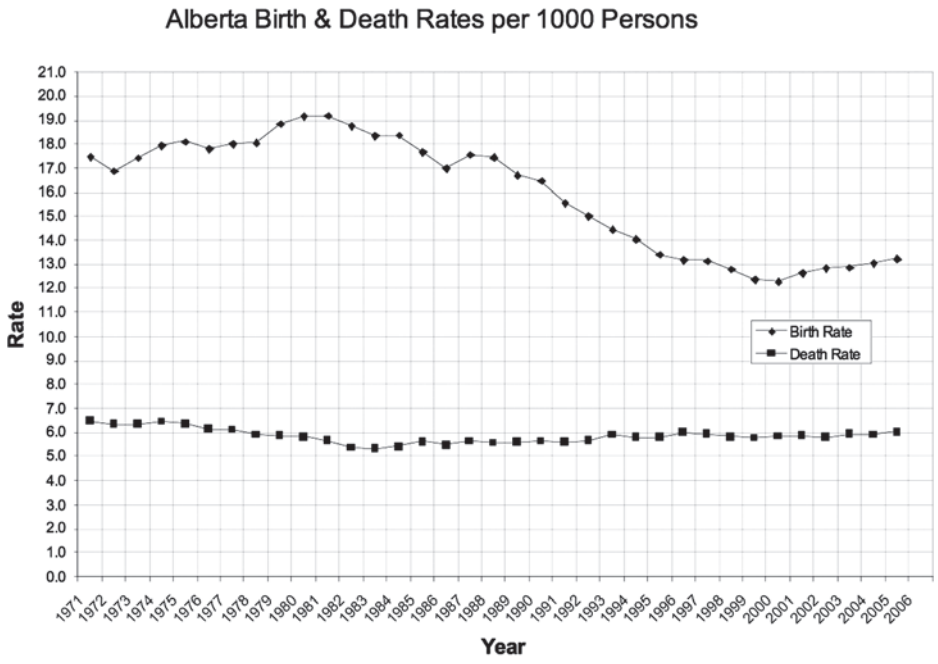
The main variables affecting the mean age and the rate percentage of seniors in population are the birth rate, death rate, and net migration including interprovincial migration and net immigration.

Births are still the major determinant of population size and age distribution in Canada. The birth rate, the number of live births per 1000 population, has been falling in Canada (and Alberta) throughout the post-war period. The birth rate in Canada in the 1910s, 1920s and 1930s was high, form a peak of 31.9 in 1915 to a low of 20.1 in 1936. From 1937 on, the rate increased to a range of 28 during the post-World War II period until 1958 and then fell continuously to a low of 11.4 in 1998.[6] The birth rate per 1000 persons for Alberta from 1971-2006 is illustrated in Figure 3. The birth rate peaked in this period in 1981 and 1982 at 19.2 and decreased to its lowest rate of 12.2 in 2001. It has been rising since into the range of 13. The death rate, also illustrated in Figure 3, has been remarkably

6 Baxter, David, "Population Matters: Demographics and Health Care in Canada" pp 141-142, in *Better Medicine, Reforming Canadian Health Care*, Gratzer, David, editor, ECW Press, Toronto 2002.

constant over this period at approximately 6 per 1000. If births were to remain at a constant rate, the age distribution of the population would eventually reach a relatively static proportion. Therefore, changes in the birth rate are critical to changes in population distribution, including the proportion of seniors.

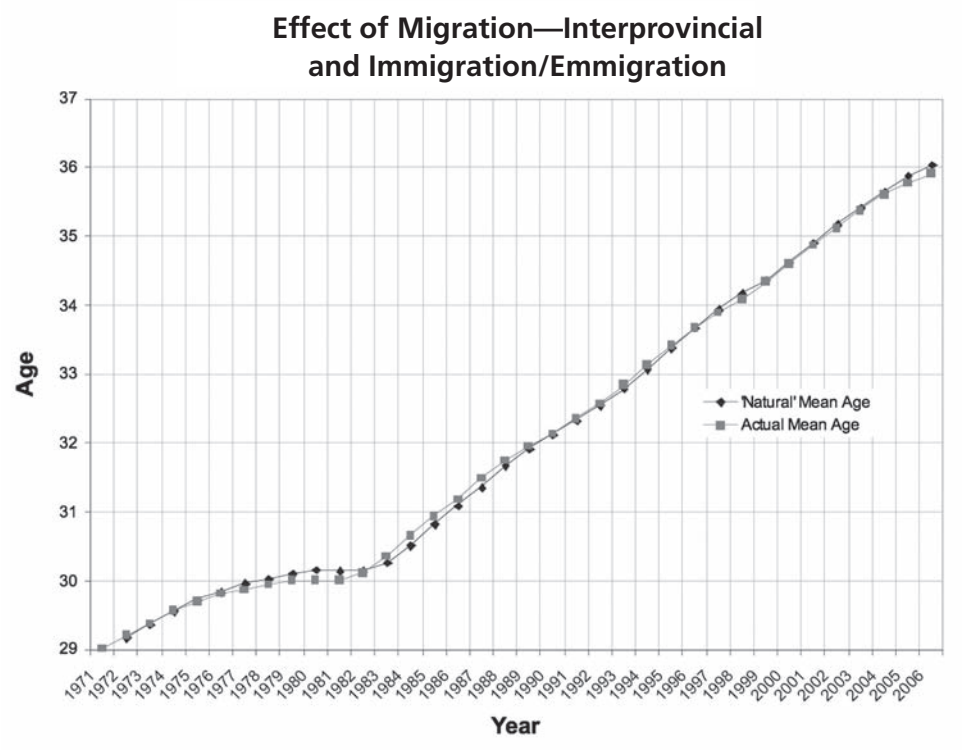
Figure 3



The net interprovincial migration can also have a major impact on the provincial population. In the last few years the net interprovincial migration has been greater than the number of births. However, the net migration has been quite variable as is shown in Figure 1b) on page 11, even dropping below zero in a number of years. What is important to consider is the effects net interprovincial migration, immigration, and emigration have upon the age distribution and therefore the population mean age and proportion of seniors. In order to do this the 'natural age' was calculated by assuming every one alive in year one aged one year in the next year adding the new births and subtracting deaths assuming a distribution of death centered on a mean of 80 years old (the approximate expected life span). The results are illustrated in Figure 4 where the actual mean ages are compared to the 'natural' mean. As can be seen in this figure, the changes in migration have had little effect on the population mean age. The corollary of this is that people coming or leaving

the province have a very similar mean age (and likely distribution) to the majority population. Many seniors move to be near their children. In fact, it seems that Alberta attracts more seniors than leave the province. Alberta has the second highest number of net interprovincial migrants who are seniors, just after British Columbia. For example, 619 more seniors moved into Alberta in 2004/05 than moved out.[7]

Figure 4

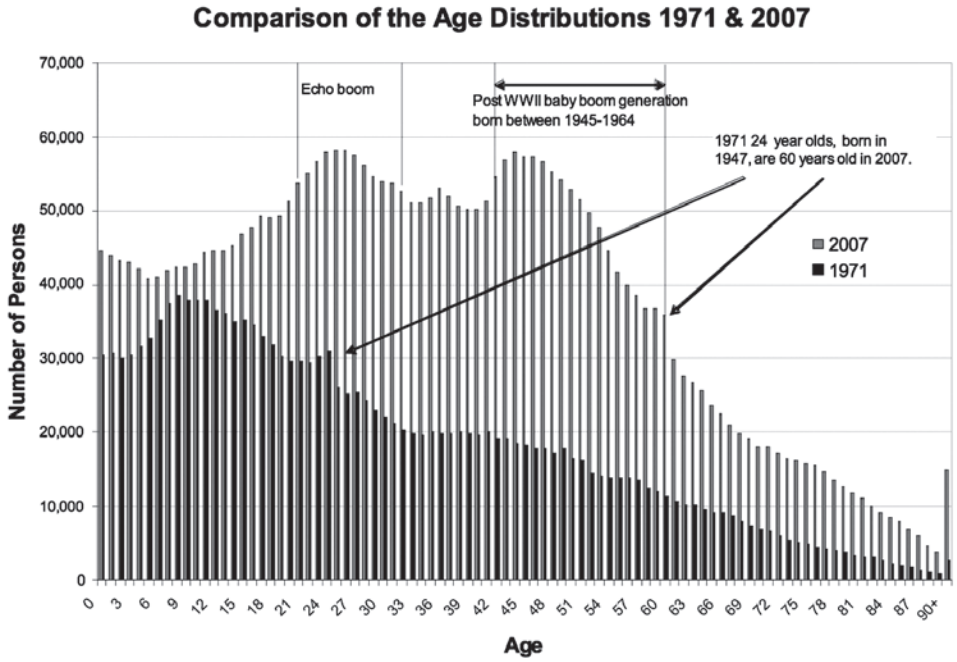


An important demographic question is how the age distribution of the population is expected to change. We first consider how the distribution in 2007 has changed compared to 1971, using Figure 5. The greater bulk in the 2007 distribution is due to a greater population. The 1971 distribution shows the leading edge of the so-called post-World War II baby boom, where those born in 1945 were 24 years old. The 2007 distribution shows this leading edge as the start of a double peaked distribution including the baby boom generation born between 1945 and 1964, and their children – the so-called echo boom. It is this twin peaked wave that is considered the coming tsunami of seniors, who will start to retire in 2010. As considered in Section Two, it is this wave that is expected to put pressure on the public healthcare system as costs increase with population age, all other things constant.

7 A Profile of Alberta Seniors, Alberta Seniors and Community Supports Report, May 2007.

Will this wave increase the proportion of seniors in the population? Clearly the lower the birth rate the faster the senior proportion of the population will rise. A lower death rate will also push up the mean age and the proportion of seniors in the population. The death rate has become quite steady over time at 6 per 1000. The birth rate has been more volatile and generally decreasing, but more recently it has settled at approximately 13 per 1000. At some point if these rates remained stable the age distribution (with a stable expected life span) would also stabilize.

Figure 5



Predicting Alberta's Future Demographics

In order to predict the future proportion of seniors in the Alberta population more exactly, a population prediction model was constructed using the Statistics Canada population table for 2006 as the base population.[8] Initially, net migration was assumed to be zero as it was considered to have had a neutral effect on the age distribution in the past, and because it has recently tapered off as a determinant of population growth. The birth rate was initially assumed to be constant at 13 per 1000. The number of individuals in each specific age was advanced one year for each subsequent year's data. The age-specific death rates for 2006 were calculated and then applied to the new number in each age. The birth rate multiplied by the previous year's population was entered in each year's zero age group. In this way the population was predicted for future years up to 2027. The predictions are calculated for a 20-year period only, as any predictions will lose their efficacy the further one goes into the future.

8 Statistics Canada population table

$$P^{2007}_{t=1971} = \sum_{i=0}^{90+} a_i^t$$

Calculated population prediction table

$$P^{2027}_{t=2008} = \beta \times P^{t-1} + \sum_{i=0}^{90+} (1-\delta_i^{2006}) \times a_i^{t-1}$$

$$\delta_i^{2006} = D_i^{2006} / a_i^{2006} \qquad \sigma_t = D_{t-1} / P_t$$

P = Population t = year a = age
β = birthrate D = deaths
σ = death rate
δ = age death rate determined from 2006 data

The population estimates will deviate from the realized population depending on the net migration data, however, the assumption is that the relative age distribution will not be significantly affected. To the degree that net migration is significant and has a significantly different (younger) distribution, the prediction will be less accurate.

Two death rate assumptions were considered. As the death rate has been very stable at approximately 6 per 1000, this rate was first applied. In this case the number of deaths per year was calculated and the age specific death rates applied as a percentage of the total. Although appearing stable, it seems unreasonable that the death rate would continue to remain constant as the average population age increases. Therefore, in the second approach the specific age death rates were applied to each year's age data. The sum of deaths was then subsequently divided by the population to determine the overall death rate. In this case the death rate increased from approximately 6 per 1000 to 8.8, a substantial increase. The reality is likely to fall between these two extremes. For example, a factor to consider is that the life expectancy for Alberta has been increasing between 1991 and 2005, although at an irregular rate, as Table 1 shows.[9]

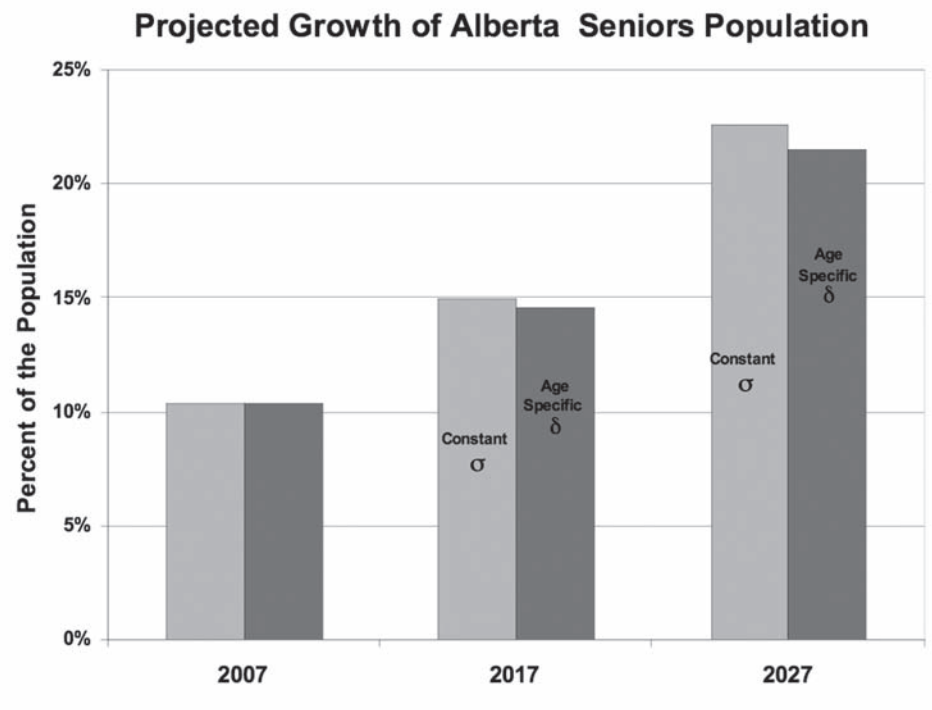
Figure 6 illustrates the growth in the population of seniors for 2017 and 2027 under the two death rate assumptions. In either case the seniors proportion of population more than doubles in 20 years, from approximately 10 percent to more than 20 percent.

Table 1 Alberta: Life Expectancy

Year	Both Sexes	Males	Females
1991	78.1	75	81.2
1992	78.3	75.4	81.2
1993	78.2	75.5	81.0
1994	78.3	75.4	81.3
1995	78.5	75.6	81.4
1996	78.5	75.8	81.2
1997	78.9	76.4	81.4
1998	79.1	76.3	81.9
1999	79.2	76.6	81.7
2000	79.5	77	81.9
2001	79.7	77	82.3
2002	79.7	77.4	81.9
2003	79.9	77.5	82.2
2004	80.2	77.8	82.6
2005	80.3	77.8	82.7

9 Statistics Canada, Alberta, At birth Series: v21570778 Both sexes, v21570782 Males; v21570786 Females

Figure 6



Population distribution is, of course, susceptible to other variables, most notably the birth rate. However, changing various parameters of this population prediction model does not substantially change the conclusion that the percentage of seniors will double in the 20-year forecast. For example, if the birth rate was increased to 20 per 1000 in the model (a substantial increase that is not expected, and is more likely to decrease), the percentage of seniors in 2027 would still be 19.78 percent.

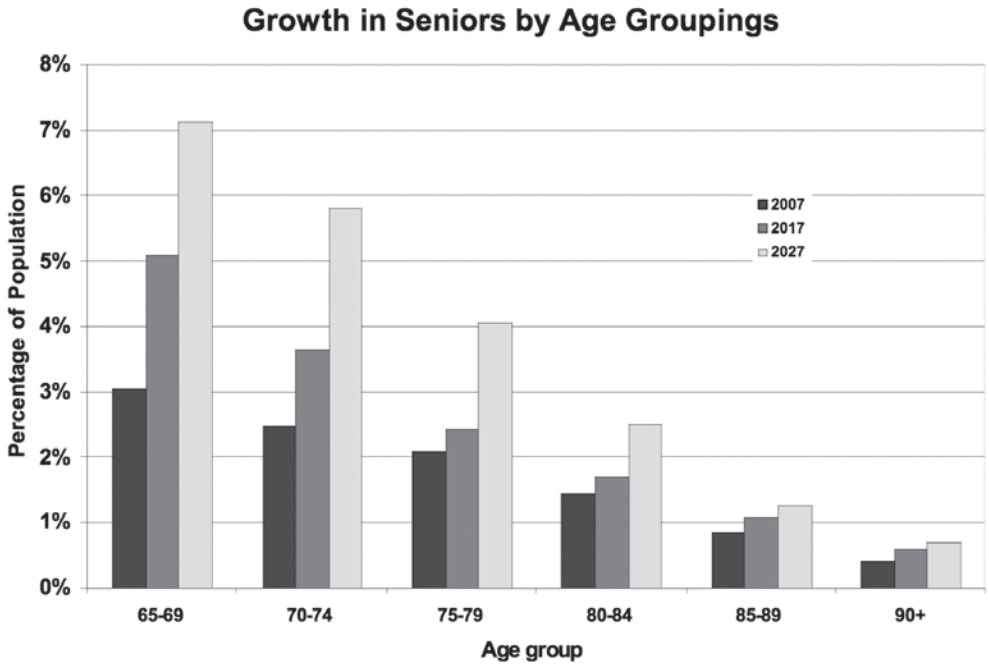
Over the 20-year period the model covers, it is more likely that increases in longevity will be achieved. This would change the death rate assumptions based on 2006 data. Note in Figure 3 that the death rate was higher in the 1970s, when the mean age of the population was also lower.[10]

Important from a cost perspective is the specific changes in the proportion of seniors by age groupings. Figure 7 illustrates how the specific age groups will grow between 2007 and 2027 under the initial assumptions. The 65-69 age group increases the most, from three percent to over seven percent. This result would be most sensitive to the specific age-group death rates experienced in 2006, used in the prediction model. Barring a pandemic which tends to increase deaths more than proportionally in seniors, it is likely that any gains in longevity will show up as reduced death rates in the 70-89 age groups. The 90+ group, if it were to be affected by increased longevity, would likely have a minimal impact on the seniors proportion of population.

