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HEALTH POLICY

## Managing the Cost of Healthcare for an Aging Population: How Manitoba Can Confront Its Healthcare Glacier

by

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“Major changes are needed to protect universal health care and ensure Manitobans continue to have timely access to a high quality, sustainable health care system in the years ahead.” (Manitoba 2012, p. 1).

For years, a debate has raged over the fiscal impact of demographic change – in particular, whether providing publicly funded healthcare to an aging population will financially stress Canadian governments. One camp, developing a theme that the pressures are a glacier rather than an avalanche, has emphasized that aging itself adds no more than one percentage point to annual increases in health costs. Therefore, it argues there is no urgency for reforms to healthcare treatment or financing (Barer et al. 1995, Evans et al. 2001). If taxes are allowed to rise and provider compensation can be curbed, so goes the argument, the system is as sustainable as Canadians want it to be.

The other camp has emphasized that a one-percentage-point annual increase is substantial, especially when it compounds over many years. Moreover, it is argued that aging will slow the growth of the tax base, potentially compromising healthcare as well as other major government programs, tax rates and debt control (Robson 2001, 2007, 2010; Drummond and Burleton 2010; Dodge and Dion 2011; and Emery et al. 2012). While this camp might concede that glaciers move slowly, it would emphasize their formidable impact when they arrive. So it tends to urge substantial reforms to healthcare delivery and financing to mitigate an otherwise painful looming collision between demographically sensitive programs and other fiscal priorities.

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This E-Brief is part of a provincial series profiling the fiscal challenge of aging and publicly funded healthcare. We gratefully acknowledge the support of Alexandre Laurin in calculating program costs and thank members of the C.D. Howe Institute’s Health Policy Council for comments on earlier drafts. However, we are responsible for any errors and the conclusions.

While the debate has raged, publicly funded healthcare in Manitoba has risen from 7.4 percent of provincial GDP in 1991 to about 9.0 percent in 2014. At the same time, it has risen from 37 percent of the provincial government's program spending in 1991 to about 39 percent in 2014.

The 2012 Manitoba government report highlights the problem – healthcare is the largest single provincial program spending item and containing its costs while providing acceptable services is an ongoing challenge. A key question for Manitobans is whether the fiscal consequences of a growing healthcare budget will squeeze healthcare itself, other budgetary priorities, or both.

## Mapping Today's Spending onto Tomorrow's Population

We shed light on that question over the next 50 years with a well-known, straightforward approach. We project Manitoba's population growth using the following middle-of-the-road assumptions: a fertility rate stable at its 2011 level; longevity rising in line with Statistics Canada's "medium" improvement scenario; net out-migration to other provinces falling to zero over 10 years and net international in-migration continuing at a rate equivalent to the 1991-to-2013 average.

We then multiply the potential workforce, which we define as Manitobans age 18 to 64, by an index of output per potential worker. This index increases by 1.2 percent annually, the rate recorded by the equivalent national measure from 1991 to 2013. These calculations provide our model with real gross domestic product (GDP) projections which we convert to nominal dollars. (Nominal provincial GDP is real GDP multiplied by the same 2 percent inflation rate we assume will prevail nationally.)

The impact of aging on future workforce growth and GDP often gets little attention in the healthcare spending debate. But they are set to grow much more slowly than they have over the past few decades (Figure 1). Hence, Manitoba's tax base will grow more slowly than in prior years and further reduce Manitoba's ability to accommodate growth in healthcare costs.

Turning to the cost pressures on healthcare, we project provincial healthcare spending for each sex in 20 age groups. Per-person expenditure for each of these groups grows according to a measure of volume of services delivered and a cost index. The volume measure – an index of service intensity – represents spending on all services provided to a person by the publicly funded healthcare system, adjusted to remove the effects of inflation. Our base numbers for these per-person numbers are the Canadian Institute of Health Information's (CIHI) figures for 2012, pro-rated to match recent actual totals.<sup>1</sup>

