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Forum V

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The Institute of Health Economics (IHE) is a not-for-profit organization committed to producing, gathering, and disseminating health research findings relating to health economics, health policy, health technology assessment and comparative effectiveness. This work supports and informs efforts to improve public health and develop sustainable health systems. Founded in 1995, the IHE provides services for a range of health-sector stakeholders, and is governed by a Board* that includes representatives from government, academia, health-service delivery, and industry organisations:

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Preface

In December 2008, the Institute of Health Economics launched a series of semi-annual innovation forums whose goal is to bring together senior public and private sector decision-makers to address policy issues of importance in the health care system, not just in Alberta, but to all of Canada and the international community, as well.

Emceed by Don Newman, national journalist and broadcaster and Chair of Canada 2020, this fifth session considered the following theme: Innovation and Sustainability in Health Systems. Speakers from all sectors provided a range of perspectives on how to foster innovation and drive towards a more sustainable healthcare system.

The complete speaker presentations can be found on the IHE website at http://www.ihe.ca/research/knowledge-transfer-initiatives/--innovation-forum-series/.

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Keynote Presentations

OECD Economic Surveys: Canada

Alexandra Bibbee, Senior Health Economist, Organization of Economic Cooperation and Development (OECD)

It is a great pleasure to be here. I am very honoured, and most of all I am happy to be able to present the results of our latest survey of Canada. We produce these surveys once every two years, and each time we have a special focus. After the economic and financial crisis, our special focus in this survey was fiscal policy. When you talk about fiscal policy, the need to consolidate, you think immediately of health care, and thus we have a chapter on health care.

Health care will be the main focus of my remarks, but first I will give a brief outline of the broad economic and fiscal policy context of the health challenge. Then I will look at Canadian health care in a comparative sense within the context of the OECD. Finally, I will present our key recommendations for healthcare sustainability. I would like to say up front that the report is not our personal view. It was discussed by a committee of peers, as our reports always are, and has been discussed and approved by the committee. The government, too, helped us a great deal and gave good comments.

Our recommendations can be classified into three main categories. First, we see a need for a more comprehensive core healthcare package. All other countries have pharmaceuticals and therapy services in the universal public package. Usually that is accompanied by cost sharing, although perhaps not in the UK, where doctors are salaried. Second, price signals are needed to create incentive for efficiency on the supply side. Other countries have shown the way with signals based on market-like mechanisms (although not markets, which cannot possibly work fully in medical care). Finally, information will be critical to monitoring quality. You put incentives into the system, but you then have to monitor closely because of the information gaps in medicine.

On the economic front, the OECD is interested in promoting strong, fair, and clean growth. Growth is the overarching objective of all of our analysis in a globalizing world. Compared with the upper half of all 33 OECD countries, Canada has a small gap in GDP per capita and a bigger gap of about 15 percent in productivity *[see slide 3, "The small gap in living standards persists"].* If productivity is broken down into its two main components, capital per worker and the unexplained residual, that unexplained residual has an even bigger gap. It is a mystery what that is, but it is often ascribed to innovation. So innovation is the key to Canada's catching up to where it should be, in the upper half of the OECD countries. Canada should not simply have to rely on trade gains to compensate for the lack of productivity.

The financial crisis has aggravated the problem. Research shows that after any big banking crisis, recoveries are very, very slow and uncertain. This is no exception. The Bank of Canada has stopped raising interest rates, and we have just downgraded Canada's GDP projection from our last outlook, so it's very tricky territory right now. We did some very novel projections in this survey. We used our methodology for calculating potential output growth in countries

and applied that methodology to provinces *[see slide 4, "Trend output growth will slow"]*. As you can see, by 2017, which is the end of our medium-term simulation exercise, potential GDP will be ten percentage points lower than had the crisis not occurred. (GDP means how fast the economy would grow if factors of production were fully utilized.). Some provinces have a much bigger gap. Alberta has a mild problem, but as you'll see, that does not relieve it of fiscal concerns.

Compared to other OECD countries, Canada came out of the crisis in relatively good shape *[see slide 5, "Canada is in a relatively good fiscal position"]*. This chart shows the deterioration of the fiscal balance after the crisis. In 2010, everybody is in deficit, but Canada is the fourth best, one might say. The dark area of the bars represents the structural deficit. This is the part that will remain even after growth returns, and even after the cyclical component deterioration, is gone. Canada has a relatively mild structural deficit. The US has a horrid one, as do Greece and Great Britain. So things look good for Canada so far.

The federal government dominates this result *[see slide 6, left, "Federal government fiscally sustainable but not total government"]*. The federal government has had a string of strong surpluses since it cleaned up its books in the mid 1990s, which it did quite aggressively and with the provinces paying some of the price. Two baselines are shown here: one is the total balance and the other, the dotted line, is the primary balance, which excludes interest on the debt. That is the balance that policies can affect. The federal government would not have a problem, even if they kept the six percent Canada Health Transfer escalator, which we assumed in these baseline simulations. We assumed that all levels of government keep spending at the rate they have over the past decade. It is artificial, but that is how we set baselines, because it shows the level of effort needed to get back to the balance.

The total government is another story *[see slide 6, right]*. This shows that the fiscal problem derives from the provinces. It assumes that they are receiving the six percent Canada Health Transfer, three percent per year growth in the social transfer, and the nominal GDP equalization transfer escalator. Québec and Ontario have dismal outlooks, because they entered the crisis with quite large imbalances and they have spent heavily *[see slide 7, "Quebec and Ontario have challenging fiscal outlooks…"]*. Their spending grew six percent per year in the past decade, and their healthcare spending probably grew even more. Thus health was squeezing out other programs, as it does in Alberta *[see slide 8, "…as does Alberta…"]*. The Alberta situation deteriorated not only because of the recession, but because of the decline in the world energy price, gas in particular. And Alberta, even with its relatively benign outlook on growth, would be deeply in the hole if spending were to continue at the rate it did over the past decade, which was 9.3 percent per year on average. It would have a 10 percent budget deficit, and it would have debt by that point. British Columbia is the best of the big four.

Health care is what is causing much of this provincial problem, as you well know. Here I show healthcare expenditures for all of the provinces *[see slide 9, "Health care: a growing provincial budgetary burden"]*: spending per capita, spending as a percentages of GDP, and average annual growth in public health spending and source revenues. Health spending growth has outstripped revenues just about everywhere except Saskatchewan. Alberta's healthcare spending grew by five percentage points, so that Alberta now devotes over 40 percent of its budget to health alone. Ontario already spends 50 percent on health care. Alberta is the most generous in per capita health spending on a total basis, both public and private. Healthcare spending is still a small percentage of GDP, but the GDP is very special in Alberta's case.

We have recommendations for Alberta in our survey. Every year we recommend the same thing: we say that Alberta needs to have a spending rule, not a balance rule. Balance is easy to achieve when you have strong growth in revenues, but spending grows just as fast, or almost as fast as revenues. You end up with a very pro-cyclical fiscal policy: you had growth in spending in the boom, and now you have a severe cutback in the downturn. That is not

what you want fiscal policy to do. We recommend a spending rule, not just a deficit rule or a balance rule, to constrain spending growth every year. This should be complemented by a savings rule, as has been recommended by various people, including the Mintz commission.

Many OECD countries that have resource wealth — for example, Chile, Norway, and even Russia — are saving in some type of stabilization or generational fund. Norway, like Canada, has huge oil reserves compared to the size of its economy and population. Norway has done a good job, but I must say that Norway implemented its rule only after it spent a great deal up front on infrastructure. So there may be an optimal time to do this, and maybe the time is near.

Now we turn to health care, because that is the real problem on the fiscal side *[see slide 10, "Some peculiarities of the Canadian health care system"]*. The healthcare system in Canada has some striking peculiarities, or features that are not common elsewhere in the OECD. Medicare is very narrowly focussed on hospitals and doctor services, which leaves many important things, such as drugs and dentistry, outside of the fully subsidized package; and there are no patient co-payments. Coverage is narrow but deep, whereas most countries have a wide public package and a little bit of cost sharing.

Looking at the system as a whole, Canada lags behind other OECD countries in implementing price signals in, say, hospital services, to create incentive for efficiency improvements. For instance, the use of diagnosis-related groups (DRGs) is a common method whereby hospitals undercut the standard price of performing various procedures, and they can keep the savings (although now hospital budgets are being capped, because hospitals that are too enthusiastic in supplying services can hurt the budget that way). Performance monitoring seems a little bit weak in Canada. Many other countries are trying to do more monitoring, and that goes along with implementing some kind of market mechanisms. You have to watch people carefully when you introduce incentives. Even small incentives can be quite powerful. On a more positive note, Canada does spend more than any other country on prevention and public health. That is certainly a good start to facing the aging challenge.