10 Some suggest that life expectancy may begin to decline due to diseases of affluence – obesity, type II diabetes, etc. This reinforces the caution of predicting too far in to the future.

However, as we shall see in Section Two, this may impact healthcare costs much more than proportionally.

Figure 7



Conclusion

Population in Alberta has grown at a considerable rate, more than doubling since 1971 – a mere 35 years. Predictive models are often wrong, especially the further into the future they attempt to predict. Although birth rates have changed considerably over time, the changes have been gradual. For particular age groups, especially the very young and older persons, death rates have declined considerably with advances in medicine and public health. However, death rates overall have been relatively stable. Therefore, population and age distribution should be relatively easy to predict. In an open society, however, the net migration can be and has been very volatile (see Figure 1 b) on page 11. By deconstructing Alberta's past experience it was shown that net migration has historically had little effect on the population mean age (see Figure 4 on page 14). The past experience of migration and immigration may not continue. Either by self-selection (more Alberta baby boomers retire in BC or offshore than migrate to Alberta) or through explicit government policy, net migration may significantly change the age distribution of the population. In any event it is reasonable to predict that the proportion of seniors in the Alberta population is going to double in the next 20 years. Alberta should start planning seriously for this. The next section considers the potential effects on healthcare costs this demographic conclusion suggests.

SECTION TWO: Healthcare Costs

Healthcare costs have been rising in Canada and in Alberta. This has created a whole literature on healthcare and a plethora of studies on how healthcare can be made more efficient and effective, and how we can move the system away from treatment to one focused on wellness. Governments across the land have been declaring the unsustainably of Medicare as healthcare budgets increase and their proportion of government expenditures rise. This section of the report will outline and analyze the current state and history of healthcare costs in Alberta. The next section will consider the controversial issue of sustainability.

Amidst all of this discussion of costs it needs to be remembered that healthcare will incur costs regardless, whether through public provision or private out-of-pocket expenses and private insurance. Failure to provide adequate healthcare can cost us even more in many ways when not properly provided: debilitating illnesses, epidemics, premature deaths, and loss of productivity.

Healthcare is a 'normal' good and in some cases a 'superior' good, in the terms used in economics. This means we will want greater health the higher our incomes rise; and we may want healthcare services to increase faster than our income increases.[11]

Public versus Private

Our current Medicare system is relatively new.[12] Hospital coverage across the nation dates to 1961, after passage of the Hospital Insurance and Diagnostic Services Act (1957), and physician care to 1971, after the Medical Care Act (1966) was passed. The relatively recent Medicare program in Canada includes public and quasi-public hospitals and mostly private physician practice, with a single payer – the government. The majority of health expenditures are paid through individual provincial public insurance programs, with federal programs for select groups, such as the armed forces and the RCMP. The federal government also makes financial contributions to the provinces for healthcare. Moving to universal comprehensive coverage in the early 1970s from a history of a fragmented mix of public and private health services was not more expensive, and stabilized expenditures as a percentage of national income.[13]

11 Elasticity is often assumed to be 1, that is a 1 percent increase in income leads to a 1 percent increase in expenditure (demand). See for example: Martins, Joaquim Oliveira, Christine de la Maisonneuve, and Simen Bjørnerud, *Projections of OECD Health and Long-term Care Public Expenditures*, Organization for Economic Co-Operation and Development, December 2006.

12 For a brief history see *Canadian Health Care System*, Donna M. Wilson, editor, Edmonton: 1995.

13 Evans, Robert G. "Economic Myths and Political Realities: The Inequality Agenda and the Sustainability of Medicare, p.120, in Campbell, Bruce and Greg Marchidon, editors, *Medicare Facts, Myths, Problems, and Promise*, James Lorimer and Company Toronto, 2007.

Provinces introduced these programs in different years. Alberta's present health system dates back to the acceptance of the hospital and medical care programs, which Alberta joined in 1972. These approximately 50/50 cost sharing programs were replaced with block transfers and grants through the Federal Provincial Fiscal Arrangements and Established Programs Act (1977). The federal government subsequently reduced overall grants and gave up 'tax points' to the provinces.[14]

After some ambiguity around what Medicare was and who paid for what, *The Canada Health Act* was passed in 1984. This act integrated and synthesized previous legislation while it laid out the five principles of Canada's healthcare system. It made clear that extra billing, an increasing practice in Alberta at the time, was not allowed. Medically necessary services and procedures are administered and paid for publically. However, there is still considerable ambiguity on what constitutes medically necessary and, therefore, there is still variance in what services are publically insured and paid for in various provinces. Services not covered by each provincial plan are paid for either directly by the individual or through private insurance plans. In Canada the average expenditure pattern is approximately 70 percent paid by the public and 30 percent by private individuals. This 30 percent is split, with 13 percent paid individually and 17 percent paid through private insurance. Alberta, at 74 percent, spends somewhat more publically than the Canadian average. The provincial comparison is shown in Table 2.[15]

14 Provincial and federal governments both tax income. The federal government reduced their percentage tax rate so that the provincial governments could simultaneously increase their rates leaving the citizen with no change in overall tax paid. A tax point is one percentage rate change. The problem is that provinces could choose to ignore this and claim (explicit) federal funding had decreased.

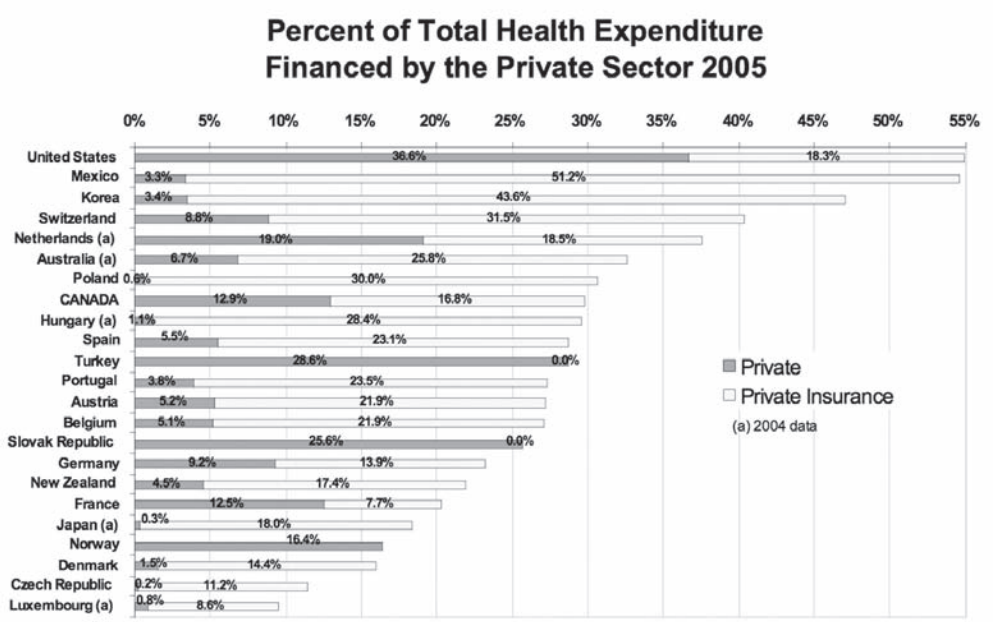
15 Table 6. *National Health Expenditure Trends*, 1975-2007 National Health Expenditure Database, Canadian Institute for Health Information, Ottawa 2008. f=forecast.

Table 2 Health Expenditure Summary, by Province/Territory and Canada, 2007[f]

		Total	Total health	Government	Other Public	Total Public	Private	Public
Prov/ Territory	Expenditure $ billions	Expenditure per Capita	Exp. as Percent of GDP	Sector Exp. per Capita	Sector Exp. per Capita	Sector Exp. per Capita	Sector Exp. per Capita	Sector as % of Total
N.L	$2.6	$5,011	10.0%	$3,637	$201	$3,838	$1,173	76.6%
P.E.I.	$0.7	$4,686	14.4%	$3,010	$340	$3,351	$1,336	71.5%
N.S.	$4.5	$4,850	13.6%	$3,144	$291	$3,436	$1,414	70.8%
N.B.	$3.8	$5,070	14.3%	$3,274	$270	$3,544	$1,526	69.9%
Que.	$33.6	$4,371	11.3%	$2,853	$282	$3,135	$1,236	71.7%
Ont.	$63.8	$4,975	10.9%	$3,082	$261	$3,344	$1,631	67.2%
Man.	$6.2	$5,250	13.0%	$3,499	$458	$3,957	$1,293	75.4%
Sask.	$5.1	$5,179	10.6%	$3,580	$451	$4,031	$1,148	77.8%
Alta.	$18.4	$5,390	7.3%	$3,695	$292	$3,987	$1,403	74.0%
B.C.	$20.5	$4,713	10.9%	$3,154	$215	$3,369	$1,345	71.5%
Y.T.	$0.2	$7,047	13.3%	$4,830	$875	$5,705	$1,342	81.0%
N.W.T.	$0.3	$7,892	7.9%	$5,728	$1,203	$6,931	$962	87.8%
Nun.	$0.3	$10,903	26.8%	$8,229	$2,126	$10,355	$548	95.0%
Canada	$160.1	$4,867	10.6%	$3,156	$280	$3,436	$1,432	70.6%

Canada's relative position in this public/private split is illustrated in Figure 8.[16] The United States tops the list with 55 percent private, with the developing nations Mexico and Korea not far behind. Although not as high as the U.S., Canada's percentage in the private domain is high when compared to other developed European nations, Japan, and New Zealand. "Allegations that Canada's public programs to finance healthcare are fiscally 'unsustainable' because they cover an unusually high proportion of costs are false."[17]

Figure 8



Explicit versus Implicit

The private/public distinction, when considering health expenditures, reflects only explicit costs, that is, costs that can be measured because an exchange of money has occurred. Recent history in Canada and Alberta has seen cost shifting in which the many costs of healthcare provision are implicit. Examples of implicit costs occur when hospital patients are discharged much earlier than in the past, or surgeries previously conducted in a hospital are performed on an outpatient basis. In such situations it is expected that family or friends will provide the needed post-visit treatment. These are real costs, but nobody receives payment. Additionally, an implicit cost is incurred when individuals must reduce or terminate employment because of the demands to be a caregiver. When such demands do not lead to outright reduction in employment, productivity is lost as these individuals require more time off for stress and increased illness due to having to care for an ill relative.

16 Figure 43: Percent of Total Health Expenditure Financed by the Private Sector, by Source of Finance, Twenty-Three Selected Countries, 2005, *National Health Expenditure Trends*, 1975-2007, Ottawa: Canadian Institute for Health Information, 2007

17 Evans, Robert G. "Economic Myths and Political Realities: The Inequality Agenda and the Sustainability of Medicare, p. 123, in Campbell, Bruce and Greg Marchidon, editors, *Medicare Facts, Myths, Problems, and Promise*, James Lorimer and Company Toronto, 2007.

As well, some costs have risen because payments for pharmaceuticals or medical devices have been pushed into 'retail' from 'wholesale'. Examples of this occur when further treatment is now required outside of a hospital, where these items were provided free of charge to the patient by the hospital (which bought them at wholesale prices). This not only changes these items from a public to a private expenditure, but also raises the total cost.

The shift in treatment of seniors in Alberta, especially with respect to housing and long-term care, has changed the expenditure patterns in these ways. A case study on the change over from a nursing home to a designated assisted living facility in Hinton, Alberta is a good example of these cost shifts.[18] Explicit costs have been shifted from public to private and increased as they move from wholesale to retail, and implicit costs have increased as more personal unpaid assistance is required.

Alberta Costs are Rising

Healthcare spending was cut by 21 percent in the three years 1994-96, when severe cuts to all public services in Alberta occurred under the Klein government as part of their drive to eliminate deficits and debt.

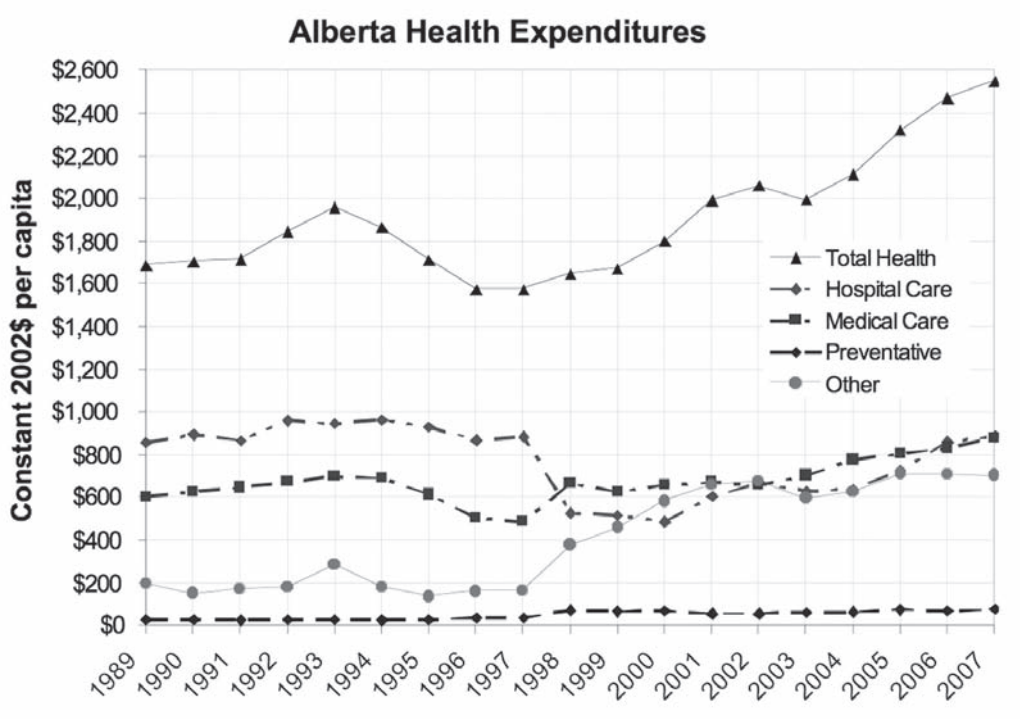
In the last 10 years, regardless of how much expenditure is explicit/implicit or public/private, the public expenditure on healthcare in Alberta has been increasing at a considerable rate (five percent per annum). Much of the increases in the most recent decade were necessary to repair the damage done in the name of deficit reduction. However, spending on healthcare in constant per capita dollars now surpasses the peak of 1993.

Figure 9 illustrates public healthcare expenditures in Alberta using constant dollars per capita. As we have seen in Section One, the population has also increased dramatically in Alberta, more than doubling over 35 years. As well, inflation, although low in the most current period, has compounded. In order to remove the effects of inflation and population increases, the values have been converted to constant dollars with 2002 as the base year, and are represented on a per capita basis.[19] This makes each year's value more representative of how public healthcare expenditures have been changing.

18 Armstrong, Wendy, & Raisa Deber, *Missing Pieces of the Shift to Home and Community Care: A Case Study of the Conversion of an Alberta Nursing Home to a Designated Assisted Living Program*, University of Toronto, March 2006.

19 Statistics Canada data Table 3260002 Consumer Price Index (CPI), 2001 basket content Series V738721: Alberta; all-items.

Figure 9



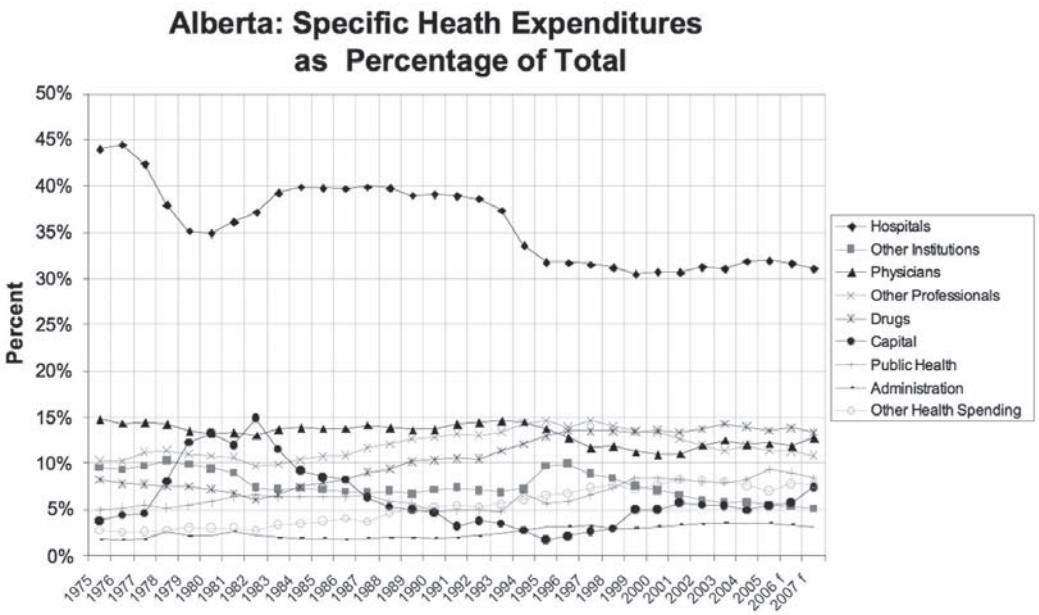
The total health expenditure line starts rising in 1997, surpassing the former 1993 peak in 2001. Physician expenses (medical care) follow a similar pattern. Hospital expenditures have risen but have not yet reached the previous high, as the number of hospital beds has remained low since the 1990s. 'Other' expenditures, including home care and pharmaceuticals, have risen considerably from the late-1990s, presumably providing treatments that have replaced much of the hospital care. Although 'preventative' spending has more than doubled since 1993, note the small amount expended (approximately $77 per capita) despite the amount of rhetoric placed on prevention in discussions of solutions to better health with concurrent lower costs.