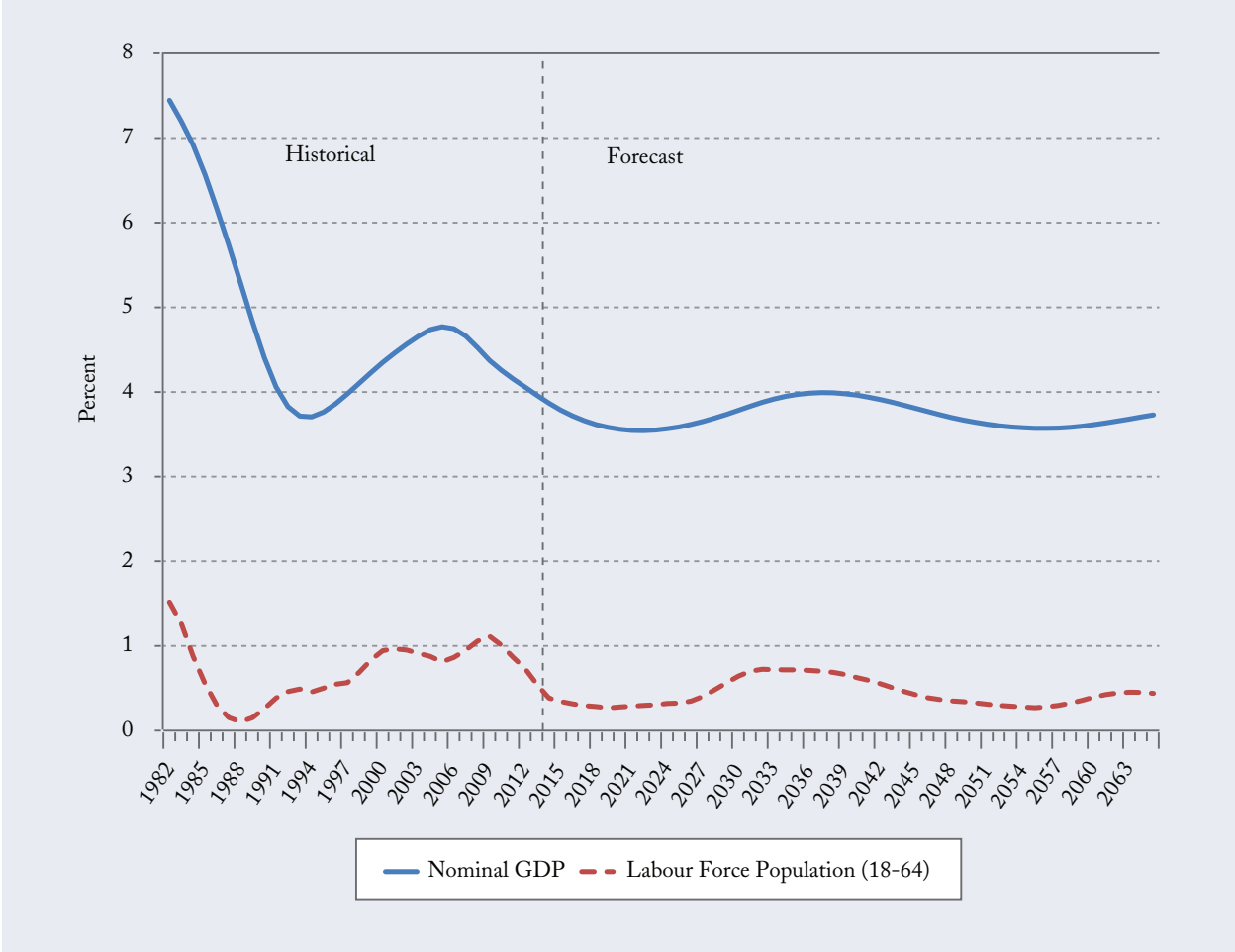
Looking forward, we assume that service intensity per person will rise at the same rate as real output per potential worker – 1.2 percent annually. In terms of cost increases, the government consumption price index nationwide from 1991 to 2012 recorded annual growth at 2.5 percent annually – 0.5 of a percentage point above overall inflation.

The last few years have seen a decline in health-cost inflation, along with lower increases in overall health spending. We hesitate to project more recent moderate rates indefinitely, recalling the 1990s when a period of

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1 For our projections, we use CIHI data for spending by age group between 2010 and 2012 to compute the three-year average share of the total spending for each group. We then use CIHI's 2013 and 2014 spending forecasts by province and Statistics Canada's population data to compute per capita costs by age group, assuming that relative spending on each group will be similar.

Figure 1: Annual Growth in Manitoba’s Labour Force and GDP, 1982-2064



Note: GDP and Labour Force Population data have been smoothed to reduce the effects of short-term fluctuations in the historical data.

Source: Authors’ calculations as described in text.

restraint was followed by rapid growth. So we project healthcare cost inflation at 1.3 percent through 2020, followed by a slow return to the historical margin over economy-wide inflation.

Because demography also affects other programs, we use similar methods – indexes of service intensity in the case of education and indexes of transfers for elderly and child/family benefits – multiplied by relevant populations and price indexes to project future spending in these areas (Box 1 spells out our approaches for health and these other programs in more detail). In this way, we can see whether these programs offset, or exacerbate, any fiscal challenge presented by healthcare.