Political economy is a problem everywhere in health care. Because everyone benefits from health care, there is a strong constituency fighting for it. People have a tremendous faith in their doctors, and they don't like skimping, as they see it, on services. But Canada is perhaps unusual in that spending is much more decentralized than just about anywhere in the OECD, yet the funding is not fully decentralized. This gives rise to the famous tensions between the federal and provincial governments. Accountability in such situations is usually attenuated because the province can blame the federal government for not providing enough money. They have been saddled with a huge burden, and they don't have the dynamic tax base to handle it. So accountability can be an issue.

Doctors are historically very independent in Canada, it seems. Doctors' unions are strong, and I understand they are very strong in Alberta, and the manner in which doctors are paid is determined at the political level. The Canada Health Act is very unusual in that it sets the funding rules and tries to set national standards to harmonize services across the country. It is a nation-unifying type of legislation, but it seems very rigid and rigidly interpreted. For example, I prepared a section on finance for the same survey, and Canada did very well in the banking sector. It stands out as having survived the crisis pretty well intact, and it has a good supervisory and regulatory regime. One thing that struck me in comparing health and financial services was that Canadians take great pride in updating the legislation governing financial markets regularly — I think every seven years — because, they say, innovation is rapid in financial service, and the regulations have to keep up with the innovation. One might say this about the Canada Health Act, because hospitals and doctors are no longer the primary means of delivering health, or as preponderant as they were.

Some consequences are the following *[see slide 11, "Some consequences"]*. Canada has strong healthcare equity, especially in comparison to the US, which is very good. But in non-medicare services, you have a US-style situation in which there are gaps in coverage and some people face high out-of-pocket costs, especially unemployed people who may not be in the safety net. There is no possibility of physician dual practice, and I understand this is a controversial issue. There is also a strong separation between medicare service provision and private competition. Because the financing system itself is fragmented, the whole delivery system becomes fragmented. This militates against the ability to develop new integrated care models, which is a major process innovation that OECD analysts and most countries in the OECD are looking at as a way to meet the challenges of chronic care in aging populations. The current business model for medical care delivery will be far too expensive once you have legions of chronically ill people.

Here is another way of seeing the same problem. Top-down budget control is important in health care everywhere because it gives quick results; but it usually does not last very long, because doctors and hospitals want to claw back what they had to give up under tight caps. Micro-incentives for structural change are better at achieving lasting benefits and efficiency gains, better even at increasing institutional innovation. You have queuing in medicare because of an insufficient supply response, which we think is due to the lack of incentives. We also wonder whether the manner in which the Canada Health Act is interpreted may cause some of this.

Now I will show some pictures of institutional features that affect performance. In this chart, I have divided the OECD into three groups: the US, Canada, and an average of all the other countries *[see slide 12, "Health spending trends are not sustainable: Health spending to GCP ratio (%)"]*. The US is a clear outlier. It is spending 16 percent of its GDP on health care, which is double what it spent in 1975. Canada's spending has risen much less, but the level is higher than in the rest of the OECD. The rest of the OECD has done more to keep down the ratio of health spending to GDP. And, as I have said, many of these countries offer much more in publicly subsidized universal care and have older populations. France, for instance, where I live, already has an aging problem, as do Italy and many of the Scandinavian countries, I believe. This increases the per capita cost, and yet they still manage to do a bit better.

The main pressure points are in non-medicare health care *[see slide 13, "Main pressure points are in non-medicare"]*. This is mainly because of pharmaceuticals; but home care, which is not a big weight yet, is a very fast-growing component of health care. One could say that the cost of medicare is sustainable. It has increased recently, but only slightly. And the cost savings achieved in the 1990s (the dark black line) has stuck pretty well. One reason for this may lie in a technology shift. Because of innovation that Dr. Tyrrell mentioned, many things that used to be done in hospitals are now done through pharmaceuticals or in therapy follow-up and thus are outside of medicare. So there could be some cost shifting that is benefitting medicare; but the hypothesis cannot be eliminated that the incentives are even weaker in non-medicare than in medicare because there are no strong public players. You have private insurance, passive payers who deal with unions, give generous benefits with good coverage, and so forth. In Canada, drug spending is now higher than physician spending. Drug costs are rising quickly in every OECD country and are the main factor in spending growth.

A main driver is, of course, income *[see slide 14, "Income is the main driver"]*. The richer a country — the more basic needs are satisfied — the more it wants to spend more on health care. As a percentage of GDP, therefore, health care may go up. In the US, some people expect that health spending will rise to 30 percent, and they feel that may be a good social choice. On the other hand, countries do not want high taxes, because they realize that taxes have deadweight costs that reduce growth. So there is a dilemma, and public choices have to be made.

Patterns of disease also are important. Some diseases have been pretty much conquered through innovation, but in the future chronic disease will be the big challenge. Obesity is one risk factor *[see slide 15, "Obesity is a risk factor"]*. Canada is among the countries with the highest rates of obesity, and we can see that the rate of obesity has doubled

since 1990. Looking forward, there are other challenges. Alzheimer's disease is going to be a very big cost driver in the future, and a lot of innovation will be directed towards that. Mental health is linked to Alzheimer's as well.

On the supply side of health care, Canada imposes tight capacity constraints on medicare, in that caps on hospital capacity and doctor numbers have been pretty much maintained. Medical school enrollments have been growing to help prepare for the aging challenge, but right now we have the second lowest density of practicing physicians among the major countries *[see slide 16, "A. Practicing physicians"]*. Japan's density is lower, but the reason that Japan has low healthcare spending is primarily because it also regulates physicians' salaries. Despite the lower density, Canada still has a pretty good balance of GPs and specialists. Some countries, particularly the US, have a much worse balance. Nevertheless, there is a great deal of complaining in Canada that people cannot find primary care doctors; and since GPs must serve as gatekeepers to specialist services, this gives rise to the first stage of queuing. Medical consultations per year in Canada have a higher rank than doctor density, which indicates that productivity is pretty good *[see slide 16, "B. Medical consultations"]*.

We have quite high physician remuneration because we have low doctor numbers. Low supply, high price is usually the rule. This shows the ratio of doctors' remuneration to the average wage within the country *[see slide 16, "C. Specialists' remuneration" and "D. GPs remuneration"]*. It is not a strict comparison across countries, but it gives you the relative level of doctors' wages in every country. I expected remuneration in Canada to be higher, closer to that of the US, but it still is among the highest.

On the hospital side, the number of hospital beds is very low, and discharges are the lowest *[see slide 17, "E. Hospital beds" and "F. Hospital discharges"]*. There is shifting of care outside the hospital, and perhaps more difficulty getting into the hospital because there are blockages in the system. The average length of stay, on the other hand, is slightly high *[see slide 17, "G. Average length of stay in hospitals for acute care"]*. This may be because the hard cases end up in the hospital, or maybe the efficiency incentives are not strong enough. We don't know. The use of high-tech equipment is on the low side *[see slide 17, "H. MRI units"]*. This is often seen as another capacity constraint.

Generic drug prices in Canada are the highest in the OECD *[see slide 18, "Canada's generic drug prices highest"]*. This is a problem in the retail distribution sector, where a system of rebates keeps list prices high. Provinces are starting to re-regulate that market, even though competition should be the driving force.

Low use of information and communications technology (ICT) in health care in Canada is considered a lack of innovation and a potential area for productivity enhancement *[see slide 19, "Low ICT use in health care suggests missed opportunities"]*. Doctors have not yet adopted electronic medical records, although governments are trying to implement these systems. The evidence is good that they reduce costs and improve quality. In fact, many countries show there is no quality–cost tradeoff. Usually, high quality and good cost control go together. You need information to make that kind of complementarity work.

Quality indicators are mixed in Canada *[see slide 20, "Quality indicators are mixed"]*. The OECD has developed cross-country indicators based on consistent methodology. Canada does very well in cancer, less well in stroke and heart disease, and pretty well in primary care, as seen in low rates of admission into hospitals for asthma. However, Canada's diabetes rate is the third highest in the OECD, after Mexico and the US.

This is a survey on patient satisfaction undertaken in 2010 by the Commonwealth Fund in New York *[see slide 21, "Canada ranks poorly in patient satisfaction"]*. Canada scored very poorly, and this was in the year after much had been done to improve patient satisfaction. A lot of money has been devoted to cutting waiting lists, and still Canada ranks

last in timeliness of care, safe care, et cetera. Of course, this is not very scientific, but it is how people feel. People are happy with their health, which is the important thing, but they are not happy with the patient experience.

Another finding in the survey is that despite great equality in access to care, there still is high inequality in health related to income *[see slide 22, "Health still depends heavily on socio-economic status"]*. Poor people have a poorer health status than in many other European countries, for example. This could suggest a need to devote more money to education, housing, et cetera, to address the health problems of poor people rather than giving so many health subsidies to everybody.

The public burden is set to grow significantly *[see slide 23, "Public burden set to grow"]*. We have some numbers, and that should motivate reforms, but you have to get people thinking long-term and strategically.