Use of Hospitals Falling

Another way to consider health expenditures is to look at the percentage of expenditures on different categories over time. Figure 10 illustrates the decrease in the relative use of hospitals and increase in home care (other) and pharmaceuticals (drugs).[20] Hospitals include long-term care facilities and auxiliary hospitals, the numbers of which have not increased with the general population increase or the increase in the proportion of seniors in the population.

20 Health Expenditure by Use of Funds, by Year, by Source of Finance, by Province/Territory and Canada 1975-2007 – Current Dollars Run Date: 08-05-02, Canadian Institute for Health Information (CIHI) Years suffixed with f are forecasted values.

Figure 10



Costs in Relation to Age

Illness, time with a physician, hospital use, care services, medical lab services, and pharmaceutical usage are highly correlated with age. Healthcare costs definitely vary with the age group considered. This variance is illustrated in Figure 11.[21] As can be seen in the first column, the average per capita cost in 2005 was just over $3,000 (2005 current dollars). Costs are high for those under age one, where they average $9,000. Most babies are born in hospitals, while those born in alternative circumstances also require health professionals. Some babies are born with health problems, sometimes severe, especially in the case of premature births. The good news is that survival rates are high and increasing in Canada and Alberta. Premature birth can occur at earlier gestation periods due to technological advances which, however, can be extremely costly to the health system. The high per capita costs for this age reflect the costs at birth.

Healthcare expenditures drop significantly through the early years and adolescence to approximately one-half the average expense. During these years health expenditures are usually limited to eye, dental, injuries due to accidents, and infectious diseases. Writing in 1995 Wilson states, "Childhood illnesses are less common today than in the past because of improved living conditions and immunization."[22] This is evident even more so today.

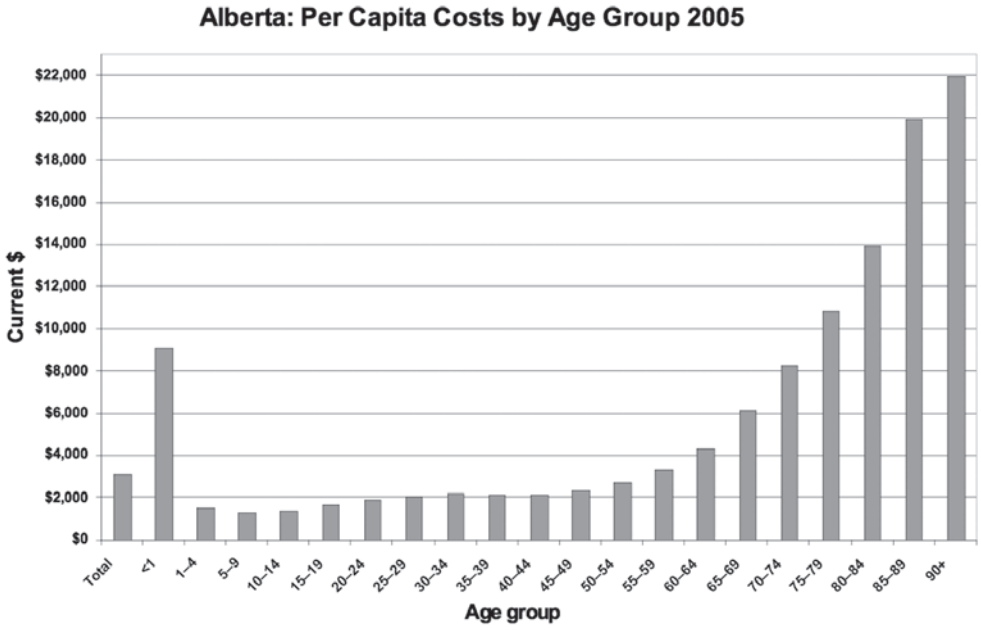
21 Table E.1.1 Estimate of Total Provincial and Territorial Government Health Expenditures, by Age and *Sex, National Health Expenditure Trends*, 1975-2007, Canadian Institute for Health Information, Ottawa: 2007.

22 Wilson, op cit 1995 p. 21

Young adults and individuals into early-middle age are relatively healthy and are not heavy users of the healthcare system. However, as Figure 11 illustrates that after age 20 through to age 44 expenditures do rise, amounting to approximately two-thirds the average expenditure. After age 44 through to age 54 expenditures start to increase, rising to the average of $3,000. In this middle-age group certain health issues become more common: heart disease, diabetes, cancer, multiple sclerosis, thyroid problems, etc. appear for many. Many of these health issues are chronic and long-lasting, requiring greater healthcare expenditures for this group and as they age.[23]

The per capita costs start to rise after age 55 and costs become significantly higher than the average for the seniors group 65+.

Figure 11



Many of the diseases that killed our ancestors are now preventable or treatable, prolonging our life expectancy. These changes were initially due to an increased standard of living and "brought about by a concerted public health movement."[24] Life expectancy has increased substantially in Canada and is now over 80 (see footnote 9). However, chronic diseases and poor health conditions increase with age, and as life expectancy increases people live longer with one or more expensive health conditions. For example, the great advances in public health have shifted the cause of death from "infectious disease to chronic disease – that is, to illnesses that are progressive and usually have long term and increasingly debilitating effects."[25] Additionally,

23 *Ibid*, p. 21.
24 *Ibid*, p. 25.
25 *Ibid*, p. 27.

Alzheimer's disease and other dementias increase with age and often require long-term care. Physical conditions such as atherosclerosis develop over a period of years. Treatments extend life, but also extend the length of the terminal illness, requiring greater healthcare services and other assistance for seniors. Most seniors report having at least one chronic health condition, most commonly: arthritis, high blood pressure, and cataracts.

Many diseases such as arthritis impede mobility and require greater assistance. Generally after age 65 we start wearing out at a faster rate. As a result of the correlation of healthcare usage with age, the considerable increase in the proportion of seniors in our population will have considerable effect on the level of healthcare use and overall cost. All other things held constant, any increases in the percentage of the population in the senior group will mean expenditures on healthcare will increase faster than the population at large and faster than the expenditures in the rest of the public sector.

Much of the need for healthcare resources is random. Many persons go through life with little need for healthcare – the lucky ones. In each age group there are individuals who require substantial healthcare resources and therefore incur higher costs than the average. Seniors incur greater costs as the number of individuals needing healthcare services in these age groups also increases. The claim of our healthcare system is to be there for these people – the unlucky ones, regardless of age. We pay for these resources collectively through our tax system in order that services are provided on the basis of need rather than ability to pay. Section Four will discuss ways to use our healthcare resources as effectively as possible, but we need to recognize that statistically, with more than a doubling of the seniors' age group, the healthcare system will need greater resources than we are currently planning for.

Estimating the Effect of an Aging Population on Healthcare Costs

The healthcare costs attributed to the seniors age group are bound to increase as the population age increases and the proportion of seniors as a percentage of population rises.[26] How much it will increase is difficult to predict, particularly too far into the future. For example, Evans et al note that although it is true that illness and its greater needs for healthcare increase with age, all other things constant, numerous studies have shown that population aging effects are relatively small. Cost projections rest on specific assumptions

26 Some evidence points to end of life being the most important cost driver not age per se, it is just that most people die in their senior ages and this is behind the higher costs in the senior years. This will be considered in Section Four.

about trends in age-specific morbidity and healthcare use that are not obvious. Reconsidering old data and taking a historical point in time, they predict physician costs from that time forward with then-current knowledge about costs and patient's age. At a given time physicians costs rise with increasing population age as we would predict, but when actual costs as they occurred over time are superimposed, physician costs fall even though the population age rises. This decrease must be due to other changes both social and technological offsetting the rise in cost due to aging. They conclude that long-term trends in healthcare physician use (in British Columbia) show minimal effects of population aging, but major effects, up and down, from changes in age-specific use patterns.[27]

The Evans et al, study has interesting implications that should be pursued. It dealt with physician costs only, which, as we have seen in Figure 10 on page 24 have fallen along with hospitals as a percentage of total expenditures over time. Alternative services have replaced these to some degree. The largest expenditure item accounting for seniors healthcare costs is long-term care, which are mainly supportive living costs.

Writing in 2001, David Baxter evaluated the cost of healthcare as a function of age and an aging population.[28] He explored healthcare spending over the years 1975-1998. He showed that population aging is not new and the population age has been steadily rising starting with the generation of 1931 – whose expected life span was rapidly increasing while the birth rate was falling. He disaggregated the six-fold increase in public spending over this period into causes: population increase, inflation, and changing demographics. From this the estimated increase in spending due to an aging population was only 14 percent. However, this approach did not consider many other potential changes in healthcare over the more than two decades, such as technological, social, economic, and environmental changes. Baxter did anticipate a major increase in the finances was needed to support public healthcare funding.

Following Baxter's approach, this report will use the most current data on age-related healthcare expenditures from Canadian Institute for Health Information in 2005 as illustrated in Figure 11.[29] This enables the projection of the effects of demographic change on provincial health expenditures. Given that the data is for 2005, this data will be used for a base year and then a general function to estimate future costs due to population aging will be calculated. For simplicity the population will be divided into sub groups: seniors (age 65 and greater) and non seniors (age 0 through 64). This approach could be

27 *Evans Robert G., Kimberly M. McGrail, Steven G. Morgan, Morris L.Barer, and Clyde Hertzman* "Apocalypse No: Population Aging and the Future of Health Care Systems", *Canadian Journal on Aging*. 2001; 20 (suppl. 1): pp 160-191.

28 Baxter, David, "Population Matters: Demographics and Health Care in Canada" in *Better Medicine, Reforming Canadian Health Care*, Gratzer, David, editor, ECW Press, Toronto 2002.

29 This does not mean seniors as age groups cost more than other age groups. Note that although per capita costs rise with each senior's age group, each age group becomes a smaller percentage of the total population. Therefore, the overall costs of any particular age group may decline. For example, the 90+ age group constituted only .42 percent of Alberta's population.

further refined by creating a greater number of age groups, or even by using each specific age as separate groups. However, increasing population groupings would considerably reduce tractability without much increasing the accuracy of the predictions for our purposes here.

Note visually in Figure 11, that although costs rise somewhat for the last non-senior age set, and that expenditures are high in the first year, the costs for these two age groups are leveled out by the consistency and lower-than-average cost of the remaining ages in the non-senior grouping. Additionally, the focus in this study is on seniors as distinct from the other age groups. Unlike Baxter, inflation and population increase are not an issue as this analysis already uses per capita constant dollars. As with Baxter, for the moment, technological, social, economic, and environmental variables are considered constant.

The Calculations

Considering the sub groups, seniors and non-seniors, we have two variables: the average expenditure on healthcare, and the proportion of each group of the overall population. The first variable is written as C_s for the cost per person of a senior and C_n as the cost of a non-senior person. The cost per person for the whole population is written C_t. The second variable is written as α for the senior percentage of the population and β for the non-senior percentage of the population, $\alpha + \beta = 1$, that is the proportions of the two groups must add up to 100 percent of the population. Now the cost function can be written as:

$$C_t = \alpha C_s + \beta C_n$$

as $$\alpha + \beta = 1 \text{ or } \beta = 1 - \alpha$$

then $$C_t = \alpha C_s + (1 - \alpha) C_n$$

and $$C_t = \alpha(C_s - C_n) + C_n$$

$$\Delta C_t / \Delta \alpha = C_s - C_n$$

What we have calculated without recourse to the actual data is a relationship of cost to the proportion of seniors in the population. It is based on the simple average cost of each group. Using the 2005 Canadian Institute for Health Information (CIHI) data as the base, we can now estimate the change in costs due to the proportion of seniors in the population. We then use the results of the estimates in Section One on the age shifts for 2017 and 2027.

The average expenditure on healthcare in 2005 for a senior was $10,417.26 and for a non-senior was $2,254.39. Therefore, $C_t = \alpha(\$8,162.87) + \$2,254.39$. For 2005 we know that average costs per person were $3,106.38 and that the proportion seniors were of the population, α was 10.44 percent. The change in the per capita costs is equal to $81.63 for each one percent increase in the share on seniors in the population.

The average cost of healthcare per person in constant 2005 dollars can now be estimated for 2007, 2017, and 2027 using the seniors percentage estimates (α)found in Section One. The results are shown in Table 3.

Table 3

Year	α	C_1	% change from 2007
2007	0.1044	$3,106.60	0%
2017	0.1499	$3,478.01	12%
2027	0.2257	$4,096.75	30%

If we do nothing else to healthcare in Alberta but continue to offer what we are providing today we would still need to increase the funding to healthcare, in constant dollars per capita, by 30 percent over the next 20 years. And we need to start this increase this year and continue each year after for the foreseeable future just to maintain average care levels. However, this may sound more extreme than it really is. An annual increase of 1.32 percent above inflation and population growth is all that is needed to increase spending by 30 percent in 20 years.

Conclusion

Using information we know today about the distribution of costs along population age groups and making some reasonable assumptions that could be tested, future health costs have been estimated. To maintain the current healthcare system in Alberta, population aging is likely to cost 30 percent more in real per capita terms over 20 years. On the surface it appears this will require an annual increase above inflationary costs and costs associated with population growth of approximately 1.32 percent a year. As we will consider in Section Four, the current state of healthcare, especially for seniors, is

inadequate. For example, long-term care facilities are in short supply and seniors facilities are generally understaffed. Although there are likely some savings which can be realized through more appropriately managing our current resources, it is more probable that healthcare expenditures will need to increase more than 1.32 percent per year, at least in the short-run. Whether this can be done financially is the topic of Section Three.

SECTION THREE: Medicare is Sustainable

It is clear that the Alberta government is obsessed with the affordability or sustainability of the publicly funded health system, as this quote indicates: "Alberta's publicly funded health system has grown steadily over the last fifty years. The range of services and benefits covered by the system and the rate of cost escalation jeopardize the continued viability and affordability of the system. The Ministry's budget now represents more than one third of all provincial program spending. As new healthcare needs and expectations emerge the cost of meeting them threatens the ability of the province to address and fund its other obligations and priorities. In the health system context, sustainability is about finding the right balance between the needs of Albertans and our funding capacity. However we describe it, there is no question that long term sustainability is a major challenge of Alberta's publicly funded health system."[30]

This section will discuss the misplaced direction of Alberta government on this perspective. Health policy needs to appropriately address the health needs of the population and the best mechanism to serve these needs. As well, the government needs to address ways to promote and improve health in a cost effective way. Most of the 2008 plan laid out by the government appears to reflect this. However, health policy should not be driven in the context of limiting expenditures in healthcare for the sole purpose of limiting the public sector, as seems a priority especially in Alberta.

At a conference in May 2007 in Regina, Robert Evans made the critical point that sustainability relates to whether the people of a nation can afford a given level of services.[31] He also demonstrated that the introduction of Medicare starting in the 1960s stabilized Canadian expenditures, which were on a runaway trajectory similar to the United States. Canadian innovation in public financing of health has kept healthcare affordable while the United States has continued on its escalating trajectory with largely private funding. As a result, the United States spending on healthcare is now considerably greater than that of Canada on a Gross Domestic Product (GDP) basis – U.S. approximately 16 percent, Canada approximately 10 percent.

The Alberta government has been in the forefront of those claiming healthcare costs are unsustainable.[32] When considering the sustainability of healthcare expenditures, a caution regarding healthcare costs from Section Two bears repeating: costs will occur. Reducing public expenditure will not make them go away, but rather will shift them to private personal out-of-pocket expenses (for those

30 Health and Wellness, Business Plan 2008-11, p.156.

31 Evans, Robert G. "Economic Myths and Political Realities: The Inequality Agenda and the Sustainability of Medicare in Campbell, Bruce and Greg Marchidon, editors, *Medicare Facts, Myths, Problems, and Promise*, James Lorimer and Company Toronto, 2007.

32 For example: *'Unsustainable' health -care system must head election agenda:* Klein, Stephen Thorne, The Canadian Press, 11/21/2005, p. A6, Ottawa.

who can afford it) and private insurance (for those that have it), or it will drive costs into the implicit realm (the costs are not accounted in exchanged dollars) where it increases stress on caregivers, increases absenteeism from work, and reduces productivity and GDP. Ironically, these costs put greater stress on the healthcare system. By all accounts the shift from public to private (explicit and implicit) will increase the overall costs of healthcare. This will undermine the efficiency aspect of Medicare. Most importantly, shifting costs will undermine the highly valued equity aspect of Medicare.

Healthcare Expenditure as a Share of GDP

The relevant ratios in this analysis are healthcare expenditure to GDP, debt to GDP, and healthcare expenditure to total government expenditure.

Gross Domestic Product is the dollar value (in current dollars) of all of the goods and services produced in a particular political jurisdiction in a given year. GDP is considered a useful measure of a nation's income when considering the affordability of healthcare (or other things). Personal income, a large fraction of GDP, is highly correlated with GDP.[33] GDP also provides a relatively common dimension to use when comparing patterns across nations. Of course there is no standard as to what a nation, or, more appropriately, on what the people of a nation should spend their income. This will depend on their wishes. However, national income will be the budget that limits their overall spending.