**Manitoba’s Outlook: Trends and Implicit Liability**

Our projections show Manitoba’s healthcare spending rising from 9.0 percent of provincial GDP this year to 11.4

## Box 1: Projecting Other Demographically Sensitive Program Costs

We use similar projection methods – multiplying relevant populations by program-specific indexes of service or transfer intensity – for all the programs we examine.\*

We assume that service intensity – the volume of services delivered per person in healthcare and education – rises at the same rate that output per person in the economy as a whole does. This assumption is not entirely arbitrary: absent good quantitative measures of quality of output, measures of activity in unpriced services such as health and education tend to be driven by inputs, and these are labour-intensive activities in which wages – which tend to rise with economy-wide productivity – are a key input. Historically, service intensity has grown at annual rates above the 1.2 percent we assume, and faster than productivity growth. We prefer to link them in our main projection in order to ensure that trends upward or downward in the shares of health and education spending in GDP are not a function of different assumptions about service intensity on the one hand, and productivity growth on the other, but rather products of demographic change and cost inflation in government consumption compared to inflation elsewhere.

Our index of transfer intensity for seniors' benefits is derived from the Office of the Chief Actuary's projections of spending on Old Age Security, the Guaranteed Income Supplement, and Allowances. Because many of those programs are geared to income, and the Chief Actuary's model assumes that incomes rise over time, this index tends to fall somewhat in real terms. To the extent that Manitoba's benefits for seniors differ from federal ones, this projection will not provide an accurate picture of the provincial outlook – but seniors' benefits are small enough in Manitoba that this is not a serious problem. Our index of transfer intensity for child and family benefits does not change over time: we assume that the real value of transfers per person in the relevant age group is constant.

Further notes on the projections for programs other than health follow:

**Education:** Base-year provincial/local spending on elementary and secondary education is calculated using data from Statistics Canada's Summary of Public School Indicators for the Provinces and Territories (2005/06 to 2009/10). Base-year spending on postsecondary education comes from Statistics Canada (CANSIM, table 385-0001). Provincial populations aged 4 to 17 and 18 to 24 drive provincial spending on elementary and secondary students respectively. We multiply these populations by our indexes of service intensity. The population under 17 drives the federal Canada Education Saving Grant, while the population aged 18 to 24 and service intensity drive federal grants to postsecondary students. We multiply these by an unchanging index of transfer intensity.

**Elderly benefits:** Base-year federal spending is from the public accounts; base-year provincial spending is from Statistics Canada's Social Policy Simulation Database and Model (SPSD/M), Release 21.0 (responsibility for use and interpretation rests with the authors). As just noted, provincial payments assume the same time-path of service or transfer intensity for provincial elderly populations.

**Child/family benefits:** Spending on the federal Universal Child Care Benefit varies with the national population of children to age 5; spending on other child-related benefits varies with relevant populations up to age 17. We assume unchanging indexes of transfer intensity. Federal family benefits delivered through the tax system, while indexed to inflation, are income-tested, so real income growth erodes their real value. SPSD/M is used to calculate the costs of provincial programs.

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\* For more background on the methodology used and the terminology see Robson (2002) and Drummond and Burleton (2010).

percent in 2035 and to 15.2 percent in 2064. Taking account of other demographically sensitive programs does not change the prospect of fiscal stress. In Manitoba, spending on seniors' programs and child/family benefits is too small to register. In education, however, service intensity creates upward financial pressure as the number of students rises. As a result, the GDP share of these social and educational programs increases from 15.5 percent to 23.7 percent over the 50-year period (Figure 2). For Manitoba to meet these demands from its own revenue sources would require it to nearly double the share of provincial income it now collects.

Most public discussion of healthcare and other programs emphasizes maintaining them – perhaps enhancing, but certainly not cutting. The opening quotation cited above from the Manitoba government, like other government communications, does not contemplate tax increases to pay for continued healthcare delivery. Such political understandings create an implicit liability on the government's balance sheet, because meeting the commitment will in the end require the government tax a higher share of provincial income in the future.<sup>2</sup>

One way to quantify this looming liability is to calculate the present value of changes in these programs' claims on GDP over the next half-century. Discounting the cumulative increase in the province's average tax take from its current level by the yield on provincial long-term bonds,<sup>3</sup> the province's implicit total social program liability amounts to \$118 billion, more than three-quarters of which (\$91 billion) relates to healthcare (see Table 1).<sup>4</sup> In other words, to cover the additional 50-year cost of these programs, the province would need about \$118 billion in assets yielding income at the same rate as its long-term bonds. That figure is nearly three times the current provincial GDP, or about \$93,000 per Manitoban.