Now, our reform recommendations: we have a big list divided into three main areas *[see slides 24–26, "Health care reform recommendations"]*. First and foremost is to promote cost awareness and accountability. That takes precedence over the other reforms. The other reforms are to improve access and quality, and to promote quality and innovation.

The cost situation has to be addressed first. We think the most important thing is to act on supply-side incentives. We need more contracting. We need regional health authorities to set a price based on standard, well-defined pricing of hospital services, and then have people compete to supply services efficiently at that price. This would include doctors' fees. It would not be simply a negotiation with the Minister of Health: it would be set in a quasi market way. This seems to work well in promoting competition and innovation. Generic drug prices should be driven by competition, although there are other issues. The first company entering into the generic market often faces high court fees to challenge the existing patent, but this is a wrinkle.

The way in which doctors are paid is the subject of some concern (this is what Health Canada told me). There seems to be a need to get the payment closer to who does the purchasing from the doctors and who is responsible for performance. There would be a better match between the fees and the needs of the system and the possibilities that the system has to pay.

On the demand side, we recommend at some point some kind of cost sharing in the form of patient co-payments. I know this is not allowed by the Canada Health Act, but it is something to think about. Maybe you could define the core package more comprehensively but have less of each type of service within that package based on value-for-money assessments of different types of services. Maybe you fully subsidize only those services that are of very high value, that give a lot of extra health for each dollar spent. For services of more marginal benefit, there could be higher co-payments. We could also steer demand a bit with co-payments.

The federal role should be more proactive. The federal funder does not impose much conditionality on its Canada Health Transfer. They are threatening to do so, but I don't think they will. We recommend that they impose some kind of accountability — perhaps better information from the provinces on the use of taxpayer money.

Promote access and choice by expanding the core package, using marginal benefit-cost analysis wherever possible, and then allowing a role for private health insurance to compete. European countries have done a great deal in that respect. Netherlands is a very interesting case.

Promote quality and innovation. As a source of both cost savings and health gains, innovation offers a double benefit. You probably need to do more on ICT applications, which have improved productivity significantly in every other sector of the economy. I know that health care is not fully amenable to standardization because of the human aspect and variability among patients, but more could be done.

Provinces should be encouraged to monitor healthcare quality. We think that a pan-Canadian arm's-length non-politicized agency should be charged with monitoring and analysis of healthcare quality across Canada to provide benchmarking that allows provinces to know where they stand and where they can spend their health dollars most effectively. Thank you very much.

Don Newman, Chair, Canada 2020, national journalist and broadcaster, former chief Ottawa CBC correspondent

I appreciate the invitation from the Institute of Health Economics for the opportunity to come here today. I suggested to John Sproule when I got his invitation that I begin my remarks by saying, "I've come from Ottawa, and I'm here to help you." He suggested that in Alberta that may not be the best way to begin, so I will say only that I'm here from Ottawa.

I have lived in Ottawa for 29 years, and before that, I lived in Edmonton for two years. Those were the two years of the National Energy Program. It seems to me that the crisis between the federal government and the province at that time was exactly the opposite of what we have now. It was a political crisis. It was about how rich we were going to be and who was going to get what share of the money. The money was rolling in, and it was about dividing the spoils. Albertans at the time were seized with this — they started new political parties and did all sorts of things — when, in fact, the National Energy Program really wasn't going to change their lives very much. Everybody knew that the price of gas was going to go up, but everybody also knew that, either way, we would be getting rich from the royalties. It didn't seem to me the kind of thing people would be all that worried about.

Now we have what I think is a crisis in health care. I think that is why we are having this conversation today and why, all across the country, people who are in the policy and political fields are very concerned about the sustainability of health care. It is mainly because it is not sustainable; it is not going to continue the way it is. This crisis is not about dividing up a growing resource. It is about managing the resources of health care because, in fact, the money to provide them is not keeping up with the demand for those resources. And yet, by and large, ordinary Canadians, ordinary Albertans, are not seized with this problem in the way that one would think they would be.

It's an interesting phenomena. Maybe the rubber will hit the road, to use the energy analogy, when people realize that the 2004 cost-sharing agreement between Ottawa and the provinces that was to solve health care for a generation, was, in fact, always set to expire in ten years. And lo and behold, the problems are more difficult to face now than they were in 2004. Many of them are the same problems: we have an aging population, and we have fewer taxpayers to pay the taxes to support all sorts of government services, including health care. But the context in which we must solve these problems is now different. In 2004, the healthcare agreement was negotiated between Prime Minister Paul Martin and the premiers. It went on, it seemed, all night, with the federal government sitting on a huge surplus of about 14 billion dollars per year and a Prime Minister who had gone from a majority government to a minority government talking about solving health care for a generation. The premiers, most of them in pretty good budget shape in their own provinces, knew that they could shake his tree for dollar after dollar after dollar. And the longer they shook, the more the money fell out, until at about two o'clock in the morning, he finally said, "Well, that's the last penny." And they signed off on the agreement.

We are now in an entirely different situation. We have the largest federal deficit in history. The most populous provinces, Ontario and Québec, also have record deficits. The federal government estimates that the earliest they will be out of a deficit position is the middle of 2016, and many people would say that is very optimistic. Alberta is in

much better shape than the other provinces, particularly as long as energy prices keep rising. But, in fact, this is a very difficult time. The population that was old in 2004 is older now. As a percentage of the total population, the aging population is larger, and the percentage of taxpayers to support the aging population is declining. The innovation that we have seen in health care has not primarily been innovation in the delivery of health care. Instead, it has been innovation in surgical techniques and drugs that extend life, which is something all of us are in favour of. But extending life is expensive. The longer people live, the more health care they will require, and the costs will keep going up.

It is against this backdrop that negotiations are unfolding at the moment. Quite frankly, at the beginning of this year, they were not going on at all. Now, there are some murmurs and some maneuvering, mainly because the premiers at their annual meeting in Saskatchewan in August started talking about this. While the federal government now provides only about 20 percent of the funding for health care in the provinces, that 20 percent is nevertheless a lot of money to suddenly find shrinking when, in fact, you need more money.

As the politicians and the negotiators, federal and provincial, sit down to try to deal with this problem, they face a number of obstacles. I'm sure that we all know them, but let's just run through them quickly. The first one is that people in Canada think that health care is free. They do not pay directly for it: they pay for it through their taxes, so they think it is free. And they do not think they should pay any more for it, whether it is through private insurance or taxes or any kind of premium that might be put on them. So you have to negotiate something that is going to require a lot more money but that people still want to consider as free.

Also there are many vested interests who actually enjoy the healthcare system more or less the way it is now and do not see any particular reason to change it. Dr. Bibbee was talking about changing the way doctors are paid. By and large, as her figures showed, doctors in Canada are paid very well; and by and large, doctors in Canada do not see any reason to change the way they are paid unless it will give them more than they are getting now. And that is not going to be as likely in a new delivery system, so they will resist that. Then there are the other economic actors in the system, particularly the union employees, who in the current system, particularly if they work in government hospitals, particularly if they work in BC, are fairly well recompensed, and thus have a vested interest in the system.

And then there is the Canada Health Act. Many people in the country — particularly the unions, some members of the Liberal party, and the political people in the New Democratic Party who rely on the support of the unions and who with their predecessor party, the CCF [Co-operative Commonwealth Federation], and their predecessor leader, Tommy Douglas, are seen as having created health care in Canada — believe that the Canada Health Act is something akin to the Ten Commandments or the Sermon on the Mount or a clever blending of them both. And they think that it should not be changed, that, in fact, it cannot be touched in any way.

And then there is the idea, which I think politicians have painted for themselves, that all taxes are bad, that nobody wants to pay taxes, that taxes slow down the economy, that taxes are unfair and that any increase would be improper. People seem to think the government gets the taxes and that the money is wasted. They don't see that life is in many ways like a spreadsheet. There are costs and there are benefits. If your taxes go up and they are wasted, that's an outrage (even if they don't go up and they are wasted, that's an outrage). But if your taxes go up either to provide you with new services or to sustain services that you value, I'm not sure that that's an outrage. That may, in fact, be a very smart investment. Making sure that the health of Canadians stays at a high level is a national good. There is a cost to a national good, just as there is a cost to any national good. If you build a new highway between Calgary and Edmonton, it is a provincial good. It is not going to be free. You would not put a toll road on it, because poor people would have to pay as much as rich people, and that is not fair. So you pay for it out of taxes, which are meant to be progressive and fair. It is a spreadsheet.

Those are the kinds of liabilities and difficulties surrounding health care that politicians are going to have to do something about before 2014. Politicians living on a four-year election life cycle in the provinces, and living on the cusp of a minority government in Ottawa, will have to deal with these things. And if they do not deal with them, they will not be able to deal with the larger problem because they will not be there to deal with it. Another thing that makes negotiations particularly difficult is that between now and 2014, every province will have a provincial election. All of the negotiations about health care will therefore go on against the backdrop of people's jobs being on the line. And health care, which is the major spending program in every province, is an issue that will have to be taken into account by healthcare providers, healthcare receivers, everybody who has a stake in health care — and everybody has some kind of a stake in it.