Our ratio of healthcare expenditure to GDP was climbing steadily, in step with that of the United States, prior to the introduction of Medicare. It has since been more in line with European and other developed nations. Figure 12 compares Canada to a number of other countries.[34] Note that Organization for Economic Co-Operation and Development (OECD) data are not completely consistent with Statistics Canada measures, but is consistent across nations, thereby allowing a relative comparison.

By a GDP measure, Albertans have become quite well off. GDP has grown from $53.4 billion in 1981 to $260 billion in 2007. On a per capita basis this is $23,272 in 1981 to $74,825 in 2007 in current dollars. As prices have gone up considerably over this period it is more appropriate to deflate these values to constant comparable dollars. Figure 13 illustrates the trend in per capita GDP measured in constant 2002 dollars. From this perspective the1980s and early 1990s

33 The correlation of personal income with GDP in Alberta is less than in other provinces and can vary as much as 10 percent over time depending upon the price of oil and gas and the activity in the industry.

34 Figure 32, OECD Health Data 2007, July Edition, *National Health Expenditure Trends*, 1975-2007. CIHI Ottawa 2008. Note (a) Data for 2004, Alberta has been added to the comparison.

were years of declining real GDP per capita. However, the last decade has been quite prosperous. In 1997, Alberta had a per capita GDP of $42,934 and in 2007 it was $63,464. This was a considerable gain of $20,530, a 48 percent increase, or an annual growth rate of per capita GDP of 4.2 percent.

Figure 12

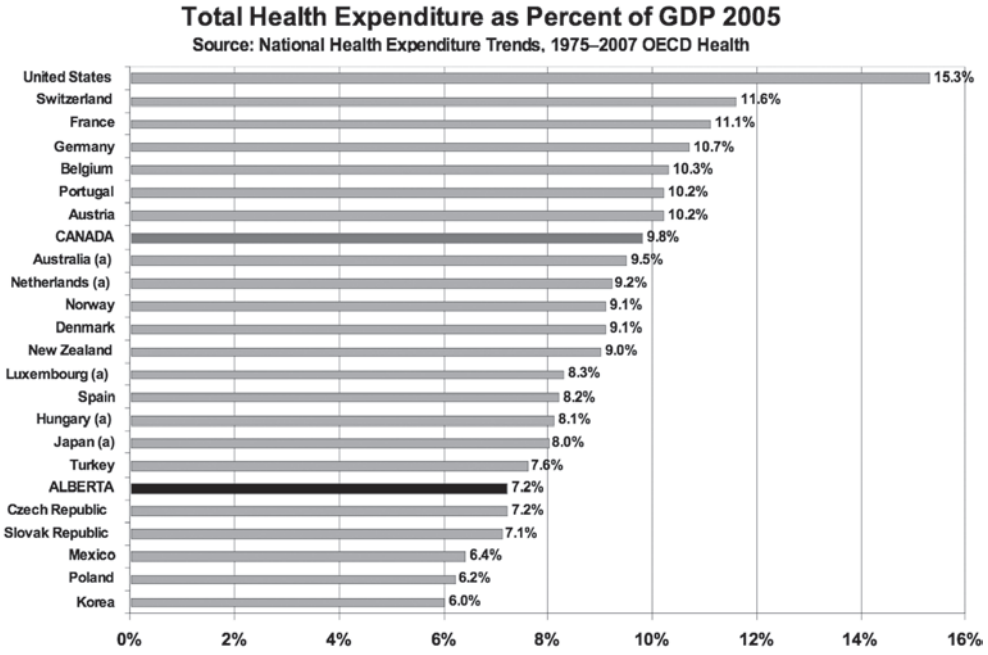
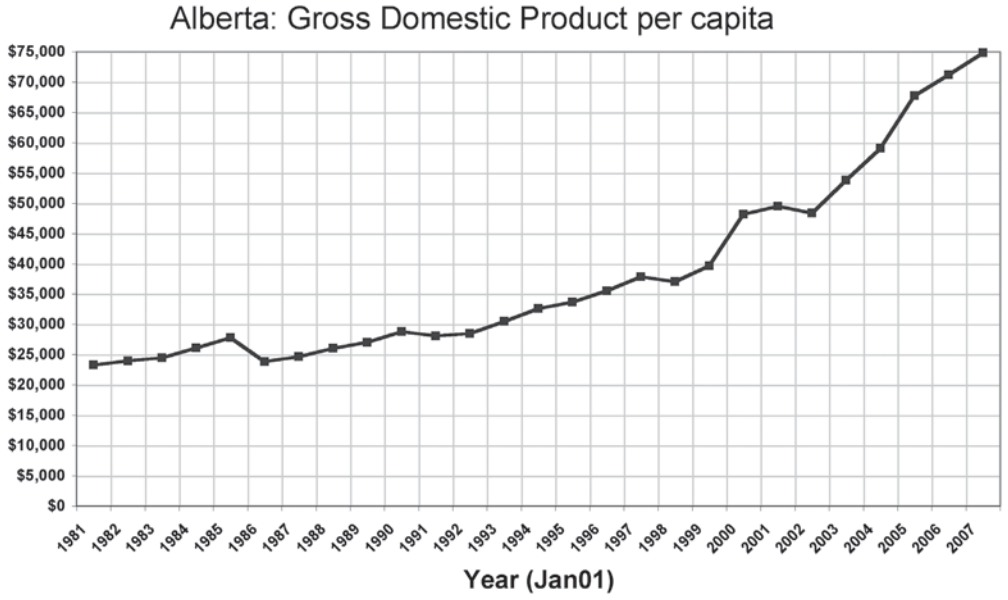
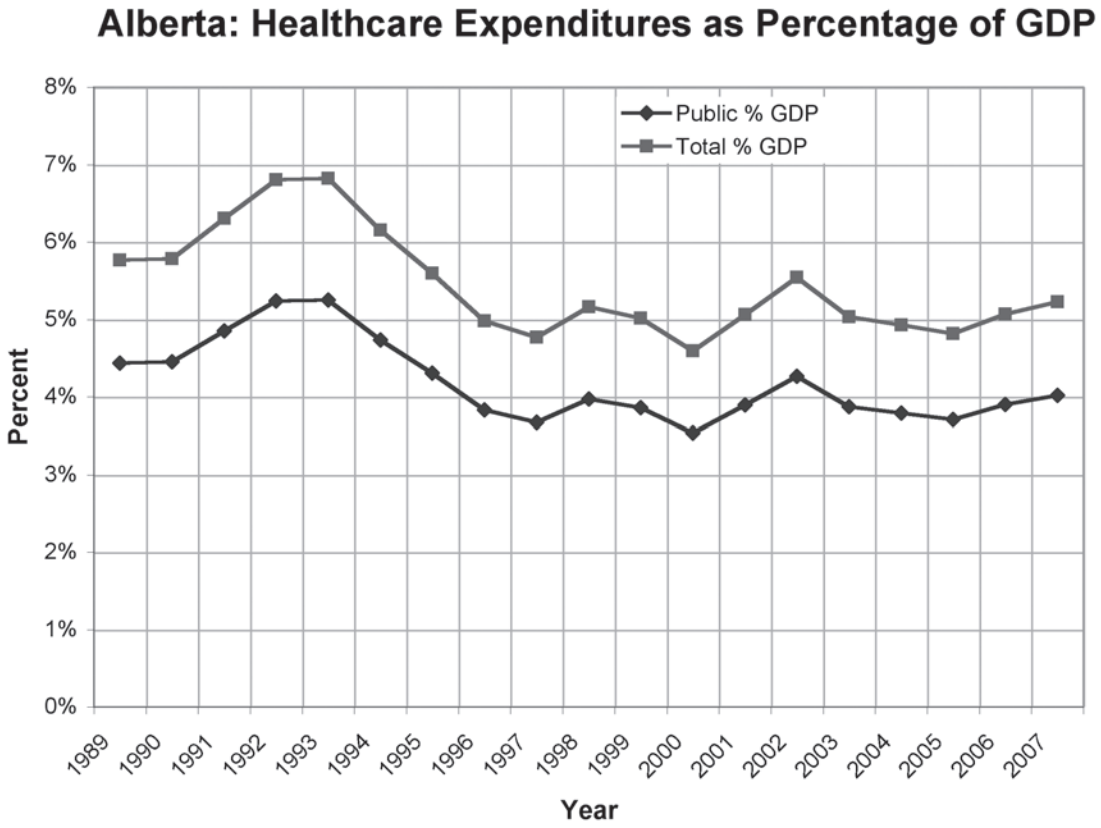


Figure 13



The rise in the per capita costs of healthcare in Alberta was reported in Section Two. Now we can consider this increase in light of the rise in per capita GDP. Using Statistics Canada data, Alberta's health expenditures as a percentage of its GDP over the last two decades are shown in Figure 14, which illustrates the ratio of healthcare expenditures to GDP. This ratio, as Evans points out, is a more appropriate way to evaluate our ability to 'afford' whatever, including healthcare.

Figure 14



Healthcare spending in GDP terms in Alberta is low by any comparison – a fraction of the Canadian average. It is extremely low using international comparisons. And public healthcare expenditure is a very low fraction of overall income, currently at approximately four percent of GDP. The current level is also low compared to the level in the mid-1990s and has remained considerably stable over the last 10 years. Clearly from a GDP measure of the productivity, income, and wealth of Albertans, current healthcare expenditures are affordable and sustainable. Moreover, Albertans could spend much more on healthcare and remain low compared to other jurisdictions in Canada and abroad.

Government Debt

Canada has considerable public debt at the federal level. However, Canada is by far in the best fiscal shape of all the G8 nations, with the lowest debt-to-GDP ratio. Our debt/GDP ratio peaked in the early 1990s and has steadily declined every year since then, as the government has been running surpluses in addition to robust growth in GDP. With a low debt/GDP ratio, Canadian healthcare expenditure (as a ratio of GDP) is easily manageable in comparison to other countries (Figure 12).

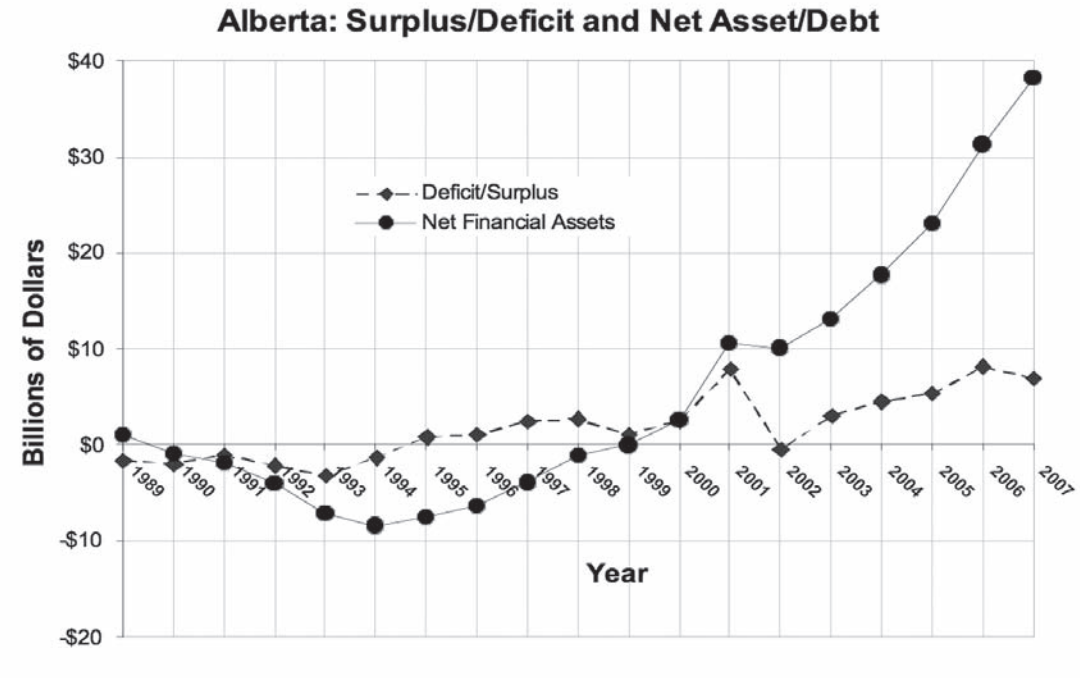
Alberta is even better off, as it has no deficits or debt and has been running large surpluses every year since 1996. In fact, Alberta has been accumulating large net financial reserves since 1999. And this year, again, "sky-high oil and natural gas prices" have Alberta on track for a record surplus of nearly $12 billion.[35] Figure 15 illustrates the net annual fiscal results including the deficit or surplus of funds at the end of the year, from 1989 to 2007.[36] Also shown in this figure are the annual fiscal results summed in order to show the net financial assets.[37] From the perspective of government debt (i.e. there are large accumulated reserve funds) or from the perspective of annul budgets (in surplus for almost a decade), Alberta can easily afford its public healthcare expenditures.

35 Predicts CIBC World Markets Inc., part of the Canadian Imperial Bank of Commerce. Scotton, Geoffrey and Jason Fekete, "Alberta surplus headed to $12B" *The Calgary Herald*, June 13, 2008.

36 Statistics Canada series V207066.

37 Net figures are used as the government has debt obligations outstanding as well as accumulated funds in trusts such as the Heritage Trust Fund. Accumulated funds could be used to pay off outstanding debt instruments but these are long term and penalties would be incurred if they are paid off early. Analogously, an individual would not be wise to pay off a house mortgage if it was at 5 percent and the money in the bank was earning 8 percent or if there was a early payment penalty where the net interest exceeded earnings on savings.

Figure 15



Royalties

This study's purpose is not to debate the royalty rates in Alberta. As we know, the current level of royalty take by the Alberta is controversial. However, it must be noted that the positive fiscal picture in Alberta is largely due to the revenue boost that royalties have provided to the budget and to the budget surpluses. Virtually all discussions about royalties have been about how much rates need to be increased. Even the oil industry admitted current royalty rates were, on the whole, low, although they disputed the appropriateness of each subsector royalty. The Alberta government has pledged to increase royalty rates in 2009, but these increases are on the light side compared to the recommendations of their own expert panel. The point relevant to this study is that there is considerable room for the government to actually increase revenues above the current level – even under the current tax regime – and the government will increase royalty rates to some extent starting in 2009.

On the other hand, the government currently depends on royalty revenues for a substantial source of operating revenue. If energy prices were to decrease significantly, the province's resource revenues would fall even more dramatically.

Taxes

On a revenue basis there is no need for the Alberta government to raise tax rates now or in the foreseeable future in order to fund appropriately Medicare (or any other programs) regardless of what government officials might argue about the sustainability, or affordability, of the healthcare system.[38] However, if Albertans decided to increase taxes there is considerable tax room to do so. Alberta is the only Canadian jurisdiction not to have a sales tax. Alberta instituted the 'flat tax' more appropriately termed the constant-rate tax system, in 2000 while also reducing tax rates from the previous system. This tax regime has reduced personal tax revenue by over $2 billion dollars a year, with most of this tax relief going to the wealthiest in Alberta.[39]

The Alberta government reports on its website the tax advantage in Alberta.[40] The government brags that it collects less than it would under any other provincial tax regime: "If Albertans and Alberta businesses were in any other province, they would pay between about $10 billion to $18 billion more in taxes, every single year. That works out to about $3,000 to $5,000 for each Albertan."[41] Would Albertans support greater taxes to have healthcare funded as necessary? The government has never asked.[42] There is enormous tax room to fund

38 Ron Liepert Minister of Health and Wellness has recently (May 15 2008) replaced Alberta's nine regional health authority boards, the Alberta Cancer Board, the Alberta Alcohol and Drug Abuse Commission and the Alberta Mental Health Board by a single provincial health services board. Liepert says the decision to have one board will help the province build an integrated publically funded health system that will improve equitable access for all Albertans and ensure sustainability for the future. The concern is: does sustainable mean healthcare reductions and/or greater privatization under one Board?

39 See: Flanagan, Greg, "Shifting the Burden", *Alberta Views*, Calgary, Alberta, Sept/Oct 2000, pp 21-27.

40 Alberta Tax Advantage: http://www.finance.alberta.ca/publications/budget/budget2008/tax.pdf

41 *Budget 2008 The Right Plan for Today & Tomorrow* Budget Speech, Honourable Iris Evans Minister of Finance and Enterprise, April 22, 2008

42 The United Nurses of Alberta polled Albertans, who reasoned that they would be prepared to pay more tax for better healthcare.

healthcare if that is what the population values and wants, should there arise any budget shortfall. As from a debt perspective, any consideration of taxes shows that suggestions that healthcare is unaffordable or unsustainable is a weak argument.

Health as a Percentage of Provincial Budget

There is no doubt that healthcare is the largest single program category of government expenditure. Figure 16 illustrates the respective shares of select categories of program spending. Healthcare takes up approximately one-third of overall expenditures. The next largest program is education, both K-12 and postsecondary, at approximately 26 percent.

So what about the widely reported steady climb (what Evans termed the "Klein line") in healthcare expenditure as a percentage of total government expenditures? It is true that the healthcare category of spending takes the largest share of the overall budget? This is illustrated in Figure 17.[43] Klein was correct: healthcare spending has been increasing as a percentage of the budget. Note that most other program expenditures are relatively 'flat' (social services has fallen while transportation has risen) indicating that health has not robbed other sectors. Debt servicing has fallen in conjunction with the increase in healthcare. Also, as the population ages, education costs (the second largest item) should become less of a burden. It is worth remembering that healthcare spending as a percentage of GDP has been flat over this period.