## Policy Pressures and Responses

Such a huge funding gap, implying a massive increase in provincial taxation, strengthens the case for major reforms to Manitoba's healthcare system. Simple compression of compensation to providers will not counteract pressures this large. So, what other kinds of moves make sense?

### *The False Hope of a Federal Bailout*

A regular theme in discussions of fiscal pressures affecting Canada's provinces is the role the federal government could – and, especially when the discussion is from premiers and other provincial officials, should – play in helping them out.

This prescription is suspect in principle. The provinces and territories tax essentially the same revenue bases as Ottawa: personal incomes, corporate profits and consumption spending. Much of the money the federal

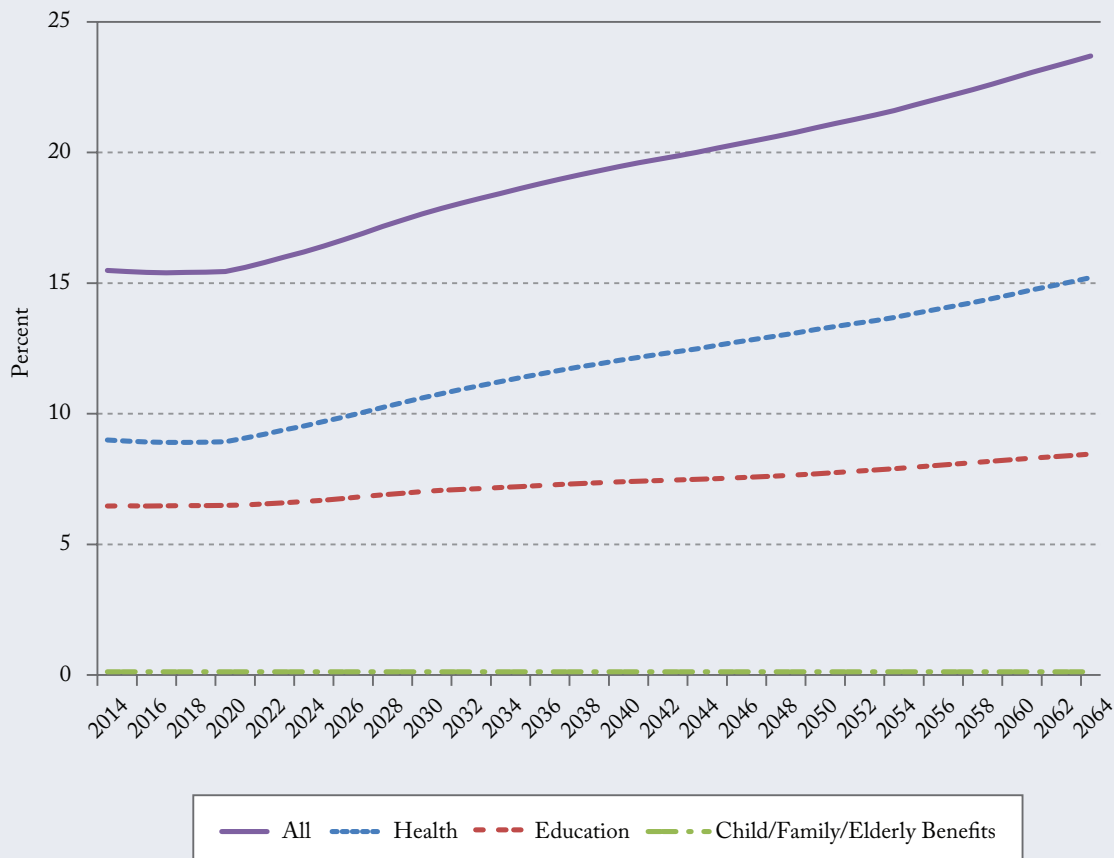
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2 The parallel with explicit liabilities is straightforward: if Manitoba decides to cover higher program costs by borrowing rather than raising its aggregate tax rate, the implicit liability would, over time, become higher public debt.