Now, thinking about some of the changes proposed by the OECD and other groups, how are they likely to fly? People who do academic research are very good truth tellers to power, but they do not have to get elected every four years. Their ideas should be considered, but they have to be realistic about how those with a vested interest are going to respond to their proposals.

One of the proposals in the OECD report is to change the way hospitals are funded, so that instead of being given block grants, hospitals are paid for the procedures they do. This was tried in the last budget in British Columbia, and it has been tried in the United Kingdom. In the UK, they found that, indeed, it did shorten wait times for operations, but there is no evidence yet that it resulted in improved treatment. It also raises the possibility that if you shorten wait times, you will provide more procedures and operations. And as you provide them, they have to be paid for. The more people being treated, the higher the cost. Either you contain costs by reducing the amount you are paying for each of those operations and treatments, or you add to the cost by speeding up the process.

Another potentially difficult issue is that there are really ten healthcare plans in Canada. They all follow the five principles of the Canada Health Act, but not everyone agrees that some of the treatments that have been suggested as innovations actually work. And some treatments may work but be so expensive and apply to so few people that they will not be adopted in every province, even though Canadians will be demanding that they be adopted. Think about the new treatment for multiple sclerosis, which I think anyone with MS would think is a wonderful idea and at least worth a try. But it is incredibly expensive, and there is argument over the science of it. Only Saskatchewan, which has the highest rate of MS and also is the only province that is not in deficit, is prepared to include it in the schedule of covered treatments. No other province, not even rich Alberta, is so far prepared to do that. So the argument over whether or not treatments work is going to be another question in the negotiation of a new agreement to bring stability to healthcare funding.

Interesting, just as an aside, Saskatchewan has the highest percentage of people who have MS, but, in fact, there are many more people outside of Saskatchewan who have MS. It could be that with a new healthcare system that is more flexible than the Canada Health Act allows, or with a greater imbalance of resources among the provinces, we are going to have people treatment shopping. If I had MS, I would probably move to Saskatchewan. Wouldn't you? Saskatchewan now has the money to afford the MS treatment, but that may not be true in five or six years if enough people move to Saskatchewan and demand the treatment. In a country where health care is meant to be both accessible and universal, to have people starting to treatment shop, while probably not illegal, would seem to fly against the spirit of what people thought they were agreeing to when the Canada Health Act began.

Another thing that is going to be difficult to negotiate is co-payments. Co-payments can come in a number of different forms, but by and large, people call them user fees. And if you remember the last Québec budget, the government was going to put into effect a $25 user fee for a visit to the doctor. That didn't last very long, because

there was a huge outcry against it. User fees would probably reduce pressure on the system, but again, it is a bit like shopping for treatments. Do you really want to reduce pressure on the system by keeping people out of it?

As Dr. Tyrrell said, the idea should be to keep people in the best possible health until their body clock runs out, and then, hopefully, the bell rings and it's over. I think that's a pretty good plan. But for a number of reasons, the average lifespan is increasing. Of course, in the first part of the last century, that was due to the infant mortality rate coming down. But now it is due to better drugs and people going to the doctor more often. People now go for regular checkups. If they get a sign that their blood pressure is a bit high or their cholesterol is too high, they track it. They keep going for checkups. If people are charged $25 every time they go, and particularly if they have a fairly large family, they are probably not going to go. They will likely die sooner, and that will take some pressure off the system; but, again, I do not think that is the way that we want to innovate and change health care.

So what should be done? I think it is obvious that people have to be told that, like it or not, healthcare costs are going up, and they are going to have to pay those costs. They can pay them in a number of ways. They can pay them through higher taxes. They can pay them by buying private insurance. (But the idea of private insurance seems counterintuitive. Why would I buy private insurance if it didn't provide any particular benefits that I do not get with public insurance? Most people think the best benefit would be to get around the waiting lists, and that private insurance is likely to do that.) There are already co-payments in some provinces. In Ontario, people over 65 get their prescriptions free after they have paid the first hundred dollars. This is a form of co-payment, and it is like American health care in the sense that you have to be a senior citizen to qualify for it. But that may be one way of getting some money: by having people co-pay for drugs that otherwise would be free.

It seems to me that we should look back a bit as we move into the future. When health care first came in, it was an insurance plan. It was not a health delivery system. Obviously, we cannot go back to having only an insurance plan; but I would propose that we go back to the system we had in many provinces until the mid 1980s, which was that we paid a monthly premium for our health care. It would not be an onerous amount, but it would serve two purposes: first, people would know that health care is not free; and second, 33 million people paying premiums would put a lot of money into the system, and that money could be used for existing services or to cover services that are not covered at present. As Alexandra pointed out, our system is deep but narrow. It is narrow because many things are not covered.

And perhaps we could have more private-sector delivery of health services that are publicly insured. That way, the infrastructure costs of health care would be put onto the private sector. As long as the private sector hospitals (and those now in the public sector could move into the private sector) were regulated by the provincial and federal governments, that would probably meet the public-administration requirement of the Canada Health Act.

And why would people want to go into the private hospital business? One way to encourage that would be for the federal government to create some kind of infrastructure bank for health care. The federal government can borrow money more cheaply than anybody in the country. They could then re-lend the money to people in the private sector who are creating different kinds clinics, different kinds of healthcare delivery systems — for tests, for laboratories, for physiotherapists, even for surgeries. It would be publicly regulated and paid for out of the public purse. And there would be no chance of losing money in the healthcare business. People want health care, and the increasing demands that the system is facing now would, in fact, play into — and pay into — the private healthcare business. As long as it is publicly administered (because the rates are set publicly) and the money is available, why wouldn't you go into it?

That would be very controversial, but there has to be a plan for people to talk about. That may not be a very good plan, and certainly I am quite willing to pull it off the table and have you propose better ones. The point I want to

make is that politicians are, in a sense, dodging it until the train hits them, and the train is really just around the bend. I think we have to get ready for it, and I think that is why an event like today's is so important. I congratulate the organizers of this forum, and applaud the ongoing work they are doing. Thank you for your attention.

Questions and Answers: Alexandra Bibbee and Don Newman

Tom Noseworthy: How would you set up the accountability to make it work in the system?

Alexandra Bibbee: You have different levels of accountability. The province itself is accountable to its taxpayers for how well it organizes the health system, but it also, as I said, could pass the buck up to the federal level. That weakens their accountability a bit. In theory, if all the resources to pay for the healthcare system were collected provincially, you would have full accountability, but that is not desirable either. I think federal involvement is a good thing because it helps set national standards and helps unify.

At the provincial level, it seems that the doctor is paid and no questions are asked. In a sense, the government is a passive payer. Maybe accountability could involve a little bit of monitoring of what the doctor does. Anyone who works — who is paid by someone else — is often monitored by the payer, by a boss or contractor. If you give out a contract, you monitor performance. As I said, that still is in an elementary stage here because of the lack of sufficient information. Partial capitation is perhaps a good way to make doctors accountable. They would be paid for treating a certain population assigned to them, and they would have to keep those patients happy in order to keep them on their list.

Tom Noseworthy: Question for Mr. Newman. With respect to the next ten years of sustainability in Canada's healthcare system, do you think it matters at all what kind of government we have in Ottawa? Majority? Minority? Liberal? PC? Is the federal government going to be a big player in the next ten years?

Don Newman: It is generally better to have a majority government because it brings more predictability and gives the federal government the opportunity to carry through on agreements they make with the provinces. I think the federal government is always going to be a big player. I agree with my colleague from the OECD: without federal involvement, there would not be a national framework for health care.

I think we are unlikely to have many majority governments. As a case in point, there is now a party in Québec that gets a lot of seats, and it is very hard to get a majority without those seats. Some people think the party is illegitimate. I don't. I think you can run a party only in Alberta or only in Saskatchewan if you want to. But the more seats that are not going to a party that can form a government, the harder it is for the parties that can form a government, of which there are really only two, to get up to that number. So I think we are going to have minority governments and a big mix of parties, and we better figure out how to make it work. And we better make the parties figure out how to make it work, instead of dancing around seeing if they can get the upper hand. I think that a better configuration for dealing with all the different pressures and tradeoffs in crafting a healthcare policy and agreeing on how it is going to be financed is a minority government in which every party plays a role. That seems to me what parliamentarians should be doing.

Unknown speaker: I wonder if you could talk a little bit about how the OECD came up with the recommendations and, more specifically, the recommendation for a dual-payment system. For example, there is no comparative effectiveness research in your presentation, and I would like to know what the evidence is that our healthcare system would be better with a dual-payment system and what metrics you use to make that statement. Wait times might be one issue, but wait times might decrease for the rich and increase for the poor within a dual-payment system. For example, emergency departments might be overwhelmed with nonpaying patients, while the

rich get immediate care for simple things that don't even need to be seen. I wonder if you can talk a little bit about how the recommendations were generated.