We need to ask, therefore, what has been happening to the total budget as a percentage of GDP? This calculation tells us the government share of the overall economy. Figure 18 illustrates total budget expenditures as a percentage of GDP for each year in Alberta. From a GDP perspective, it is not that healthcare expenditure has been increasing – it has remained quite steady – but that government expenditure has been decreasing (considerably) over the same period. Under Premier Klein's tenure, government as a share of the overall economy fell from 22 percent of GDP to 12 percent. This is a 45 percent reduction in the public sector proportion of the economy. GDP is somewhat more volatile in Alberta, due to the effects of the oil and gas economy, compared with other jurisdictions. Therefore Figure 18 includes total budget expenditures as a percentage of personal disposable income (PDI), a measure of the income Albertans receive. From an income perspective government has fallen from approximately one-third to one-quarter.

43 Federal and provincial general government revenue/expenditure; Alberta; Provincial government Table 3850002, Statistics Canada. Note Education series was disrupted when the Province took over K-12 education revenue and then accounted for more expenditures.

Figure 16

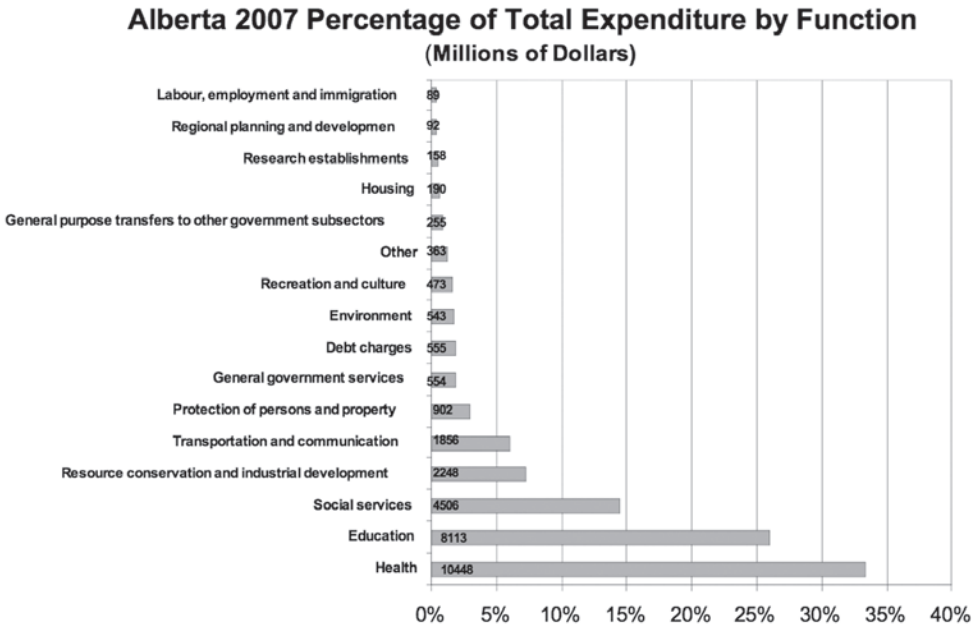


Figure 17

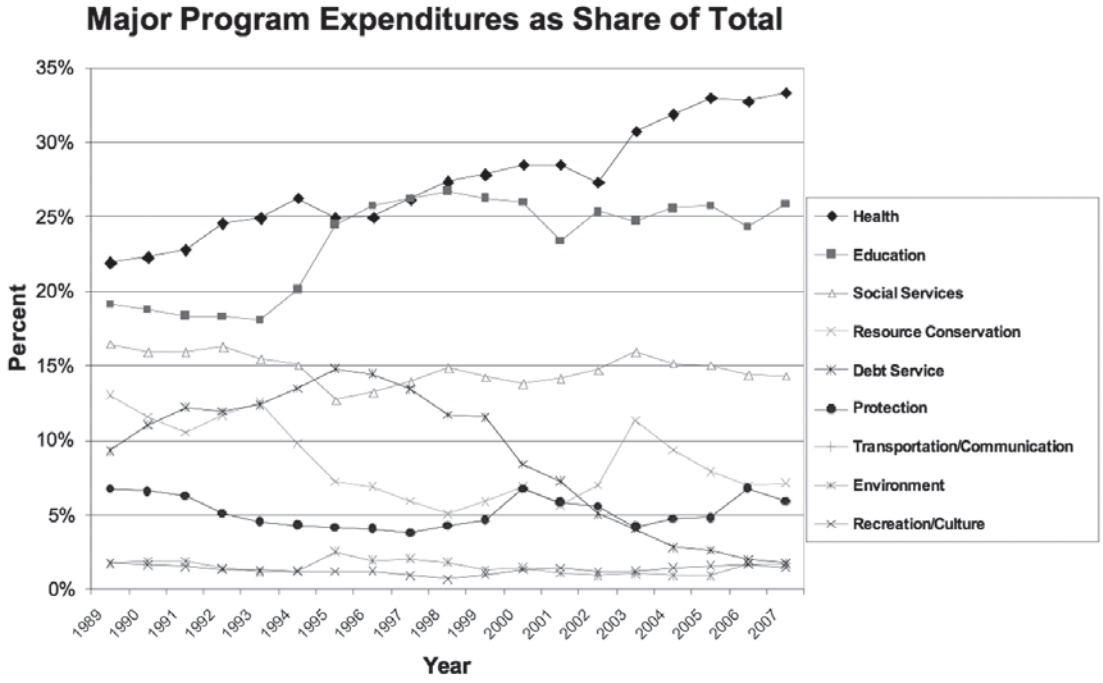
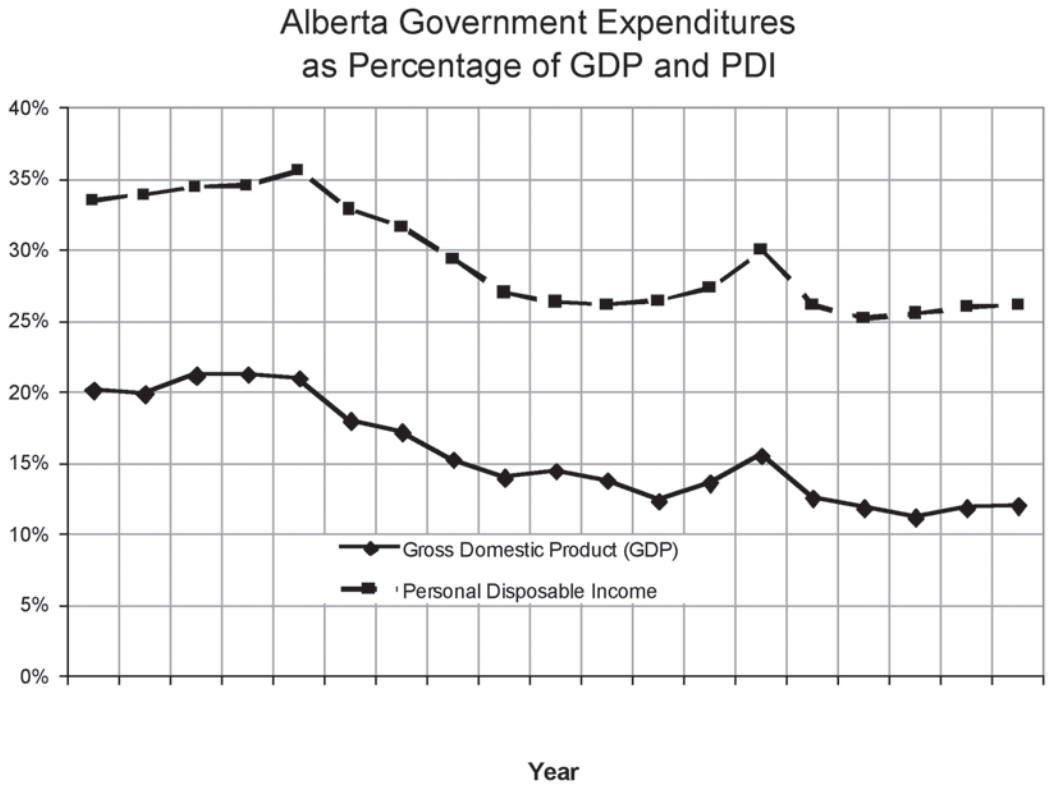


Figure 18



A Note on Federal Provincial Funding

Although the Constitution puts the primary responsibility for healthcare on the provinces, it is also important to note that the federal government financially supports Medicare. In addition to legislation such as the Canada Health Act, the federal government has played an important role by providing funding. Initially Ottawa provided about 50 cents on the dollar for hospitals and physicians. However, this led to provinces skewing healthcare provision to these services and a belief that spending in many cases could be more efficiently expended on other healthcare services. Provinces were also dissatisfied because their priorities were being distorted.

The federal government's contribution now comes in the form of an annual grant, as part of the Canada Health Transfer. These grants have been substantially reduced from the 50 percent basis that initiated universal Medicare. However, back in 1977 the federal government, as part of its contribution, also gave up tax points. Ottawa transferred 13.5 tax points of personal income tax and one tax point of corporate tax to the provinces where each tax point represented one percent of the federal government's take from personal income or corporate tax revenue raised in the province.[44] The value of each tax point has grown with the economy. Taxpayers didn't notice

44 Barrie, Doreen, *Sacred Trust or a Citizen's Guide to Canadian Health Care*, University of Calgary, 2004, p. 12.

because their taxes likely remained unchanged. Subsequently, Alberta and other provinces reduced taxes and the subtlety of this form of federal support has been lost on the public, who perceive the federal contribution to be only the explicit transferred funds. How will the federal government exert the moral and political authority to enforce the Canada Health Act if its financial commitment has, or is perceived to have, declined drastically?

Conclusion

In Alberta, a very small percentage of our Gross Domestic Product goes to healthcare. Albertans are extremely wealthy on average, in per capita GDP terms. Our public sector is extremely well off, with large surpluses annually and with large accumulated financial resources. We have a very small public sector as a proportion of the economy. We have exceptional tax room if for any reason we wished to increase the public sector side of life. None of this analysis tells us whether we are spending too much or too little, nor whether we are spending it efficiently. It does tell us that healthcare spending is sustainable and affordable.

Is sustainability just a code word for cutting public expenditure, privatizing, deregulating and otherwise pushing costs on to individuals and their families? Unsustainability claims appear to be a smoke screen for a particular ideological perspective. This ideology, already implemented to a considerable degree in Alberta, has been variously termed conservative, neoconservative, libertarian, or neoliberal.[45] Its basic tenets include individual private property rights, free markets, and free trade. "Each individual is responsible and accountable for his or her own actions and well-being. This principle extends into the realms of welfare, education, healthcare, and even pensions."[46] The Klein era was one of diminishing the public sector share of the economy and attempting to reduce healthcare wherever possible. This effort has only paid off in demolishing or privatizing public assets, increasing the inefficiencies in healthcare, and overextending healthcare workers.

It should be clear that Alberta can easily afford and sustain healthcare expenditures at any reasonable level that the public desires. An extensive literature supports the tenet that the most efficient and equitable way to deliver healthcare is through the principles of Medicare. The real political question should be how much we need to spend to assure healthy Albertans now and for the future.

45 Harvey, David, *A Brief history of Neoliberalism*, Oxford University Press, 2005.

46 *Ibid*, p. 65.

SECTION FOUR: Improving Seniors Healthcare

Section One discussed Alberta demographics and demonstrated that the senior percentage of population will increase by almost 50 percent within 10 years, and increase to more than double the current levels over the next 20 years.

Section Two discussed the costs of healthcare and concluded that seniors do incur greater than average healthcare costs, and that costs escalate with age. The reality is that as we age health needs increase. Seniors currently account for approximately 35 percent of total public healthcare expenditures. When the demographic changes are combined with expected cost increases associated with aging, it was estimated that healthcare expenditures in per capita constant (2008 dollars) would have to increase by over 30 percent in the next 20 years. As 2008 spending is estimated to be $13.2 billion or approximately $3,775 per capita, healthcare expenditures would need to increase to approximately $5,000 per capita for 2028 (in 2008 dollars) in order to maintain the current (insufficient) health services. This would necessitate a real increase in health spending at a rate 1.32 percent per year in addition to increases for inflation and population growth. This growth rate in additional expenditure is not quite as dramatic as it might seem given the growth in the seniors population and the demand this group puts on healthcare.

Section Three showed how meager current healthcare spending is in respect to our aggregate income (represented by Gross Domestic Product). Also, this section illustrated how positive Alberta's fiscal situation is, how small a share of total GDP the public sector represents, and noted how much room if necessary there is to raise revenues with taxes and resource rents. GDP growth at an annual rate of 4.2 percent per capita in the last decade, although exceptional, suggests that GDP growth will be in excess of 1.32 percent and should outstrip the required growth in healthcare. At these rates of growth of GDP and healthcare expenditures, healthcare expenditures (in GDP terms) would fall or at least remain constant. Any increase in demands on healthcare expenditures due to an increased seniors cohort is easily affordable.

This section will discuss the current state of services for seniors, how these services are currently inadequate, and how some healthcare services should be returned to the public realm. Some evidence is presented that this process has the potential to reduce overall costs and improve the well being of seniors. However, increasing the public explicit expenditures beyond the status quo is likely inevitable. Lastly,

healthcare delivery reform is discussed as an approach to improving health outcomes and potentially reducing costs, particularly if the rate of chronic conditions is reduced in the senior ages. Reform is strongly recommended not just for potential healthcare cost savings, but primarily for improving the health and wellbeing for Albertans. Freedom from the fear of healthcare expenditures in old age will allow for improved creativity, productivity, and income to a greater extent than any age-related cost increases.

Seniors' Health Issues

Seniors' main health problems concern managing chronic diseases. A considerable majority – 81 percent of Canadians over the age of 65 – suffer from a chronic condition. Of those about 33 percent suffer from three or more chronic conditions.[47] About 60 percent of healthcare costs are due to chronic diseases and, compared to other countries, our health system does a poor job of keeping people with chronic disease healthy.[48]

A major factor for seniors is maintaining their independence. A recent Ipsos-Reid poll found that 97 percent of Canadian seniors want to live independently for as long as possible, and that 82 percent would do anything to avoid moving into a care centre.[49] Dependency is linked to chronic conditions, and, as one would expect, the greater the number of conditions the greater the degree of dependency. Such dependency may threaten seniors' ability to live in the community. However, "in some instances, being dependent was related to the pain accompanying the condition, not the condition itself. ... effective pain management may reduce the amount of dependency associated with chronic conditions among Canadian seniors, and ultimately, enhance their ability to continue living in the community."[50] Falling and sustaining injuries is another serious issue for seniors. Managing prescriptions and avoiding adverse drug responses is a particular need associated with the treatment of chronic conditions. Dementia is a growing concern as it increases with age – estimated at 2.5 percent for ages 65-74, 11 percent for those 75-84, and over a third of the 85 and over age group.[51]

47 Gimour, Heather, & Jungwee Park, "Dependency, chronic conditions and pain in seniors", Health Reports, Special Issue, Catalogue no. 82-003-SIE, Supplement to Volume 16, Statistics Canada, Minister of Industry, Ottawa 2006. p. 27.

48 Rachlis, Michael, "Completing the Vision: Achieving the second stage of Medicare", in Campbell, Bruce and Greg Marchidon, editors, Medicare Facts, Myths, Problems, and Promise, James Lorimer and Company Toronto, 2007, p. 227.

49 Ipsos-Reid poll, conducted on behalf of Bayshore Home Health, March 2008, http://www.ipsos-na.com/news/pressrelease.cfm?id=3840

50 *Op cit*, Gilmour, p. 28.

51 Bethany Care, "Report to the Community 2007/08", *Calgary Herald Supplement*, June 2008, p. 6.

Healthcare and Assistance for Seniors

There is a service continuum for healthcare that seniors draw upon. Some healthcare services are in the private sector and must be paid out-of-pocket or with private insurance. Some private insurance is subsidized by the government. Alberta Health pays the cost of Alberta Blue Cross premiums for all Alberta seniors, their spouses, and eligible dependents. Drug costs, account for approximately 8 percent of total provincial health expenditures. Total drug claims and costs in the Alberta Blue Cross Seniors Drug Benefit Plan continue to rise, as does the co-payment portion.

The service continuum includes: physician services, home and community care, supportive housing, assisted living, long-term care facilities (nursing homes and auxiliary hospitals), pharmaceuticals, and acute care hospitals.

Physician Services

Seniors obtain most of their primary care through private physician services in clinics. Although 82 percent of Albertans have a regular medical doctor, 374,000 adult individuals or 13 percent of the population do not have a regular doctor and 139,000 or 5 percent can not find a doctor.[52] The primary care network is a relatively new initiative to facilitate a more integrated and effective team approach to care, particularly for seniors. A move in the right direction, it is too soon to see how effective this will be in aiding the more efficient use of doctors in Alberta.

Community Care

Community care focuses on supporting people living in their own homes with supports that allow them to remain at home. These supports may include: home care, home making, lifeline, meals on wheels, respite care, seniors' centres, family service and caregiver centres, municipal parks and recreation programs, geriatric day hospitals, and day programs. Some community low-cost housing is provided for seniors, although this housing does not provide any other services. Home care is provided by the public health board, the voluntary not-for-profit sector, and the private profit sector.

52 Percentage distribution of Canadians aged 12 years or older with or without a regular medical doctor, by selected characteristics, Canada excluding the territories, 2007, The Daily, Statistics Canada June 18, 2008.

Approved Home Care

Home care and community-based services are currently the responsibility of health regions (to be fully consolidated by April 2009). The scope of services varies across regions and access can be limited for some. Although they constitute a relatively small share of healthcare expenditures, these programs have become an important alternative to hospitalization. Home care is meant to help people to live independently in their community for as long as possible.[53] It is supposed to complement care provided by family, friends, and other community services. Home care provides support to seniors (as well as others), who are recovering from illness, coping with physical or mental disability, managing chronic diseases, or requiring end-of-life care.