3 The paper uses a nominal discount rate of 3.5 percent to discount future nominal costs.

4 As we explain in Box 1, the labour-intensiveness of healthcare (and education) services provides some justification for linking service intensity to economy-wide productivity. The assumption that both grow together is clearly critical to our results. Should Manitoba manage to constrain growth in service intensity to 0.5 percentage points less than growth in productivity – 0.7 percent annually, rather than the 1.2 percent we assume in our projections, demographically sensitive spending would be 12.9 percent of GDP in 2064 and the unfunded liability today would be \$91 billion. Historically, service intensity has tended to outpace productivity: if it grew 0.5 percentage points faster – 1.7 percent annually – demographically sensitive spending would be 21.3 percent of GDP in 2064 and the unfunded liability would be \$204 billion.

Figure 2: Manitoba's Demographically Sensitive Programs as a Share of GDP, 2014-2064



Source: Authors' calculations as described in text.

government already transfers to the provinces simply reflects differences in the degree to which the two levels of government tax these bases – which are a matter of history and politics, not logic or economics. If the federal government increased its transfers further, the fiscal imbalance – the degree to which Ottawa is a tax-and-transfer machine supplying the provinces with the revenues they could raise themselves to perform their constitutional functions – would simply get larger. Manitobans, like Canadians in other provinces, will be better able to hold their provincial government to account for the performance of publicly funded healthcare if the province is raising, and is seen to be raising, more of the necessary funds itself.

The lure of more federal funds is also open to a practical objection. Despite the premiers' complaints, the federal government's major continuing program transfers to the provinces – principally the Canada Health and Canada Social Transfer, and Equalization – have grown prodigiously over the past decade and a half. In dollar terms, they have more than tripled since the end of federal restraint in 1997/98, growing relative to the economy



Table 1: Manitoba's Demographically Sensitive Programs, Implicit Liabilities

Demographically Sensitive Programs							
Region	Health	Education	Elderly Benefits	Child/ Family Benefits	All Programs	All Programs Relative to GDP (2014)	All Programs per Person
	\$ Billions					Percent	\$
BC	383.6	18.3	0.7	-1.2	401.4	171	87,029
AB	580.1	108.3	16.5	-0.6	704.3	204	171,999
SK	79.3	30.5	0.5	–	110.3	130	99,069
<b>MB</b>	<b>90.6</b>	<b>27.4</b>	<b>0.0</b>	<b>0.0</b>	<b>118.0</b>	<b>189</b>	<b>92,775</b>
ON	1,194.2	194.0	1.5	-6.4	1,383.3	195	101,265
QC	681.9	139.6	–	-14.7	806.8	218	98,373
NB	67.7	8.3	0.0	0.0	76.0	233	100,678
NS	89.1	9.3	–	0.0	98.4	247	104,814
PE	13.0	2.5	–	–	15.5	263	106,538
NL	65.1	7.4	0.0	0.9	73.4	201	140,209
YT	9.0	1.0	–	–	10.0	387	274,687
NWT	13.9	2.8	–	–	16.7	370	380,070
NU	13.9	3.1	–	–	17.0	681	464,111
Provincial	3,244.6	545.6	19.2	-22.0	3,787.4	197	107,200
Federal	0.0	-12.1	461.0	-21.1	427.8	22	12,100
Canada	3,281.4	540.4	480.2	-43.1	4,258.9	220	120,200

Source: Authors' calculations as described in text.

and even more when compared to other federal government programs. Indeed, Ottawa's cash transfers to Manitoba have more than doubled over that period.

If more federal transfers were the answer to provincial fiscal woes, this money should have eased their plight. Yet aggregate provincial deficits are larger now than they were following the federal restraint of the late 1990s. In fact, federal cash transfers to Manitoba were \$1.6 billion in 1998/99, and the provincial deficit was \$4 million. In 2013/14, federal transfers were \$3.8 billion, yet the provincial deficit stood at \$430 million. A reasonable interpretation of that experience would be that the provinces responded to increases in federal money mainly by spending more, rather than by undertaking reforms that would let them provide more bang for the buck in their services, including healthcare, over the long term.

As a scan of our results across the country in Table 1 reveals, moreover, similar – often worse – pressures afflict all jurisdictions. Since any increases in net federal transfers to Manitoba would have to come at the expense of other provinces, it is hard to see such increases being economically or politically attractive. The pressure of healthcare spending on other programs and taxes is a problem Manitoba should tackle on its own.

### ***The Case for Prefunding***

One way to mitigate the impact of rising costs in some healthcare services would be to follow the lead of the late-1990s reforms to the Canada and Quebec Pension Plans, which converted them from pay-as-you-go to plans in which a portion of premiums collected from people today prefunded their future needs. Some drug programs, and potentially long-term care as well, are like social security programs in that many people can prepare for predictable expenses by building a provident fund during their younger years.