Alexandra Bibbee: The recommendations were generated mainly by cross-country experience. The OECD recognizes that in a dual-practice system there is always a risk that the doctors will increase their profits by taking the easier cases to their own clinics, leaving the hard cases to the public sector. In European systems, there is much more competition between private and public, and it is seen as a harmonious coexistence, partially because there is simply not enough capacity in the public system to fund as many services as people want. You have to give a little leeway to people. You do get a little inequality — that is probably inevitable — but to have such an absolute standard of absolute equality may not be worth the price of the lost efficiency.

Unknown speaker: Generic drug pricing in Canada is the highest in the world. What percentage of our drug costs was attributable to generics?

Alexandra Bibbee: I read somewhere that Canada is one of the highest-volume users of generics, so they could profit very significantly from lower prices. Something like 50 percent is in generics.

Unknown speaker: So a lot of that increase in costs is driven by high generic prices.

Have you looked at this since there have been some major changes in generic pricing? Ontario led it, and I think the other provinces have taken a run at the price of generic drugs.

Alexandra Bibbee: Ontario announced it in the 2010 budget as we were finalizing the survey. So no, we haven't, but we'll be interested. It is probably early to see an effect.

Don Newman: It is not entirely clear what the impact of that has been, but the resistance has been huge, and not so much by the drug companies. In Ontario, the generic drug companies pay the pharmacies an allowance, which is really kind of like payola, to sell their drugs. And then the pharmacists add that cost to the cost of the drug; and then the cost is covered, particularly for people over 65, by the provincial health system. The government is trying to make these payments illegal, but the big drug chains, like Shoppers Drug Mart, are threatening to close their pharmacies at seven in the evening instead of keeping them open until midnight like the rest of the store. It is a big wealthy vested interest that can make its weight felt, and how that's going to work is not entirely clear.

Innovation and Sustainability in Health Care

Tim Caulfield, Canada Research Chair, Health Law and Policy

It is a real pleasure to be here, and I very much enjoyed the first presentations. I took the title of this forum to heart and am going to talk about innovation and its role in our healthcare system. And knowing who was going to be here, I decided I was going to play the role of the skeptic.

My simple message is to be skeptical about the potential impact of innovation on the healthcare system, to be evidence-based, and to be realistic. Before I go on, I do want to say that, like Lorne, I am a big believer in innovation. So despite everything you are about to hear me say, I want you to remember that. I am a big believer in innovation, and I am also a big believer in science. In fact, I believe in science for science's sake. I think that it is a reasonable thing for a wealthy liberal democracy to fund. So with that optimistic caveat out there, let me move forward.

I am going to critique the role of what I think are probably two of the sexiest areas of innovation right now — areas that my research group has been very, very involved in over the last 10 or 15 years — genetics and stem cell research. Both of these, as everyone in the room knows, have constantly been held out as revolutionary technologies that are going to change everything from clinical care to public health to preventative treatments. I am a believer in these two kinds of technologies, but I am skeptical about how much impact that they are going to have, at least in the near future. And I also think that they are being oversold. I told you I was going to be a little bit skeptical, and let me tell you exactly why.

Genetics is a good example, and a topic in which I have been embedded for a very long time. I gave a presentation recently at the Canadian Academy of Health Sciences where I talked about this, and it stirred a bit of controversial surprise. I didn't mean to stir controversy, but I did, I think it is because people see a positive message associated with genetics (and I've certainly followed this in pop culture). Historically, the genetic revolution was first sold as a way of getting gene therapies out there. There was going to be gene therapy for everything, but that didn't pan out. In fact, it crashed rather dramatically in the late 1990s.

Then the big push was going to be high penetrance genes, such as the breast cancer gene. They were going to give us powerful predictive information that we were going to be able to act on. As a lot of people in the room know, particularly those with a medical background, that has not panned out either. There are very few high penetrance genes for common diseases, almost none.

The most recent wave of promise of how the genetic revolution is going to change things is the use of genetic information as a preventative strategy. I would put pharmacogenetics aside for a bit because I do think that is an exciting area. But if you look at how genetics is portrayed in the popular press and by many of the individuals seeking funding in this area, it is being put forward in the following way: Get your genes tested. Find out what your genetic predispositions are, and as soon as you know what your risks are, you can modify your behaviour accordingly. You have heard this already, right? And, in fact, I have done this. I went to 23andMe, which is one of the big companies in the United States, and got my genes tested. I got 600,000 genetic markers tested to find out what my predispositions were. And what did I find out? Absolutely nothing whatsoever that is of health value. I found out a whole bunch of

very interesting things. I found out that I'm 100 percent Irish. That's the way I like it. I don't have a gene from anywhere else on planet Earth other than from Ireland, and that's why I'm slow and like beer. But other than that, I found out nothing useful. I found out that I'm a little bit taller than average, that I have blue eyes and kind of curly hair, which confirmed the other diagnostic tool that I use often, the mirror.

Now, why is this information not very powerful? Because the information — the geneticists in the room probably know this and can explain better than I — the risk information is so shallow. I am at increased risk for four things, and will use celiac disease as the one example. The background risk of celiac disease is 0.1 percent. My risk is four times that, so I am at 0.4 percent. Is that meaningful in any way? No. Same with heart disease: you go from a 1 percent to, say, a 1.5 percent chance of getting heart disease. That isn't going to motivate behavior change, and, in fact, research has shown that it does not motivate behavior change. A Cochrane Collaboration paper was just published by Theresa Marteau, who determined that genetic risk information does not change behavior. So that field is being hyped.

We are seeing the same thing happen in stem cell research. Now, I'm extremely excited about the field of stem cell research. I do think we are going to see major, major breakthroughs, but this is, again, a field in which near-future breakthroughs have been promised. But we're not talking about tomorrow. We're not talking about next year. We're not talking about five years from now. We're probably talking about 50 years, which is still a blink of the eye in terms of scientific development, but this is not something that is going to revolutionize medicine tomorrow. There are many scientific hurdles to get over.

Why are these things problematic? First of all, over-hyping an area, overselling an area, has an impact on public trust, and the public will stop listening. Again, there is research to back this up. It can also lead to premature implementation of technologies. We saw that with gene therapy, when an individual who went to clinical trials too early, Jesse Gelsinger, died. That happened 12 years ago, and the field of gene therapy is still recovering from that premature implementation.

This kind of push may also distract us into ignoring the other drivers of a particular chronic disease. As everyone in this room knows, exercise and diet are far more powerful engines of health than getting your genes tested for chronic disease. A recent study in the United States showed that 5.7 percent of the population gets enough exercise — 5.7 percent! And we're worried about testing our genes? We know we should work out, and we are not working out.

Another reason it is problematic is that unless an innovation is implemented thoughtfully and appropriately, it can be a cost driver. Genetic testing seems to be heading in that direction. Studies from the United States show that people view their results as health information. They take their genetic profiles from 23andMe to their family physician. Do the physician know what to do with it? No, no idea. So you have a cost there. The family physician ends up ordering other tests, right? And on and on the costs accumulate, with no health benefit.

This kind of hype is, in part, a systemic problem. You have scientific enthusiasm. Completely understandable. And you have competition for research funds, so you have to make your area sound sexy. You have to make it sound as if it's going to have near-future benefits. I have experienced this writing research grants. The media does both a good job and a bad job. They simplify stories, and they present these innovations in a manner that hypes the field. And, lastly, I think the pressure to commercialize also drives the hype. There is increasing pressure for your technology to have economic benefit and commercial value, and some studies suggest this is leading to premature implementation and hyping. Now, I told you I was trying to be provocative. I think there are tremendous benefits with the commercialization push. So I am going to end there. That is my simple and quick plea for a realistic, evidence-based approach and for a little bit of healthy skepticism toward the use of innovation in health systems. Thanks very much.

Marvin Fritzler, Chair, Alberta Research and Innovation Authority

I didn't expect that I would be sitting next to Tim. How many people in this room have had genetic testing done? So what would be the probability that two people who have had 23andMe testing are sitting beside each other? How bizarre is that? But unlike Tim, I actually found it useful. We traced our family history back to 1620, and much to my horror, I had assumed I was 100 percent German but found out that I am partly Irish. I won't go into that, except insofar as it introduces one of the three points I want to make. I think that a huge driver of healthcare innovation is an off-stream of what Tim referred to, and that is personalized medicine. Whether that is going to have a negative or positive impact on healthcare costs is in huge debate now, and it is in debate because not many people have experience with it outside of a few examples of treatment of breast cancer, warfarin administration, and other examples that are emerging. But it is certainly something that requires thought.