Individuals seeking home care are assessed based on need, including financial ability to access other services, the availability of public services, and the availability of informal care and other family support, and are then referred to the appropriate publicly funded, community or private agency, services or programs. Services may include nursing, physiotherapy, occupational therapy, social work, dietician services, speech language pathology, support services (likely not publicly funded), and volunteer resources.

Specialized programs include adult day support – to maintain the individual in their own home setting with health monitoring, recreational activities, supervised exercise, nutritious meals and opportunities for socialization. There are user fees attached to these programs.

Information sessions are provided for providers and clients for self-managed care. This program only assists those who choose to pay support staff/services on their own rather than obtain services through contracted agencies.

Respite care or in-home companion care may be an option to provide for family caregivers to take a break to maintain their own health. There are additional fees for these services while companion care is generally through private providers where the user pays.

Who pays for home care? Healthcare services, such as nursing and rehabilitation, are supposed to be covered by the Alberta Health Care Insurance Plan. Medical supplies, equipment, wound care supplies; intravenous therapy and medications are paid for by the user. Home care was seen as better for the individual than institutionalization and less expensive for the public health and social care systems. Hospitals

53 Home Care pamphlet, Calgary Health Region, 2008

are expensive, but the patient is provided with most of their needs paid for under Medicare (going back to the Hospitals Act). Has the shift to home care been for the benefit of seniors or just a means to shift costs from the public to private sphere?

Home care use is being increasingly used to enable early discharge form hospital, and less to support people in their home. The number of persons accessing home care services increased from 1.18 percent of the population (13 percent of seniors) in 1991/92 to 2.12 percent of the population (21 percent of seniors) in 2000/01.[54] Mean hours per client increased 115 percent over the same period. Since 1991 publicly funded home care is not only for seniors; home care, it appears, has become an alternative to hospital care since the implementation of the policy to reduce hospital beds in the mid-1990s.

Recent research has found that less than two percent of Albertans received formal home care services, and fewer individuals received home care between 2003-2006 compared to the late 1990s and early 2000s.[55] Home care averaged two hours per week, although large differences in care and ailments among clients were found. The majority of home care hours were basic services provided by aides, rather than skilled care provided primarily by registered nurses. The study finds that home care utilization is complex and not easily explained. The study concludes that greater research is required (1) to assess the need for home care among seniors and younger disabled persons; (2) to identify the number of hours of home care and the frequency of services events each week that are needed to maintain chronically-ill persons at home; (3) to investigate the outcomes of varying amounts and types of home care; and (4) to find out when home care can prevent hospitalizations and nursing home admissions. "These studies will help to better understand the relationships between chronic illness and home care, and to forecast home care needs in Canada."[56] Greater understanding about home care will hopefully lead to better resource planning and policy.

Palliative Care

Palliative care can be practiced in any site – home, long term care, hospital, rehab facility, etc. and is particular to seniors. Many people die in hospital and some receive extensive and expensive interventions to prolong life. This uses a considerable amount of hospital resources. Hospital care is approximately 10 times more expensive than care in a long-term care facility, and home care is usually half the cost of

54 *Ibid*, calculated from Table 1, based on number of seniors in the two years reported.

55 Wilson, Donna M., *Seeking Information on Linkages Between Chronic Illness and Home Care Through an Analysis of Alberta's Home Care Data Research Report*, February 27, 2008

56 *Ibid*, p. 5

long-term care.[57] Although less expensive, palliative care at home is costly to families in both money (explicit costs) and time (implicit costs). Assistance in the form of home care and medical supplies are expensive to families as these are mostly not covered under Medicare but are borne privately.[58] Hospital costs are covered by Medicare, however, they are very expensive places to die.

Maintaining dying persons in their homes for as long as possible by using palliative home care or hospice care for end-of-life care could result in more appropriate (better) care and considerable savings to the healthcare system. Therefore, financial costs of this type of care should not be a concern or constraint to its provision. Wilson et al described changes in home care, particularly palliative care, over a decade of healthcare system changes between 1991 and 2001. They compared home care clients, services, and providers. Over these 10 years, 7.0 percent of all home care clients were classified as palliative. While the palliative proportion of home care clients varied considerably among health regions, the number of palliative clients more than doubled over the decade. Home support aides were the most common home care provider, and personal care was the most common service provided to all clients. The average number of care hours prior to death for palliative clients increased from 40.9 to 87.9 hours. The relatively small amount of palliative home care provided, particularly in rural areas, raises concerns about the burden on informal caregivers – family and friends. It may also indicate an overreliance on hospitals to provide end-of-life care. Another concern is that the least skilled and educated healthcare workers provided the majority of care to home care clients, including those who were actively dying."[59]

Supportive Living

Supportive living provides alternative housing such as lodges, personal care homes, assisted living and care centres. Supportive housing focuses on accessible seniors' housing with varying degrees of healthcare and personal support services. Supportive housing includes public housing, seniors' lodges, seniors' housing for independent living, and designated assisted living. These last two are mostly provided by the voluntary and private sectors. Lodges and assisted living facilities usually provide 'hospitality' services. Some public funding is provided through provincial grants to municipalities. Table 4 shows the increase and movement to supportive living facilities.[60]

57 Northcott, Herbert C., & Donna M. Wilson, *Dying & Death in Canada*, Garamond Press, Aurora, Ontario,2001, p. 67.

58 Wilson, Donna M, "Medically Necessary? The case for Funded End-of-Life Care", Health Law Review, Vol.10Num.3, pp 3-5.

59 Wilson, Donna M., Corrine Truman, Joe Huang, Sam Sheps, Stephen Birch, Roger Thomas, Tom Noseworthy, "Home Care Evolution in Alberta: How Have Palliative Clients Fared?" *Healthcare Policy / Politiques de Santé*, 2(4) 2007: pp 58-69.

60 Greg Melchin, The information is supportive living information broken down by Regional Health Authority and by type of owner/operator far the period of April 1, 2006 - March 17, 2007.

Table 4

Fiscal Year	Number of Supportive	
	Learning Facilities	Living Units
2001/02*	139	8,005
2002/03*	140	8,182
2003/04	362	18,198
2004/05	380	19,903
2005/06	390	19,934
2006/07	682	23,545

* The department tracked only publicly funded seniors' lodges prior to 2003/2004

Long-term Care

Long-term care includes supportive care and/or treatment, and is funded by Alberta Health. Long-term care facilities, often referred to as nursing homes and including auxiliary hospitals, are operated in all three sectors: public, voluntary, and private. These facilities are expected to provide considerable healthcare and personal assistance to residents. Long-term care facilities provide authorized nursing, medication, and personal care to disabled adults and seniors assessed to need facility care. With direct nursing care costs covered under Medicare. [61] Long-term care facilities also provide sub-acute care on a short-term basis to allow early discharge form hospital for all adult patients. It is estimated that LTC and auxiliary hospitals cost 75 percent of the total costs attributed to seniors' healthcare.[62] It is this level of support that Alberta Health has been seriously diminishing in its drive to reduce costs and shift them to users, in effect delisting and privatizing medically necessary services. This is emphasized by the failure to build more facilities and the conversion of many beds to assisted living units, as well turning them over to the private-for-profit sector.

There is ambiguity between different reporting authorities over the number of long-term residents in continuing care facilities in Alberta. According to Alberta Health and Wellness, in 1998 there were 12,836 long-term care residents in 13,300 LTC beds. In 2006, there were 12,520 LTC residents in 14,468 LTC facility beds, which include 5,524 (38%) public, 5,100 (35%) private, and 3,844 (27%) voluntary.[63] This report will use Statistics Canada data on 'residential care facilities,' if for no other reason that they are the most reliable over time. Residential care facilities are categorized by ownership: private

61 Defined as those who require help getting out of bed, toileting, getting dressed, getting to and from the dining room, feeding, administering medication, etc.

62 Health Canada Health Policy and Communications Branch, *Health Expenditures in Canada by Age and Sex, 1980-81 to 2000-01, Ottawa*, August 2001.

63 Alberta Health and Wellness, website, classification project # S-2004-025.

(proprietary), voluntary (religious and lay), and public (municipal, provincial, and federal).[64] The most recent data is for the fiscal year 2005/06.

Table 5

Facilities	**Private**	**Voluntary**		**Public**			**Totals**
Type	*Proprietary*	*Religious*	*Lay*	*Municipal*	*Provincial*	*Federal*	
Homes for the aged	44	35	20	1	54	0	154
Mental disorders	18	12	129	0	21	3	183
Other care	0	7	14	0	16	0	37
Total	62	54	163	1	91	3	374
Beds	**Private**	**Voluntary**		**Public**			**Totals**
Type	*Proprietary*	*Religious*	*Lay*	*Municipal*	*Provincial*	*Federal*	
Homes for the aged	4,792	2,995	2470	60	6,084	0	16,401
Mental disorders	173	150	1969	0	1,117	70	3,479
Other care	0	709	427	0	394	0	1,530
Total	4,965	3,854	4866	60	7,595	70	21,410

Table 5 shows the number of residential care facilities and available beds for Alberta seniors, persons with mental disorders, and persons with other conditions requiring care facilities. [65] The beds data are for beds "staffed and in operation," that is, beds that are either occupied or available for new residents on the last day of the reference period, fiscal year 2005/06. Out of 16,401 beds available for seniors, 4,792 (29.2%) are private-for-profit, 5,465 (33.3%) are provided through voluntary non-profit organizations, and 6,144 (37.5%) are provided publically. Occupancy for seniors' beds 2006 was 95.8 percent.[66] The average expenditure for seniors per resident-day was $158.50 in Alberta.[67]

This table gives a sense of the available beds by ownership. But how have the number of beds changed over time? Figure 19 shows the number of beds available as a percentage of the senior's population. No matter how the beds are counted, the number has been pretty static and, therefore, there are clearly fewer beds per senior population. Figure 19 illustrates this.[68] The Beds available per senior have fallen from a high of 65 per 1000 (6.5%) in the early 1990s to a low of approximately 47 per 1000 (4.7%) in 2005.

64 *Residential Care Facilities* 2005/2006, Statistics Canada Heath Statistics Division, Cat # 83-237-X Ottawa, Nov. 2007.

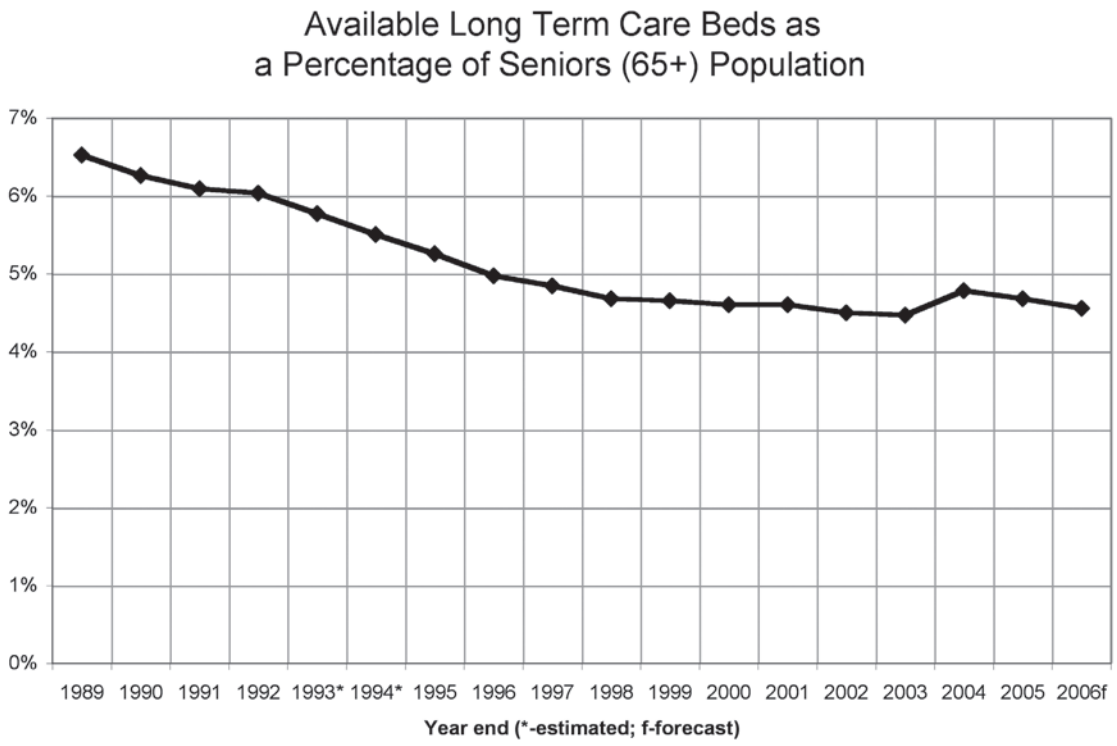
65 *Ibid*, adapted from Table 1-10.

66 *Ibid*, Table 9-9, p. 100.

67 *Ibid*, Table 11-9, p. 112.

68 Calculated by author from: Statistics Canada, series v21657666, Alberta; Total, homes for the aged; Operating residential care facilities, approved beds; and CANSIM Table 510001 – Estimates of population, by age group and sex for July 1, Canada, provinces and territories.

Figure 19



Acute Care Hospitals

Acute care focuses on illness or episodic care and includes emergency, intensive care, general medicine and surgery, pediatrics, mental health, primary care, acute palliative care, ambulatory care, rehabilitation, geriatric assessment, and etc. Acute care facilities include public hospitals, hospices, private clinics and laboratories and doctors offices.

Hospitals represent a large share – over one-third – of health expenditures in Canada. The average hospital stay costs approximately $1,000 per patient per day in Canada.[69] The policy in Alberta, started in the mid-1990s, was to reduce acute care beds from the high of 4.3 per 1000 to the recommended 2.4 per 1000. They accomplished this and more as they sold, decommissioned and amalgamated hospitals. Data on hospital beds in Alberta are hard to find, making it difficult to pin down the actual number of beds. There is now a list of Alberta hospitals but bed numbers are not included.[70] By all accounts the number has been decreasing while population has been growing! Figure 20 shows data from the Canadian Institute for Health Information on hospital and hospital beds in Alberta between 1999 and 2006, illustrating the decline in both.[71] As population has increased considerably over this period the beds per 1000 has declined considerably more than this illustration implies.

69 Canadian Institute for Health Information, *The Cost of Acute Care Hospital Stays by Medical Condition in Canada*: 2004-2005, Ottawa, 2008.

70 Alberta Health and Wellness, Health Facilities Planning Branch For General Reference Purposes Only, Hospital Services In Alberta - Active Treatment (Acute Care) & Auxiliary (Chronic/Long Term Care) April 2008.

71 Canadian Institute for Health Information, Number of Hospitals and Number of Hospital Beds, by Province, Alberta, 1999-2000 to 2004-2005 and Preliminary 2005-2006, Ottawa, 1996-2005

As scarce as hospital beds appear they may still be overused because of an inappropriate system lacking integration and management. Hospitalization rates vary across the country for seven chronic conditions that could potentially be managed or treated in the community, known as ambulatory care sensitive conditions (ACSC).

A report from the Canadian Institute for Health Information (CIHI) and Statistics Canada measures ACSC admission rates in health regions across Canada and explores the factors that contribute to higher or lower rates. ACSC are conditions, such as asthma, diabetes and hypertension, where appropriate primary healthcare in the community may prevent or reduce the need for hospital admission. Table 6 shows the inpatient rehabilitation clients by age groups.[72] Note that 71.5 percent of the clients were seniors. Being a senior does not mean that use of an acute care hospital is inappropriate. However, seniors are much more likely to be suffering chronic conditions where a different and less costly alternative treatment would be more appropriate. Therefore, this statistic may suggest that expensive hospital beds could be released if other, more appropriate and publicly funded assistance was in place.