Like other provinces, Manitoba could selectively convert pay-as-you-go programs so that the babyboomers, rather than their declining numbers of children and grandchildren, pay some of the higher costs that loom (Robson 2002; Stabile and Greenblatt 2010). Prefunding does not make sense for all the programs with threatened cost increases, but can spread more fairly over time the needed tax increases for health services that, like pensions, are related to age.<sup>5</sup>

### ***Reducing Healthcare Spending's Sensitivity to Aging***

Unlike pensions, which are promises to pay dollars, healthcare promises services, the cost and quality of which are not fixed. The camp that says aging by itself is not a major problem has tended to emphasize that some factors that make per capita healthcare spending so strongly associated with age, such as high rates of hospitalization or use of certain drugs, may change over time (Evans et al. 2001), which could mitigate the demographic effects in our model. To the degree that healthcare spending is related to the end of life, the tendency of people to live longer, healthier lives could mean that future Manitobans will incur higher inevitable higher healthcare costs at a later age than today's, which would delay the demographic effects in our model.<sup>6</sup>

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5 Busby and Robson (2010) explore some prefunding possibilities and their mechanics in more detail.

6 One objection to projecting healthcare costs on the basis of current age-specific service usage is that the higher costs associated with older people reflect their higher mortality rates, which means that these projections overstate cost increases in a future where people are living longer before they incur those mortality-related costs. As Brown and Suresh (2004) demonstrate, however, projections that distinguish spending on people who survive from spending on people who die at various ages produce cost estimates that are only marginally lower than estimates that make no such distinction.



Clearly, this is not a simple subject. As Felder (2013) points out, decisions to spend are at least partly driven by the life expectancy of the patient, so it is possible that a population that is living longer, healthier lives might encourage more spending on the “young elderly.” Given the difficulty of making firm judgments in this area, we are driven to look at what has actually happened to the age profile of provincial healthcare spending in Manitoba since CIHI’s first data in 1998. Unfortunately for Manitoba, there have been only small declines in the relative amounts being spent on older age groups between 1998 and 2012 (Figure 3), but the overall 2010 profile was not much different from that in 1998. In other words, a 1998 projection of the impact of demography on Manitoba’s healthcare spending by 2012 might have overestimated the effect by only a trivial amount. Therefore, avoiding a demographically driven squeeze on Manitoba’s budget will require more conscious effort than in the past.

One aspect of Manitoba’s healthcare bundle is particularly sensitive to the pressure of aging: long-term care for the elderly. Well over one-half of the population will need continuing care support at one point in their lives – a proportion that jumps to almost three-quarters after age 65. But many citizens mistakenly believe that governments are going to cover most of their future long-term care costs. This is because public subsidies to long-term care in institutions or at home are generally opaque and misunderstood. The ambiguity of current public-private responsibilities for financing long-term care dampens private savings and pressures the public sphere to pick up the slack.

But an expanded public role here would heighten intergenerational equity concerns, which is why provincial authorities must clearly define the extent to which they will cover future costs. To reduce the connection between public health spending and aging, public subsidies for long-term care must be targeted to those without the means to pay for it. At the same time, the government should require that those who can afford it absorb a meaningful share of the cost. Doing so means setting, and publicizing, government subsidies clearly so that private options – increased savings and insurance – grow to complement public subsidies (Blomqvist and Busby 2014).