I have leaned a little bit on the thinking of Denis Cortese, the relatively new CEO of the Mayo Clinic, who believes that at the end of the day the value that we will get for our investment in personalized medicine is going to be a net positive. I think personalized medicine is on the radar screen. It is in practice in many facets of medicine already today, but its potential impact is, I think, interesting to consider and something that foresighting ought to have a hard look at.

I have two other points to make. There are three tenets of medicine. The first is that the first-line approach is prevention of disease. We heard a bit about that from the OECD and a little bit in what Don had to say, and it happens to get a lot of press. Behaviour modification and other preventative strategies are one of the key tenets of medicine.

The third tenet of medicine (skipping the second) is to provide appropriate treatment and therapy. In medicine, there is a tendency to jump from number one, prevention, to number three, treatment, forgetting about the second tenet of medicine. I heard nothing about that second tenet in any of the presentations today, and that is an early and accurate diagnosis. That is something we do, quite frankly, very poorly, and it is a component of the healthcare cost today. If we can push the boundary back to earlier and accurate diagnosis, meaning seeing patients before they have wiped out half of their myocardium in a myocardial infarct or before they develop end-stage renal failure, then all the costs that attend to that go down. There is a lot of room for improving on cost containment in medicine, and I think we have to pay much more attention to the second tenet of medicine, to make an early and accurate diagnosis.

And we have the tools to do that. They are emerging very, very quickly. We know already some of the biomarkers that identify disease before disease onset. I agree with Tim that genetics as predictors of disease tend to be rather weak, unlike some of the other biomarkers and proteomics, ribonomics, metabolomics and other "omics" that are with us. I think that's going to have an impact if we pay attention to the second tenet of medicine.

Point number three: I think Don Mazankowski said it first in what is widely known as the Mazankowski Report — and this was what? 15 years ago — and that is isn't it about time we started looking at health care as a net revenue generator as opposed to a cost sink? The view of Mazankowski, and then of Henry Friesen, who followed him on a national scale, was why are we not investing in innovation in health care at a suitable level so that instead of it being a cost sink it is a revenue generator? Whether at the preventative level, the diagnostic level, or the therapeutic level, innovation will be a generator of revenue.

Dr. Bibbee, in your OECD presentation, I did not see much about the return on investment and how we are doing internationally, nationally, or even provincially on that. For the most part, it is hard to capture, but return on investment in health has had a hard look by Cy Frank, who headed a committee of the Canadian Academy of Health Sciences. For those of you who have not seen it, his report is available on the CAHS website. It is a very granular report, I would say: there are so many measures of return on investment in health care and innovation that it reminded me of going out to my child's sandbox and counting the grains of sand. It is very difficult. But we have to come down to those three or four or, at most, five measures that are going to tell us how much return on innovation investment we are going to get. Dr. Tyrrell, for one, has long championed the notion that a minimum of one percent of healthcare spending ought to be invested in research and development and innovation. We are not there yet. If you look at it in relation to GDP, we would like to target three percent of our GDP to R&D, as Finland does. We are not even close to that yet in Alberta, let alone in Canada.

Innovation as a driver of return on the investment is, I think, a part of the equation that requires careful consideration and discussion. After 15 years of talking about this, isn't it time to do something about it?

Alison Tonge, Executive Vice-President of Alberta Health Services

Alberta Health Services (AHS) has a strategic aim to become the best-performing healthcare system in Canada, but in order to do that is we need a highly productive and innovative healthcare system. I am going to talk about what I call productive innovation, which is innovation focussed on quality and productivity, and about driving those dual objectives.

This is a slide that Stephen Duckett put together some while ago now *[see slide 1, "Compared to other provinces, Alberta…"]*. The figures probably need updating, but the message is quite telling: that in Alberta we spend more on health care than do other provinces and get less in return for that investment. So we have a huge case for innovation, and we have a mandate over the next five years to drive that innovation.

We need to figure out how we are going to drive that innovation. What is our overall strategy? And how do we create a creative tension for innovation? Many countries are cutting back on public services, and thus creating that innovation tension through reduced spending. We are fortunate in that we have secured funding, but it is a double-edged sword. What we need to create as a health system is an innovative culture that drives innovation, and we need to do this on two scales. First, at the macro scale, we need a whole-system approach to innovation. Secondly, we need to remove some of the barriers to fast adoption and diffusion of evidence-based health care, which we all know is not appearing fast enough in our health system.

AHS is focussed at the moment on forming strategic goals in the areas of staying healthy, reducing inequalities, primary care, access and flow, and seniors *[see slide 2, "The Best Performing Publicly Funded Health System in Canada"]*. We are about to publish a five-year, five-point action plan with the government, which sets out what we are doing in all of those areas. Our whole focus is better care and better value. It's about transformation; it's about doing things differently; and it's about adding capacity in the right part of the system. For example, we are adding huge amounts of capacity in senior care, but we are coupling that additional capacity with the right system levers. We are bringing in activity-based funding. We are using market approaches to drive the right sort of innovative culture. We are using the right levers, whether they be quality standards or incentives, to create that innovative structure.

We are also looking to create a strong integrated primary care and community system founded on populations. Within that system, we must adopt what we know, evidence-based practice. If you ask me what are the top three priorities, prevention — the segmentation and targeting of risk groups — has got to be number one. Having excellent chronic disease management is second; and the third is using technology on a scale that we haven't to date. Again, we can adopt and diffuse that technology and gain a good return on that investment. AHS has a great opportunity, being a provincial organization, to scale up innovation; and I think that includes scaling up our adoption of evidence-based technology and evidence-based guidelines and pathways.

My last point is that we need to remove the barriers to innovation. There are four main pillars that I believe are very important: knowledge and challenge; reward and incentives; recognition and championing; and systems of support.

The first pillar, knowledge and challenge, is needed to create a stimulus for innovation. We need excellent measurement systems at the systemic level, at the organization level, and at the pathway level. And we constantly need to reflect on how well we are doing against national and international standards. Creating that drive for measurement is a good trigger for a culture of improvement. We are just starting to produce a productivity and innovation index, and this is a very early work in progress *[see slide 4, "Quality, Innovation and Productivity -Opportunity Index"]*. It asks what opportunity we could realize in our system if we were to adopt the best evidence-based practice. These sorts of indices are no use without the how-to bit, and, going back to the previous slide, we need knowledge about what difference that adoption would make. We need evidence-based models at our fingertips online.

We also need to have the right sort of rewards and incentives, which is the second pillar. We need to use the right levers. That could be activity-based funding, but we also need to reward innovators. Quite often, process improvement realizes a huge return on that investment. We need to share the rewards and savings from process improvement with those who innovate and improve processes. We also need to recognize and champion an innovation culture through both national and provincial competitions that recognize innovators who are doing things differently and transforming our culture. Finally, we need to look at systems of support within AHS, at what sort of improvement knowledge we have, and spread that on a scale that we haven't done to date. We also need to look at how we support, for example, supply-chain management, those macro system supports that drive savings and innovation.

We have to recognize that we have been given a fantastic opportunity. We have been given a chance to create a high-performing system, but we will not be able to realize that opportunity without the systems that we have just talked about today. Thank you very much.

Fred Horne, MLA, Edmonton–Rutherford, and Parliamentary Assistant, Senior and Community Supports

Thanks to the Institute of Health Economics for once again inviting me to participate in an Innovation Forum. As someone who has spent most of his professional career in the field of health policy and is now working as an elected person, it is a privilege to have the opportunity, not so much to speak, although that is a privilege, but to be part of the learning and discovery that is facilitated by these forums.

I want to spend a few minutes talking about some of the themes that were raised by our first two presenters. I will then finish with a few snippits, if you will, from some of my recent work in touring the province consulting with Albertans about an Alberta Health Act. It is an important piece of legislation that we intend to table this fall in the Legislative Assembly.

When it comes to the question of sustainability, I have done a lot of reading over the years and looked at all of the arguments about how much a jurisdiction should spend in order to sustain a system over time, and where those investments should be made. I have always found it somewhat disappointing that this discussion never begins with an examination of why we have publicly funded health care in Canada to begin with. Don did a very good job in his talk of pointing out that all of this stems from an insurance program designed in 1962 to ensure that no Canadian suffered undue financial hardship as a result of illness or injury. It seems to me that we have moved away from that considerably over the years, not only in the scope of what is provided, but also in the nature of the program itself. We have developed a very good benefit program across the country, with varying degrees of scope. It was not that long ago that there was no publicly funded drug coverage in Canada east of Québec. And as technology grows and we are able to do more for people, obviously the desire is not necessarily to do the right things — and I'll talk about what I mean by doing the right things in a moment — but to do more of what is simply possible.