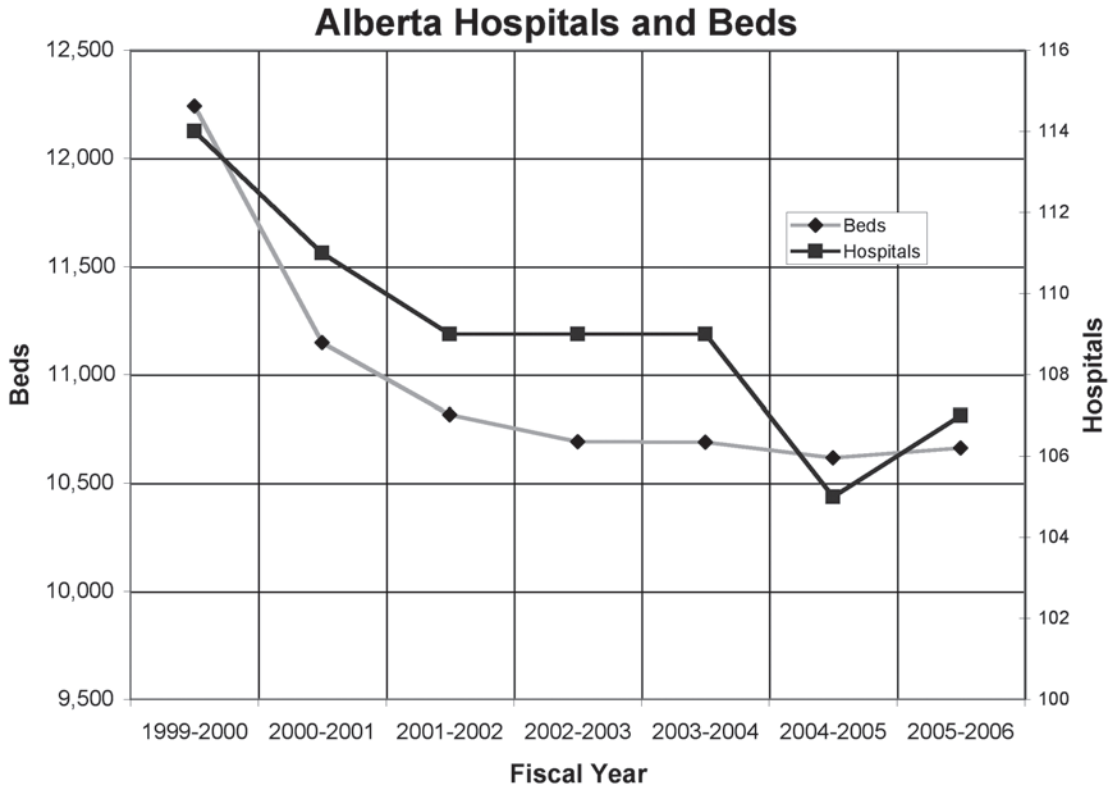
Table 6 Age Distribution of Impatient Rehabilitation Clients, 2002-2007

Under 45		45-54		55-65		65-74		75-84		85+	
#	%	#	%	#	%	#	%	#	%	#	%
2,308	6.8	2,469	7.3	4,864	14.4	7,890	23.3	11,328	33.4	5,020	14.8

Seniors 65+		Total	
#	%	#	%
24,238	71.5	33,879	100

72 NRS, CIHI 2002-2007, Run Date:08-05-06, Canadian Institute for Health Information. 2008. Based on clients discharged from NRS participating facilities in 2002-2007 with complete admission and discharge assessments. Other Rehabilitation Client Groups: include: congenital deformities, developmental disabilities and other disabling impairments.

Figure 20



Another use of acute care hospitals is for injuries. Hospital admissions and discharges for injuries in Alberta has been fairly constant from 1994 to 2003, as shown in Table 7.[73] The admission of seniors has been on the increase in absolute numbers and in the percentage of inpatients. Is this due to a shortage of appropriate care facilities and home care? This is an expensive and unnecessary use of hospitals, which could be reduced if proper care and management of seniors was in place, particularly promotion of prevention of falls, which are very serious for frail seniors.

The shortage in long-term care beds means that patients are using acute-care hospital beds. For the last number of years approximately 320 beds per year have seniors in residence who would be more appropriately served in a long-term care facility, where a bed was not available for them. The cost for this amounts to $116,800,000 (320 beds for 365 days a year at $1,000/day).[74] The same beds in a nursing home would only cost about $18,500,000, a savings of approximately $100 million per year to the public health system, although some costs are shifted as residents of LTC facilities pay a housing fee of approximately $50 per day.[75]

73 Canadian Institute for Health Information, Health Services, Hospital Discharges, Injury Hospitalizations by Age group and province, 1996-2005, run date: 08-06-22.

74 Note: One must be cautious on aggregating such costs as the greatest portion of an acute care hospital bed is for the acute care. The costs of monitoring and recovery part of the stay – the "hotelling" costs – are relatively low. However, the 'opportunity cost' of an acute care bed is the important aspect.

75 100 in Calgary alone as reported by Lang Michelle, "500 seniors waiting for care, Crisis grows as list doubles for long-term beds." *Calgary Herald*, June 29, 2008.

Table 7 Alberta Hospital Discharges

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total	26,593	24,396	23,738	24,006	23,237	23,653	24,359	24,360	24,873	25,560
Seniors 65+	6930	6778	7082	6948	6589	7305	7556	7716	7743	8096
Percent of Total	26.1%	27.8%	28.9%	28.9%	28.4%	30.9%	31.0%	31.7%	31.1%	31.7%
Deaths 65+	405	351	384	384	383	458	439	475	472	476
Percent of Seniors	5.8%	5.2%	5.5%	5.5%	5.8%	6.3%	5.8%	6.2%	6.1%	5.9%

Drugs

Since 1985 drug expenditure has consumed an increasing share of Canada's healthcare dollar. Total drug spending in Canada is estimated to be almost $27 billion in 2007, an annual growth rate of 7.2 percent, with an increase of approximately $2 billion over 2006. This represents 16.8 percent of total healthcare expenditures, accounting for the second largest share after hospitals. Public-sector expenditure on prescribed drugs is forecast at $10.8 billion in 2007, with an annual growth rate of 9.3 percent. In an international comparison of public provision of pharmaceuticals, this amounts to 39 percent of total drug expenditure in Canada, the fourth-lowest share, among OECD countries, ahead of Poland (37.9%), the U.S. (24.2%) and Mexico (11.1%). The share was highest in Luxembourg, at 84.0 percent. For Canada in 2007, non-prescription drugs accounted for $4.4 billion or 16.4 percent, private sector prescriptions accounted for $11.7 billion or 43.5 percent, and of this private spending $3.9 billion or 14.5 percent was out-of-pocket, while private insurance paid $7.8 billion or 29 percent. Spending on prescribed drugs continues to grow faster than spending on non-prescription drugs and has reached 84 percent (79.5% in Alberta) of the total drug bill in 2007.[76]

As the Canadian Institute for Health Information states: "It is important that Canadians have access to safe, appropriate and effective drug therapies; the right drug, for the right condition, for the right person, at the right time. It is also recognized that drugs can lead to adverse drug reactions, regardless of appropriate use. Adverse reactions not only lead to an increased risk of morbidity and mortality, but can also lead to an increased economic burden through additional drug use, hospitalization, and repeated physician visits."[77]

76 Canadian Institute for Health Information, Drug Expenditure in Canada, 1985 to 2007, Ottawa, 2008.

77 Canadian Institute for Health Information, *Drug Claims by Seniors: An Analysis Focusing on Potentially Inappropriate Medication Use*, 2000 to 2006, Ottawa, September 2007.

Many interrelated factors influence expenditures on pharmaceuticals. Drug prices have been relatively stable over the past 10 years. Therefore, increased drug spending is due mostly to the increased volume of drug use and the entry of new drugs. Increasing drug use is likely driven by pharmaceutical technology, patient expectations, and prescribing practices.[78] Alberta per capita expenditure (2004) was 94 percent of the Canadian average but was 20 percent higher than in British Columbia and 28 percent more than in Saskatchewan.[79]

It is expected, by governments and citizens alike, that the value of drug use is in the increased health of individuals and populations. The pharmaceutical industry promotes increased spending on drugs with the argument drugs improve health more effectively and at lower cost than alternative therapies. There may be increasing evidence that this value proposition is not being fully realized.

A CBC News investigation revealed that in 2004 Canadian seniors accounted for 44 percent of adverse drug reactions causing death that are reported to Health Canada, even though they made up just 13 percent of the population.[80] The report concluded that older people are more vulnerable to drug reactions as they use more drugs than the general population, are more vulnerable because they metabolize and excrete drugs more slowly, and it is more common for a senior to live with several chronic conditions, each of which might require its own medication. Approximately 10 percent of seniors who take drugs will have a reaction serious enough to put them in hospital. "The patients we see in the emergency room, probably 75 to 80 per cent of them, have a medication involved in their problem. They've almost always been started on something recently that they've [reacted badly] to. Family doctors are in a tough position when it comes to prescribing for seniors, and they need tools and training to help them do it more safely," said MacKnight, the president of the Canadian Geriatrics Society. CBC found that 1.5 million Canadian seniors, more than one-third, were given drugs that are either ineffective in the elderly or put seniors at an unnecessarily high risk when safer alternatives are available.[81]

Other evidence shows that seniors are more at risk for adverse effects due to complex drug therapies and age-related changes to the way drugs are processed by the body. "A 2002 literature review noted that 28% of all emergency department visits were drug related, of which as many as 24% resulted in hospital admission." The study showed that 70 percent of the drug-related emergency visits are preventable and that, "women and elderly individuals seemed to be at greatest risk."[82] Clearly, improper drug administration leads to increased hospital entry.

78 Steve Morgan, "The Canadian Rx Atlas – A Snapshot of Utilization and Expenditure", *Provincial Reimbursement Advisor*, pp 33-39, UBC, May 2006 p. 33.

79 *Ibid*, p. 35.

80 Drugs killing thousands of seniors yearly, CBC News, Monday, April 11, 2005.

81 This figure was arrived at using data provided by Brogan Inc., a health-care data and research company based in Ottawa.

82 The Canadian Institute for Health Information (CIHI), *Drug Claims by Seniors: An Analysis Focusing on Potentially Inappropriate Medication Use*,2000 to 2006, Ottawa, September 2007.

Recent Events in Senior Healthcare

In Alberta, between 1988 and 1999, Conservative government policy dictated severe reductions for healthcare expenditure, including a reduction in LTC beds. "The intended purpose of the policy was apparently attained, as residents with lower care needs declined considerably, as did length of stay."[83] A report conducted at the time notes that this led to considerable changes in healthcare utilization among by seniors in Alberta. Even while hospital use has decreased with an increase in average case intensity, the rate of long-term care residents has also decreased while the average care intensity has increased. "Overall the trends indicate caring for fewer and sicker patients in institutions with increasing community care. The extent and appropriateness of substitution of community care for institutional care, the quality of that care, and questions of whether health outcomes are better, worse, or unchanged, are important subjects for further study. Unless this is studied, we cannot assess the appropriateness of current policy directions."[84]

In what was already an over-extended system, the government initiated a study on long-term care needs. In November 1997, then-Health Minister Halvar Jonson directed the Long Term Care Policy Advisory Committee, chaired by David Broda, MLA for Redwater, to review long-term care services in Alberta.[85] The so-called Broda report stated, "We need to be able to provide more accessible and equitable long term care services to Albertans who need them."[86] This report set the direction of healthcare reform for seniors for the next five or more years. The report included numerous recommendations, many of them laudable. These include: (1) Establish healthy aging with emphasis on promoting healthy lifestyles, preventing illness and injury. (2) Shifting the focus so that the first priority is for people to remain in their homes and other types of supportive living arrangements by expanding home care and other assisted living services. (3) Adopt a primary healthcare model so services are well coordinated, teams of health professionals working together to meet people's needs. (4) Take steps to increase the number of qualified professionals and healthcare providers and improve training. (5) Implement new programs involving physicians and pharmacists in managing and monitoring seniors' drug use. These five objectives are good directions to pursue if they are truly motivated to improve conditions for seniors and not only to reduce public cost savings, for example, by reducing services and/or shifting costs.

83 Wilson, Donna M & Corrine D Truman, "Long-Term-Care Residents," *Canadian Journal of Public Health*; Sep/Oct 2004; 95, 5; pp 382-386

84 Saunders, L. Duncan, et al, *Trends in the Utilization of Health Services by Seniors in Alberta*, The Alberta Centre for Health Services Utilization Research, June 1999

85 Broda, David, Chair, Long Term Care Policy Advisory Committee, Alberta Health and Wellness, *Healthy Aging: New Directions for Care, Long Term Care Review*: *Final Report of the Policy Advisory Committee*, Edmonton, November 1999.

86 *Ibid*, p. 4.

Other Broda recommendations were controversial. One included the unbundling of healthcare services from other services such as personal care, food services, and housing arrangements. Another was to introduce consistent charges for the personal care component of home care services such as homemaking services and assistance with the tasks of daily living. In addition to these, another goal was to encourage the private and voluntary sectors to expand.

It is fair enough that individuals are responsible for the costs of non-medical services (as was the previous case anyway). However, these recommendations changed the system to one that is increasingly in the private-for-profit sector, with little or no regulation of either quality or cost. Also, there are different levels of costs depending on the type of facility for the same service or medical need. Increasing the current cost-recovery charges to more accurately reflect both housing costs and people's ability to pay, has increased cost shifting onto the individual and away from public funding.

The Effects of Implementing Broda

Following the release of the Broda report Alberta Health and Wellness published a survey of reactions to it. [87] The unbundling of services was the operational process used to implement the Broda report recommendations. The more facility care can be broken down into component parts, the more opportunity for operators to charge clients and the less responsibility for Alberta Health to cover costs. Healthcare can be unbundled from housing, and housing and support services can also be unbundled further. In addition to housing, including capital and operating expenses, the components of continuing care are being subdivided into professional case coordination and clinical services, personal care, aids such as equipment, medication, transportation, and residential supports.

The Alberta Chapter of the Consumer's Association of Canada conducted a study to evaluate the effects of the Broada report's implementation. The study concludes: "[B]oth residential and in-home care for the elderly have become costly and inaccessible arenas for many people. Quality is often grim, staffing levels are marginal. The promise of innovative models of care has been largely eclipsed by limited access and decreasing coverage of the costs associated with care. Many families now face an untenable choice: either give up a salary to care for a loved one at home, or spend savings and assets to purchase private services. Indeed, so much of the burden and cost of care has been offloaded to families that the Long Term Care

87 Alberta Health and Wellness, *Public and Stakeholder Response To The Final Report of the Long Term Care Review Policy Advisory Committee*, April 2000.

Association of Alberta is quietly advising people to purchase private LTC insurance to protect their income and assets." It goes on to state: "Alberta is now spending more money managing an increasingly fragmented LTC sector, leaving less money for actual care. Between 1997/1998 and 1999/2000, the actual money spent on administration by regional health authorities increased by 15.2 percent – more than for any other identified category except research and education." [88] The Association recommended: (1) The restoration and expansion of universal public coverage for long-term care supports, regardless of the setting in the new supportive, and designated living models. (2) End unbundling, reintegrate services, functions, organizations, and payments to benefit seniors and their families, reduce administrative costs, and maximize opportunities for wholesale purchasing. (3) Ensure full disclosure about LTC services. (4) License, regulate, and monitor supportive housing and Assisted Living settings.

The Broda report recommendations appeared to have many attractive attributes, "ageing in place" with more choice for the highly diversified seniors needing assistance or facility care, individual respect with reduced intervention to the level necessary, increased and better trained staff, and a call for greater consistency and higher standards in the system. The implementation of the report focused on shifting and reducing costs on the public. This put extreme stress on seniors and their families as the healthcare system reneged on their expectation that healthcare would be there when they needed it, without cost to themselves.

After the substantial reductions in funding and consequent changes to healthcare delivery in the 1990s, considerable problems with seniors' care became apparent. Implementation of the Broada report, which was an attempt to rectify seniors' care, created its own problems. Subsequently, as the consequences got worse, the Auditor General reviewed the system and released a report on seniors' care and programs in May 2005.[89] This report was as a wake-up call for government, as it revealed how all constituents had been juggling competing financial and program priorities for more than a decade. The report echoed many of the issues identified in previous government reports of 1999 and 2000. In June 2005 Health and Wellness and Seniors and Community Supports jointly released a draft document on continuing care, health services, and accommodations standards.

88 Armstrong, Wendy, *Eldercare – On the Auction Block Alberta families pay the price*, The Alberta Chapter Consumers' Association of Canada, Edmonton, 2002.

89 Alberta Government, *Auditor General's Report on the Government of Alberta's Seniors Core Services and Programs*, Edmonton, May 9, 2005.

Another task force was established: MLA Len Webber, Chair of the Healthy Aging and Continuing Care in Alberta Implementation Advisory Committee, and MLA Ray Prins, Chair of the Seniors' Advisory Council, conducted a stakeholder review of the standards. The Task Force on Continuing Care Health Service and Accommodation Standards was struck to receive input from the public and stakeholders to make recommendations for "Improving the quality of health and accommodation services and the overall quality of life for all persons receiving care in Alberta."[90]

The Task Force categorized what they heard and their recommendations into 12 sections: staffing; medications; food services; access to services, resident and family satisfaction, and concerns resolution; standards and legislation; monitoring, compliance, and enforcement of standards; funding the system and funding individuals; health benefit and income support programs; building design and infrastructure; achieving, promoting, and recognizing excellence; and public awareness and communication. Task Force co-member, Bridget Pastoor, submitted a separate report.[91] She focused on five themes: improve the quality of life for residents; implement clear, enforceable standards for healthcare and accommodations; address staffing issues, working conditions and training; ensure transparency, accountability and consistency across the province; commit to increased funding. Taken together, if the recommendations of these reports were to be implemented, there would be a huge improvement in seniors' care in the province. As Bethany Care Society reflected: "The 2005 MLA Task Force Report is the fifth major document in as many years to analyze or codify what seniors, families, staff, operators and government all know to be true."[92]

A case study on the conversion of one long-term care facility to a designated assisted living facility is instructive of the actual outcomes of the Broda report implementations.[93] This study emphasizes how transition from long-term care to designated assisted living has had some positive attributes. For instance, designated assisted living appears to be a positive response for the desire of seniors for privacy and control in their own home or home-like settings and to move away form depersonalized institutional type care. "The original philosophical concept behind assisted living appears sound. After all, allowing individuals with complex care needs to have more of a say in how they live their lives and take measured and managed risks under the watchful eye of committed care organization has obvious appeal. Encouraging individuals to help themselves and maintain a more normal life – with just the right amount of help when they need

90 Prins, Raymond, MLA Lacombe-Ponoka, & Len Webber, MLA Calgary-Foothills, Co-Chairs, *Achieving Excellence in Continuing Care, Final Report of the MLA Task Force on Continuing Care Health Service and Accommodation Standards*, Alberta Governmnet, Nov. 2005.

91 Bridget Pastoor, Liberal MLA for Lethbridge-East, *Blueprint for Action*, 2005. http://www.liberalopposition.com/downloads/Blueprint_for_Action_Long_Term_Care_2006.pdf

92 Bethany Care society, Seniors' Care and Programs in Alberta-Themes for Action After Five Years of Study, Response to The MLA Task Force on Continuing Care Health Service and Accommodation Standards, Calgary, September 2005.