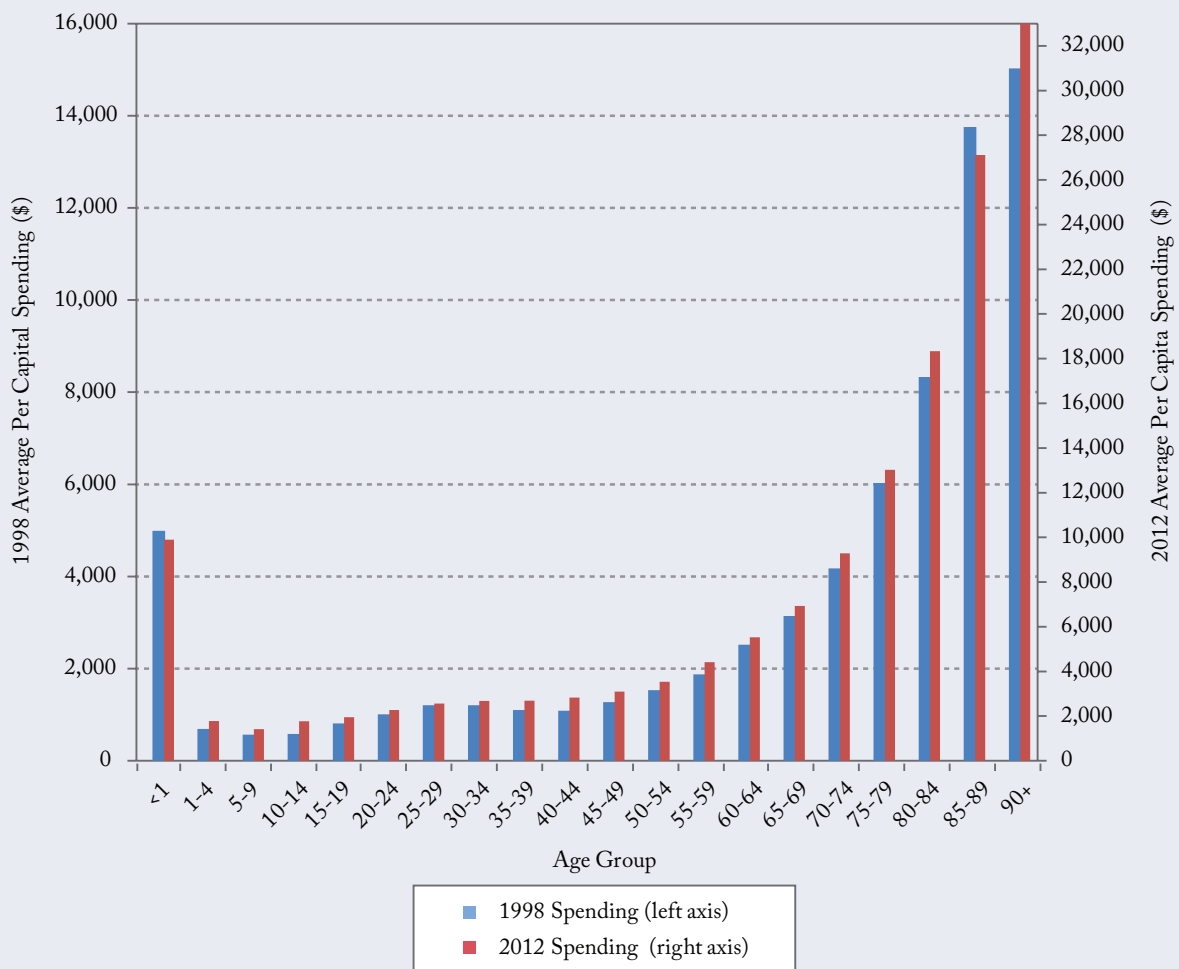
### ***Accessible Reforms and Benchmarking Best Practices***

Where might Manitoba get more bang per healthcare buck? As in other provinces, areas that experts have identified as promising include:

- more coordinated team-based primary care models where patients can get comprehensive non-acute services from an organized group of practitioners such as doctors, nurses, dietitians and physiotherapists, which operate as a unit;
- scope-of-practice changes to get more services, but of similar quality, from such medical providers as pharmacists and nurse practitioners instead of from more expensive physicians;
- better follow-up care for patients once they are discharged from hospital;
- improvements in, and more use of, non-institutional care for seniors with chronic conditions;
- more use of clinical evidence to reduce variation in diagnostics and therapeutics use; and
- incentives for patients to take greater responsibility for maintaining their own health.

As well, Canada’s provinces exhibit large differences in spending in major categories that may yield further insights. Manitoba spends less per capita than most provinces on drugs (Table 2 and Table 3), likely a direct consequence of focusing public drug coverage based on income (Busby and Pedde 2014). By contrast, Manitoba spends more on “other health spending,” which includes health research, home care, training and

Figure 3: Average Per Capita Health Spending by Age Group in Manitoba, 1998 and 2012



Note: The vertical axes show nominal dollars for transparency's sake: these are the actual dollar figures from CIHI. We could have used constant dollars from either – or, indeed, any year – or index numbers, because this focus of this figure is the relative distribution of health spending by age in the two years. To facilitate comparison of the age-profiles of spending: we have set the vertical scales so roughly half the bars in each year are taller (or shorter) than their counterparts in the other.

Source: CIHI (2014).

other funding and services. Perhaps Manitobans get appropriately greater value than other provinces from their spending on health research and other services, but we do not know.

More rigour in addressing that question is clearly vital to limiting the impact of less useful healthcare spending on other fiscal priorities. That said, the practice of benchmarking has already produced demonstrated results – the 2012 Manitoba Budget Address highlights that the province has gone from one of the highest healthcare administrative cost provinces to one of the lowest.