In a discussion about the sustainability of our healthcare system, we also have to consider the role of policy and legislation. We have not done a good job in Canada of defining outcomes. And by outcomes, I mean outcomes in three categories. The first is outcomes with respect to the health status of the population. We talk a lot about chronic disease as a cost driver in the system, but do we really have any concrete targets at a national level, or even a provincial level, for controlling the rates of incidence of chronic diseases? A simple example, and something that we are not terribly proud of in Alberta, is that we have the highest rate of infant mortality in Canada, yet we don't seem to have a strategy for addressing that. I think we are doing a much better job of looking at healthcare outcomes, by which I mean how well people fare after an interaction with the healthcare system, whether it be for coronary bypass surgery or any number of other procedures. The third area is health system performance, which Dr. Bibbee focussed on in her presentation.

It seems to me that a serious discussion of our healthcare system is certainly in order, and not just a discussion among economists and politicians, but a discussion among the public about what they would like to see in the healthcare system of the future. I think it is the role of government to lead that discussion. We are working very closely in partnership with Alberta Health Services both to articulate policy outcomes and to design, at the operational level, strategies that are going to get us there.

In consulting with Albertans, I have discovered that the public wants to see some clear articulation of policy outcomes; some accurate performance measurement expressed in human terms (How much access do we have to

primary care? How long do people have to wait for elective surgery?); some public reporting; and, most importantly, some real evidence that government and agencies of government, such as AHS, have a culture of continuous learning from which we are taking findings and applying them to refining our processes. I would say that that continual refinement is a form of innovation that is rather lacking in the healthcare system across the country.

I want to talk briefly about the role of legislation. We began to move down the road to improvement in this area about a year ago under the leadership of Premier Stelmach. The Canada Health Act does contain principles (principles that are largely undefined), but it primarily serves as a mechanism to transfer funds from federal to provincial coffers. Beyond that, it really does not speak to a vision of a publicly funded healthcare system for the nation. I think one of the questions we need to ask is what do we need to do to update our legislative framework? In Alberta, there are many barriers within current legislation. I can give you some examples, but suffice it to say that our template, which consists of a Hospitals Act, a Nursing Homes Act, and a Health Care Insurance Act, is not focussed on meeting the assessed needs of our own people. It is focussed on money, it is focussed on meeting the needs of institutions, and it is largely focussed on meeting the needs of providers, as opposed to what Albertans have been talking about in recent months, the needs of individuals, families, and communities.

That gets to the heart of what we are looking to do in the Alberta Health Act. We believe that principles are important, and I will be the first to tell you that the public has largely given up on the question of what is the appropriate amount of money to spend in a healthcare system. In this province, you could ask ten people whether it's $12 billion or $15 billion or $20 billion, and nobody would be able to give you an accurate answer. And increasingly, I am finding that people actually don't care about the answer to that question. The question they want answered is how well are we spending the money? And they have a very sophisticated recognition of the influence of the social determinants of health on the performance of the healthcare system.

My recent report includes some of the principles that Albertans came up with. They want government ministers and departments to work together in addressing those social determinants. They want a healthcare system that recognizes that health is ultimately a partnership between individuals, families, communities, providers, and government. They want some clear parameters for decision making to be laid out for elected officials, and then they want to see evidence that those things were taken into consideration in arriving at final decisions. We have also recommended the establishment of a health charter for Albertans. Charters have met with varying degrees of success over the years, but we think it is important to codify what citizens can expect from their healthcare system. The opportunity to have input and to provide feedback, almost in a customer-defined sense, is another major theme that we uncovered during the public consultation. We need to update our legislative framework in order to do that.

Ultimately, I would suggest to you is that all of the things we are talking about today have a role in the sustainability in our system. But we have to begin with the question of what it is we are trying to achieve as Canadians in the 21st century with respect to our publicly funded healthcare system. Is it simply a question of output and meeting expectations around entitlement, or is it truly a contribution to better health status, productivity in our economy, and ultimately a more democratic society? Thank you very much.

Don Newman: Thank you, Fred. I want to start with a thought and then bring in the panel, and maybe Marvin and Alison can pick up on this.

It seems that when we are talking about innovation, we are talking about sustainability, and that is basically how to pay for the healthcare system. But when we're talking about innovation, we are really talking about two things. One is innovation in treatments, innovation in techniques, innovation in the science-based part of health care. But, Alison, you are talking about innovation in the healthcare delivery system; and Marvin, you seem to make a point about

whether personal medicine, much of which is science-based, has a net benefit or a net cost. Are we agreed that we are talking about two different things that they could be contradictory?

Marvin Fritzler: I don't think so. My definition of innovation is new ways of doing valued things, which include service, prevention, you name it, down the whole spectrum of medicine. I don't think of it as two separate things at all. It is just new ways of doing things. But implementation is the key: we have a lot of innovation that is never implemented.

Don Newman: Okay. But, Alison, it seems to me that the demographics of health care mean that we have to find new ways to make it sustainable, and that has to be innovative. Was that not true?

Alison Tonge: Yes. I am interested first in adopting what we already know, and I think that is innovative. We often talk about generating innovation. In fact, the piece that we don't do well is the adoption and diffusion of innovation. In the life cycle of innovation, from research to development and right through to adoption, it is in that adoption end that health care has done extremely poorly. That is what I'm talking about when I talk about an innovative culture and innovative organization. That is productive innovation, which can be done in a quite a short time frame and does not conflict with the generation of innovation for future needs. I think the two can align over the medium term.

Marvin Fritzler: On my way from the airport to this meeting, I got a call from someone in British Columbia, asking if I would come to Vancouver and talk about diagnostics.

There is an innovative technology, a new high-throughput screening test that makes it cheaper to diagnose rheumatic diseases. It has been validated. It has been adopted in other places, but in British Columbia we can't get it in because the fee schedule does not allow us to do it. It says you must do this diagnostic test *this* way. And so here we are, in 2010, looking at technology that is 50 years old because the fee schedule says that's how you do it. So we are cramped a little bit through legislation and incentives.

Don Newman: New technologies and techniques may save money, or may, in fact, be cost drivers, but they are not the same thing as, say, gene therapy or those kinds of things that are at the moment cost drivers, and, as Tim, pointed out, could take 50 years to pay off. If you are thinking about how to make the healthcare system sustainable, are you thinking about delivering new techniques or changing the fee schedule or changing the way doctors are paid? Or are you thinking about the long-term rather than the short term, about investing 50 years down the road for when you have retired and maybe need more health care?

Tim Caufield: I think it's not a choice between the two. You need to invest in both, and the point I was trying to make is that you have to do it realistically.

Another thing that was raised, which I don't think has gotten enough push, is the gap between the lab and implementation. We hear this all the time from the scientific community. This is expensive clinical research. Even if they have a genetic test that is highly predictive, we don't know the clinical value of that highly predictive test. The question then becomes, Who is going to invest in that research? Someone has to invest in it if we are going to get that benefit 50 years down the road. I think we need to think of innovative ways to fund this kind of exciting research.

Don Newman: But, Fred, that doesn't necessarily come out of the health budget. When the Alberta government (or any provincial government) is thinking about to sustain the healthcare system economically, you are really thinking about how to provide the services that we know about now, not the services in the future. If you find a new diagnostic technique, you integrate it, but in fact you're thinking about how to pay for more or less what we have now rather than the long-term research. That's a whole different kind of program.

Fred Horne: I was not arguing for one at the exclusion of the other. One of the most important issues we have to deal with in the short term is, to put it simply, doing what we know works. We have been fortunate in Alberta to be able to fund a terrific amount of research. One recommendation that has been made is to establish an independent entity that would be a clearinghouse to support evidence-based decision making in health care. I think that is important because, first of all, it is going to be more efficient. But if we want to discuss some of the strategies that the OECD has recommended for introducing other funding streams, we must prove to our own public that we are operating the system that we currently have at maximum efficiency. And I don't think anyone in Canada has yet tackled it in a way that is focussed enough to do that.

With respect to the long term, it is very important in government that the Minister of Health work very closely with the minister of whatever department is responsible for technology. We need to look at health as an economic driver, but also at the return on investment, not just in terms of commercialization of new technology, but in terms of better health status for the population. I think you have to look at both the short term and the long term, but we have an immediate urgency on the applied side that needs to be addressed.

Don Newman: Your research is basically on the applied side, and the negotiations we are going to have over the next couple of years between the federal government and the provinces are going to be about funding the applied side. There are already Chairs of Excellence; and wealthy provinces like Alberta, and to a lesser degree Ontario, put a lot of money into research, but they don't take it out of their healthcare budget.

Alexandra Bibbee: I just want to add that in innovation generically, whether health or otherwise, there are two well-known types of innovation processes. One is process innovation, which would include getting more out of what you have already, organizing your inputs more efficiently. You could call it X-efficiency. That is perhaps a high priority right now with the budget situation. Product innovation, the second type, is breakthrough stuff that costs a lot up front, but gives you health gains in the end. You are trying to maximize the health of the population in the most efficient manner that you can. That has to be the goal, not just minimizing costs, which would be served by X-efficiency.