93 Armstrong, Wendy, & Raisa Deber, *Missing Pieces of the Shift to Home and Community Care: A Case Study of the Conversion of an Alberta Nursing Home to a Designated Assisted Living Program*, University of Toronto, March 2006.

it – assists them to maintain their capacity and function, reduces the need for staffing and lowers human and financial costs for everyone involved."[94]

However, while recasting healthcare facilities as housing and changing to assisted living facilities may appear to reduce public costs, it has really shifted these costs to the individual. "Yet, simply by recasting healthcare facilities as "housing" and healthcare benefits as "income subsidies" within a larger context of continuing care reform, a remarkable range of medically necessary healthcare goods and services have been unbundled, de-regulated and de-listed."[95]

This pretty much sums it up: good ideas undermined as they were driven primarily by the desire to reduce publicly paid costs, not overall costs, only to shift them on to seniors and their families.

Why Completing Medicare's Original Vision is Urgent and Imperative

According to Tommy Douglas's original vision "programs should be designed to keep people well – because in the long run it's cheaper to keep people well than to be patching them up after they are sick." [96] The first phase of Medicare removed the financial barrier to health between the provider and the client and was accomplished by instituting a single payer-the government – with no charges to a user for medically necessary services. Designated services are universally available to all citizens based on need regardless of ability to pay. Although a fine achievement, many now characterize Medicare as a system to treat sickness, not a health system. The second phase of Medicare is to place emphasis on health through prevention of illness and the maintenance of good health and healthy lifestyles. This model of care should be implemented throughout the healthcare system, from community care to intensive care. Many reports have highlighted the community health centre model, where a team of healthcare professionals, including doctors, nurses, mental health professionals, kinesiologists, physiotherapists, nutritionists, dieticians, social workers, educators, etc. provide primary healthcare, wellness promotion, and community development programs. And it should incorporate a public home care and pharmacare program in the interests of integrated health using the most appropriate and least cost services. The objective of 'Phase Two Medicare' would be healthy living, aging, and dying.

94 *Ibid*, p .21.

95 *Ibid*, p. 20.

96 Douglas, T.C., "We must go forward" in *Medicare the Decisive Year*, Lee Soderstrom, Candian centre for policy Alternatives, Ottawa, 1984. As quoted, *op cit*, Cameron, p. 227

The debate about private versus public provision of healthcare is long over. It is well established that healthcare is not a commodity best traded in the market and determined by supply and demand. The lack of a competitive market, asymmetry of information between providers and consumers, the large advantages of monopoly provision (government), and the enormous need for product testing and regulation all attest to market failures. Most importantly, entrepreneurship in medicine provides the wrong incentive signals. Appropriate and ethical decisions are required in healthcare, not ones based on maximizing profit. Due to these and other special circumstances around healthcare, there is a large body of evidence that for-profit healthcare is more expensive, less efficient and less effective than publicly funded or not-for-profit healthcare.[97] For one glaring example, public administration of health in Canada has been estimated to cost less than one-third of that of the United States mostly private system of administration.[98] However, the research showing the efficiency of public provision extends beyond administration and includes delivery.

The efficiency of public versus private delivery has been ignored by the determination of conservative governments to undermine public Medicare. Or as Evans puts it, the debate is about: Who pays for healthcare? Who gets it? Who gets paid for providing it? "Crisply put, the objective is to shift the responsibility for health spending onto older people themselves." [99] With public insurance the burden falls on tax payers, the benefits fall on the sick. Under private delivery the costs fall on the sick, benefits fall on the rich, and who gets paid is controlled in the private domain. Publicly funded and managed healthcare is considerably more efficient than a private healthcare system. However, there is more money to be made under a private system, especially for for-profit businesses.

Both the Commission on the Future of Healthcare in Canada, chaired by Roy Romanow, and SOS Medicare 2, the conference about phase two medicare, conclude that home care and pharmacare are priorities to improve and modernize Medicare. [100] Unfortunately, the focus of our current system is still on expensive hospitals and physician services. Governments may shift care appropriately, from a cost-and-benefit perspective, to home care and pharmaceuticals. However, their motives may be only to shift costs from the public sector to the private. This would be precluded if homecare and pharmacare programs were included in Medicare and the Canada Health Act. As well, the Medicare system needs to be fully integrated.

97 For example see Bruce Campbell, Doreen Barrie, Robert Evans; Colleen Fuller, and Diana Gibson, Michael Rachlis and Kushner, Richard Plain, Consumers' Association of Canada, etc.

98 "A 2003 article in the *New England Journal of Medicine* by Harvard Medical School physicians S. Woolhandler, T. Campbell and S.U. Himmelstein found that the U.S. system spends 3 1⁄2 times what it costs in Canada for administration because resources are devoted to screening out sick people ineligible for insurance, denying claims and fighting appeals." Cited in: Barrie, Doreen, *Sacred Trust or a Citizen's Guide to Canadian Health Care*, University of Calgary, 2004

99 *Op cit* Evans, pp 154-155.

100 Campbell, Bruce and Greg Marchidon, editors, Medicare Facts, Myths, Problems, and Promise, James Lorimer and Company Toronto, 2007.

As compared to a hundred years ago, when we were a young country with a low average age and most healthcare was for acute problems, "Today, our main health problems are chronic diseases in an aging population. Our system offers increasingly expensive treatments, but our major health problems continue to be chronic diseases, which can not be cured but often can be prevented."[101] The healthcare system is organized for providers not its citizen clients. Weak communication skills have exacerbated the poor integration of healthcare and disease prevention and healthy lifestyles. "Some of these problems could be ameliorated if clients had access to a high functioning team of professionals instead of the more typical focus on one doctor." [102]

Michael Rachlis has outlined well the principles for phase two medicine.[103] This approach should have a population health focus and be equitable, client centred, effective, accessible, and safe. As instrumental objectives it should be efficient, accountable, appropriately resourced, and non-profit. Healthcare spending is a public choice. There is no reason to restrict spending on it – nothing else is so important.

Healthcare Reform Under Stelmach

The new premier of Alberta, Ed Stemach, has repeatedly stated his government's support for public Medicare, both before the recent election and after winning it with a greater majority. What has the government been saying and doing?

Before 1994, 128 acute care hospital boards, 25 public health boards and 40 long-term care boards reported to the provincial health ministry. In 1994 all of these boards were eliminated and seventeen health regions were established by government. The members of these boards were appointed with a mandate to manage operational decision-making at the local level. In 2001, as part of municipal elections, two-thirds of board members were elected. One-third of the members were appointed by the provincial government, as before. In 2003 the 17 health regions were reduced to nine regions with board members exclusively appointed by government. Mental health services and associated budgets were transferred to the regional health authorities, although the Alberta Mental Health Board continued to provide policy and planning advice to the health minister. On May 15, 2008 Ron Liepert, Minister of Health and Wellness, announced the establishment of one provincial wide board – the Alberta Health Services Board. This board supersedes the nine regional boards, the Alberta Mental Health Board, the Alberta Cancer Board, and the

101 *Ibid*, p. 232.
102 *Op cit*, Cameron p. 236.
103 *Op cit*, Rachlis pp 230-231.

Alberta Alcohol and Drug Abuse Commission (AADAC). The single board's mandate is to deliver health services for the entire province and be accountable directly to the minister.[104] Although the single board became effective immediately, the regions' administration and bureaucracies remain intact until reorganization in March 31, 2009. Possibly a single Board will help move healthcare to phase two.

The 2008 business plan for Alberta Health and Wellness states: [105]

> For most people, primary healthcare serves as the initial point of contact with health service providers. Primary healthcare workers provide basic health services such as treatment for common illnesses, health promotion, disease prevention and chronic disease management. They also connect Albertans with more specialized care. Primary healthcare requires innovative, multi-disciplinary teams, new incentives and compensation methods. New primary healthcare models take a "whole person" approach and address both physical and mental health needs. The emphasis is on achieving life-long health and providing effective treatment for episodic health conditions. Primary healthcare focuses on early detection, prevention, chronic disease management and education about the factors that affect health and minimize complications of chronic diseases. Through better information people will be able to prevent disease and the complications of diseases and maintain good health.

This sounds a lot like phase two Medicare. So the government appears to be aware of the need and will hopefully take the steps necessary to implement it.

The ministries responsible for seniors' health and wellbeing include Health and Wellness and Seniors and Community Supports. Seniors and Community Supports have outlined significant opportunities and challenges in their 2008 business plan.[106] These include: a recognition that an aging population requires effective planning; that government has the opportunity to develop flexible approaches that assist Albertans to access improved drugs or medical equipment to reduce or offset the need for more costly facility care; the development of a range of coordinated supports and services to better assist individuals with complex needs; an increase in community participation by addressing barriers that affect the degree to which seniors and persons with disabilities can access accommodation, employment, or volunteer and recreational opportunities; that seniors in need have access to financial assistance to support independence; and that a safe and secure environment is provided. These are laudable goals the government needs to follow through on.

104 News release: *One provincial board to govern Alberta's health system* May 15, 2008, http://alberta.ca/acn/200805/23523ED9498C0-0827-451C-E98A0B8430DC1879.html

105 Health and Wellness, *Business Plan* 2008-11, p.157.

106 Seniors and Community Supports, Business Plan 2008-11, pp 225-6.

Health and Wellness has recently announced: "a nine per cent increase in Alberta's health and wellness spending will address population growth pressures and workforce challenges and, at the same time, support the improved efficiency of health system services and operations. The Health and Wellness budget will grow to $13.2 billion in 200809, up $1.1 billion or 9.1 per cent over last year. [Additionally] the 2008-11 Capital Plan will support $3.3 billion in health commitments, an increase of $294 million over the previous plan. Of this increase, $151 million is designated for capital maintenance and renewal projects, [including] construction of more than 600 new and 200 replacement long-term care beds."[107] If where governments allocate budgets indicates their priorities, this is good start.

In another press release on April 22, 2008 the Alberta government announced increased funding of six percent to 40 long-term care organizations that operate 200 nursing homes and auxiliary hospitals throughout Alberta, as long-term care organizations are facing escalated short-term operating costs. The minister had previously made a commitment to initiatives over the next nine months to address the backlog of patients in the acute care system, ease access and improve the sustainability of continuing care in Alberta.[108]

The government has moved very quickly on the healthcare file. Has there been a conversion in this longstanding government's views on healthcare with the change in the premier's office? Time will tell.

107 Alberta Government Press Release, Edmonton April 22, 2008, http://alberta.ca/acn/200804/23354775A5476-C24D-5680-58ACBEF280520FF5.html

108 Alberta Government Press Release, Edmonton, May 28, 2008, http://alberta.ca/home/NewsFrame.cfm?ReleaseID=/acn/200805/236153079EB9A-F58C-1CF1-7357B8617E8AFD47.html

Conclusions and Recommendations

The increase in the number of seniors in Alberta in the next 20 years has significant implications to healthcare and seniors care in the province. There is hope that the 'new senior' will be more healthy (and wealthy) than in the past, and that age-related healthcare cost will shift downward (Figure 11 on page 25). This can not be counted on, at least in the near term, unless health becomes the priority in healthcare. An OECD study has found that age-related morbidity has not decreased significantly in Canada, with the implication that "it would not seem prudent for policy-makers to count on future reductions in the prevalence of severe disability among elderly people to offset the rising demand for long-term care that will result from population ageing."[109] This policy warning needs to be heeded. The government is well aware of the increasing seniors population but has not making the necessary investments to prepare. The government has instead been trying to save money by cutting back on services and unbundling housing from healthcare services.

There is nothing technically wrong with unbundling housing from healthcare expenditures. Denmark has also done this. The difference is that Denmark has public housing programs, and health services including the provision of drugs, medical equipment, and other medical supplies, is determined by need, not by the location of the service. The implementation of the Broda recommendations took unbundling too far. In Alberta the provision of health services depends on the housing facility one happens to be in. This process has been the most difficult for seniors. The housing component of facility care has increased, and the system seems to 'nickel and dime' clients for every small thing not considered medically necessary, items in many cases paid for in a hospital setting. Additionally, reorganization of health services delivery for seniors has meant a shift away from services publically paid by Alberta Health to private services, in settings without the same quantity and quality of services. The shifts have not resulted in appropriate 'community care' to delay or prevent the need for institutional care, but rather to restrict institutional care to those already in critical need. The situation is now very critical.

In this report it was calculated that to maintain the status quo constant dollar per capita healthcare services will require an average annul increase of 1.32 percent in real public funding. Expanding healthcare expenditures by this percentage per year will not be enough, though. In the short-run, continuing the status quo in health services is not

109 Lafortune, Gaétan, Gaëlle Balestat, and the Disability StudyExpert Group Members, *Trends in Severe Disability Among Elderly People:Assessing the Evidence in 12 OECD Countries and the Future Implications*, Working Paper Number 26, Organisation for Economic Co-operation and Development, March 30, 2007.

sufficient for seniors, nor is it good enough for healthcare in general. The government of Alberta has been on the wrong path with its primary focus on cutting public costs, especially on seniors care, and likely increasing the total costs – public and private. However, there may be long-term cost advantages from improving the health system. By making real investments in integrated primary care, home care, and pharmacare, expanding the capacity of our long-term care system, and not privatizing seniors care, we can provide quality care that may actually save the overall system money and provide better services for seniors who want to remain independent.

Although a small percentage of seniors need to enter a long-term care facility, our current capacity has been compromised and is inadequate. What is needed is a more than doubling of long-term care facilities by 2028. This will entail a much greater number of staff and higher quality of training for staff, increased standards and their universal enforcement, and greater regulation of private and voluntary providers to ensure public standards and fees are maintained across the board.

Supportive housing is fine for the vast majority of seniors who are healthy and independent, but it is largely unregulated and has limited access to healthcare. The main government policy since the Broda report has been to expand the supportive housing options in the for-profit sector while limiting the number of long-term care facilities which provide medical services under the Hospitals Act. The province has also been converting long-term care beds into assisted living facilities, which means a significant reduction in the healthcare personnel and the qualifications of those retained. All lodges and most assisted living facilities have to call emergency services for incidents that could be dealt with in a long-term care facility. This will not in the long-run save the health system money. There are, though, some opportunities to more appropriately target the use of public resources. For example, increasing the number of long-term care beds would free up much more expensive acute care beds.

The approach of shifting more costs on to the individual decreases the efficiency and effectiveness of the healthcare system as it also diminishes equity. Today's and tomorrow's seniors expect that healthcare will be there for them when they need it, at an appropriate level, that it be accessible, affordable, and of top quality, and that they need not burden others, especially family, in their later years. All Albertans deserve and expect better quality care and that we all must educate ourselves and demand our government build a quality public and integrated seniors care system that will meet the needs of all.

Recommendations

It is clear that the healthcare for seniors requires a considerable injection of new resources right now, both to serve current seniors better and to be prepared for the future increase in the senior population cohort. What we know is that seniors' major needs are for the appropriate management of chronic conditions. We know that seniors would like the most effective and least intervention necessary in their lives in order to function as independently as possible in their community and not be institutionalized. We know that inevitably a small percentage of seniors require significant care best provided in long-term care centres.

Promoting independence, community supports, and aging in place is positive, provided that adequate, appropriate, accessible, and publicly funded care services are available. However, trying to avoid providing for long-term care needs, as it appears past policy has, in order to cut and shift costs has created the greatest problem and has likely ended up costing more. Avoidable hospital admissions due to preventable injuries, adverse drug reactions, and unavailable primary or long-term care puts unnecessary extra demands on acute-care hospitals, and do not serve these patients well.

Healthcare must remain public. It has been shown extensively that healthcare is more cheaply and efficiently provided through single-payer, public financing and controls. The greater equity provided by public provision of healthcare is also a cornerstone of our Canadian identity as a caring people who believe that when it comes to health, ability to pay should not be the rationing mechanism. For greater efficiencies and lower total costs, more healthcare services should be brought under the public fold, not less. For Conservative governments though, it appears the political issues are twofold: who pays and opportunities for private entrepreneurs to profit. Efficiency and equity are of lesser importance.

Specifically, we need to:

- Build more long-term care units. Alberta needs a building program started now that will continue until at least another 14,000 beds (double the current number) are in place and staffed by 2025.
- Increase sub-acute beds and services for patients who, after an acute hospital stay has ended, are not able to return home.
- Increase hospice and palliative care services as the number of people dying in Alberta will double over the next 20 years.

- Increase educational places for healthcare professional programs, including specialized geriatric training. This has been stated but there is huge need across the medical landscape now.
- Hire more staff (per capita) who are graduates of these programs. There are far too few healthcare professionals now and more are required. However, merely a proportional increase will not be sufficient to meet the need.
- Increase resources for on-the-job training. Healthcare professionals need ways of improving skills and improving credentials while they are working. We can't afford to lose any personnel now, as there is no flexibility in the system.
- Improve working conditions. The lives of healthcare professionals are far too stressful in the current environment. We can not afford to lose the professionals we now have to stress and burnout.
- Improve care standards and their enforcement across public, voluntary, and private services.
- Control and regulate housing costs of continuing care residents in all settings.
- Introduce 'Phase Two Medicare' for seniors now, including an increase in public home care resources, improved access, integration and coordination of medical and other care and support services, and improved management and supervision of alternative therapies, particularly pharmaceutical treatments.

More than any other jurisdiction, Alberta has the resources and the opportunity to implement an ideal Medicare (publically administered and paid) system. Enough studies. Why not become the leader in implementing phase two? If we make a genuine effort it may cost more in the short-run and may cost less in the long-run as health becomes the focus. It can't hurt to try given our public wealth. If it proves successful, the model can be exported to the rest of Canada and even the rest of the world. What greater legacy could there be?

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