**Table 2: Real Per Capita Health Spending, By Use of Funds, Manitoba vs. other Provinces, 2012 (in 2014 dollars).**

Region	Hospitals	Other Institutions	Physicians	Other Professionals	Drugs	Capital	Public Health	Admin	Other Health Spending	Total
<i>Per Capita Spending 2012 (in 2014 dollars)</i>										
BC	1,745	218	901	39	227	184	379	46	285	4,024
AB	2,101	395	952	59	341	217	265	39	178	4,546
SK	1,706	618	874	32	308	226	425	47	305	4,541
<b>MB</b>	<b>1,950</b>	<b>638</b>	<b>832</b>	<b>28</b>	<b>271</b>	<b>234</b>	<b>292</b>	<b>47</b>	<b>363</b>	<b>4,654</b>
ON	1,457	405	953	32	343	169	264	32	171	3,826
QC	1,409	537	707	29	321	289	117	48	160	3,617
NB	1,993	549	813	9	277	267	174	41	274	4,399
NS	1,790	681	813	14	300	334	119	105	182	4,340
PE	1,907	551	694	18	270	566	232	114	214	4,566
NL	2,350	781	867	21	299	359	189	72	364	5,302
CAN	1,627	446	876	34	316	222	245	44	203	4,013
<i>10 = lowest</i>										
MB's Rank	4	3	6	6	8	6	3	5	2	2

Notes: Spending figures from 2011 have been inflated using CIHI's Government Expenditure Implicit Price Index to their 2014 values. "Other professionals" include care primarily provided by dental and vision care professionals; "Other institutions" include nursing homes and residential care facilities; "Public Health" include expenditures for items such as food and drug safety, health inspections, health promotion activities, community mental health programs, public health nursing, the prevention of spreading disease and health promotion.

Source: Canadian Institute for Health Information, 2014.

## Closing Comments

Notwithstanding recent restraint, demographic change will stress Manitoba's provincial budget in the decades ahead. While Manitoba might spend more per person on healthcare than most other provinces, it remains to be seen whether its residents are receiving commensurately more value in their health services. Meanwhile, selective prefunding and benchmarking against other provinces' best practices can help Manitoba deliver high-quality healthcare in a sustainable fiscal framework for years to come.

Table 3: Real Annual Per Capita Spending Growth Rate (1991-2013), Manitoba vs. Other Provinces.

Region	Hospitals	Other Institutions	Physicians	Other Professionals	Drugs	Capital	Public Health	Admin	Other Health Spending	Total
<i>Real Annual Per Capita Spending Growth Rate (Percent)</i>										
BC	1.7	-2.1	1.3	-1.9	2.4	3.0	6.6	-1.7	4.3	1.7
AB	1.5	3.1	2.3	-3.5	4.1	2.8	2.7	0.4	0.9	1.9
SK	1.2	1.3	2.8	-3.5	2.6	-1.7	4.3	0.8	4.7	1.7
<b>MB</b>	<b>1.2</b>	<b>2.0</b>	<b>3.3</b>	<b>-0.6</b>	<b>5.6</b>	<b>3.2</b>	<b>4.6</b>	<b>0.5</b>	<b>4.1</b>	<b>2.3</b>
ON	0.6	2.3	1.4	-0.1	4.0	4.6	5.5	0.0	1.3	1.6
QC	1.0	1.3	2.7	-1.6	4.4	5.8	1.4	-1.3	1.6	1.8
NB	1.6	3.5	2.8	-2.8	2.7	-0.8	4.0	0.2	6.1	2.2
NS	0.8	6.3	3.5	-4.4	3.0	4.3	2.3	5.7	6.4	2.5
PE	2.1	2.5	3.0	-1.7	5.5	7.9	3.9	5.8	6.1	3.0
NL	2.3	3.7	4.1	0.6	4.7	10.5	4.9	2.8	7.4	3.5
CAN	1.1	1.6	2.0	-1.4	3.9	4.0	4.4	-0.3	2.5	1.8
<i>10 = lowest</i>										
MB's Rank	6	7	3	3	1	6	4	5	7	4

Notes: The growth rate is computed as a compound annual growth rate from three-year averages of expenditure around 1991 and 2013, where these expenditures have been inflated using CIHI's Government Expenditure Implicit Price Index. "Other professionals" include care primarily provided by dental and vision care professionals; "Other institutions" include nursing homes and residential care facilities; "Public Health" includes expenditures for items such as food and drug safety, health inspections, health promotion activities, community mental health programs, public health nursing, the prevention of spreading disease and health promotion.

Source: Canadian Institute for Health Information, 2014.

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