Don Newman: Marvin, I want to go back to a couple things you said. One is that we are not very good at diagnostics, but isn't it true that part of the reason people are living longer is that we are better at diagnostics? You were just explaining a process now in British Columbia that is probably going to extend lives; and it appears, just observing life, that people do live longer with cancer, and they do it partly because treatments are better and partly because they can go to the doctor without paying a user fee. They go earlier, they are diagnosed earlier, the treatments are more effective, and the five-year survival rate is higher. So, in fact, we are not doing as bad at diagnoses as you led me to believe. Am I right or wrong?

Marvin Fritzler: Over the long term, you are right. The problem is that the uptake of new evidence-based diagnostics takes as long as the uptake of a new therapeutic, and in many cases longer. The case in point was the BC one. There are many, many other examples. Perhaps the quickest to application is in the area of imaging where the lag phase is, but many of the other diagnostics that are out there still have yet to be adopted in clinical practice. That is where I think the boundary can move back most significantly. But funding for diagnostic research is at the very low end of the spectrum. Peer-reviewed funding would rather fund the fancy silver bullet than the early diagnostic.

Don Newman: Is that your view too, Tim?

Tim Caufield: I think this is a very interesting conversation because it touches on what I said before. Diagnostics is incredibly complicated research, much more complicated than people give it credit for. Look at the controversy

around the mammogram recommendations that came out of the United States not long ago. It was a very good example of the need for more research in this area, as well as in the area of PSA testing. People thought this was going to be phenomenally beneficial. We were going to diagnose people earlier. In fact, it may have been a cost driver, and it may have actually done more harm than good. I think it points out that we need to do that kind of research. We also have to understand that diagnosing early is not necessarily a slam dunk. It is a complicated question that requires long-term research and long-term investment. Do you think that's fair to say?

Marvin Fritzler: I agree. Diagnostics is not one test. Our technology now in multiplexing and putting together a profile is so much more powerful than taking only, for example, a PSA. I mean, the digit in the back happens to be as sensitive as PSA. Our ability to use multiplexing and to put metabolomics, proteomics, and genomics together into a profile is huge and it is emerging very quickly. But the uptake is going to be, unfortunately, very, very slow.

Don Newman: Fred, I was struck by your saying that people in Alberta don't really care how much it costs for a healthcare system that they think is satisfactory. Is that really true if healthcare spending is now at over 40 percent of the provincial budget and will soon to be up to 50 percent unless there are innovative ways of delivering the health care to keep the costs down? People would rather have health care than just about anything else?

Fred Horne: I think there is no question that health care is regarded — probably along with education — as one of the two most important public goods. In Alberta over the last year, I have detected a shift in people's interest, from discussion about cost to discussion about value. In reality, what is happening with provincial budgets is that health care is beginning to create an opportunity cost for other important areas of public policy, like education and infrastructure. Perhaps at that point — if you consider Ontario, for example — people will shift back to the cost question.

But I think there is a lot of questioning among the public about how well we are spending the money that we have allocated for health care and what the results are. People increasingly realize that for everything we fund in health care there is something else that goes unfunded. We have to recognize that, particularly as politicians. It is incumbent upon us to work with organizations like AHS to get those performance indicators in place and, most importantly, to show citizens that we are learning from what we are measuring. We are applying those results.

Don Newman: Alison, it is important to work with your organization, but when you are working with the deliverers of the service — the institutions — are they resistant, or do they realize that they have to be innovative in delivery to maintain public support for what they're doing?

Alison Tonge: I first want to pick up on the issue of measurement, which I think is a very important one for us. How do we value the system? How do we measure value? It is very important that we get that right, because if we have the wrong sorts of measures published we may skew the system. So we need to make sure we have a balanced set of measures of value, which are based on outcomes as well as access and sustainability. And I think we need to be held accountable for that whole balance of measures.

To address your question of whether the system is resistant to innovation and high performing, I have seen lots and lots of pockets of excellent innovation and high performance. The issue is how to get consistency and standardization across the province on the scale needed and within the time that we're looking at, so that we can live within the resources that we have and drive the performance and value-based targets that we are looking at agreeing on for the next five years.

Don Newman: I want to move to questions from the audience, but while we do that, Alexandra, health care is almost a secular religion in Canada. When you compare Canada to the other OECD countries that you monitor, are they as religious as we are in their health care, or is it just another part of their lives?

Alexandra Bibbee: I think in Europe — and most OECD countries are in Europe — having a public healthcare system that is generous and allows people to get health care without regard to their ability to pay is just simply taken for granted. I think it as a religion here because it makes you stand out in the North American context. Europeans don't care about such comparisons. You mentioned that without co-payments, people will get diagnosed early and so forth. But in other systems, they still have at least symbolic payments, nominal payments, not excessive, but something that signals the costs to society of their use of the system and maybe makes people more responsible for adopting the right habits to avoid treatment in the first place, to stay healthy. As Tim said, exercise and diet are really the keys to doing that.

Audience Question and Answer

P.J. White, President, Alberta Medical Association: I am a semi-salaried physician. I'm having a bit of a disconnect with this discussion, because I think we have a crisis in health care, and I think we need to have serious immediate innovation in how we deliver health care. We have Albertans who do not have a family physician. The system is overloaded. Fred's report highlighted three big issues: mental health, continuing care, and primary care. Within his report, he mentioned team care and delivery of team care. I think we have an opportunity here to do something different, for physicians to work in teams, and I think the climate and the time is ready.

I don't think there is any well-proven payment system. Every payment system has its faults. I come from Ireland, which has a two-tier healthcare system that's in a mess. So I think we have an opportunity to engage physicians, maybe provide incentives through the payment system, to do things differently. And I think we have an opportunity to front load the primary care system, and to talk about prevention and early access. What Albertans are really looking for is early access to their doctor.

Don Newman: Thank you. That sounds like a question first for you, Fred, and then maybe Alison.

Fred Horne: I don't think there is a lot for me to add to what Dr. White said. The direction that we are heading as a government in Alberta is toward a people-centered healthcare system in which the focus is on people and communities, including both people who are well and people who are sick. The question of primary care is central to the discussion of integration. We rightly take a lot of pride in Alberta for the distance that we have come on integration through primary care networks and other models. We need to continue that. It strikes me that if you have the opportunity to give people a home within the health system — and this is what team-based care is all about — to provide for their basic needs, to assist them with navigating the system, and to help educate them, there is a much better chance that they will become more self-sufficient, if you will, in managing their own health in the future.

Alison Tonge: My first thought is to fully support the team-based primary care model, integrated in particular with the population-management and community services that we provide. That integrated model could be incredibly powerful in driving the performance of the system, so I think I fully support the idea.

Marvin Fritzler: Dr. Bibbee, I was surprised at one slide you showed, which was counter to what I have been led to believe in Alberta, which is that, Canada-wide, we are low on ICT use in health care.

Alexandra Bibbee: This comes from the Institute of Health Economics.

Marvin Fritzler: That was a huge surprise to me. We have been bragging about being the most wired province in the country.

Alexander Bibbee: This was Canada, not Alberta.

Marvin Fritzler: Oh, I know. But even on a Canadian level, I am quite surprised. We were the first to do distance consultations in Newfoundland in the Atlantic region. What are other jurisdictions doing that we aren't? I'm a little confused.

Tom Noseworthy: We don't use the electronic health record. We don't share electronic health records for individual patients.

Marvin Fritzler: So that's the game breaker?

Tom Noseworthy: We are the best in Canada, and Canada's the worst in the world.

Don Newman: I want to thank Tom for bringing clarity to that issue.

Unknown speaker: I would like to question the assumption that our system is not sustainable. There is a fair bit of research showing that when you adjust for inflation, for population size, for aging of the population, and for our increasing wealth, the cost increase over, say, 25 or 30 years in Alberta and in Canada, will be quite modest. Furthermore, in support of Mr. Horne's point, there are a couple of studies indicating that Canadians would actually agree to pay higher taxes if better services were provided.

Don Newman: I think, Alexandra, that might be for you.

Alexandra Bibbee: I have seen one study on projections of the future burden of health care in Alberta, taking into account all aging effects, and it did not seem that trivial. I don't have it at my fingertips, but it seemed that real per-capita growth in spending was above the growth of the GDP, which after so many years is not sustainable.

The OECD has done this exercise for all OECD countries. After you account for known factors such as income, the residual has been a strong driver, and we believe it is technology that increases demands in health care. If that residual stayed the same, if technology kept costing as much and expanding demands and needs as much as it does at present, you would have a very unsustainable situation. Healthcare spending would double easily in the next 20 years.

Don Newman: Let Fred pick up on that. Obviously, the government is not taking the view of the questioner that you can either factor in or factor out population growth and inflation of the aging population. If you were to factor out the ten coldest days in Alberta every year, you would have a much higher average temperature, but I'm not sure what it would prove. You factor out different things, you get different results. But, in fact, there is aging. There is inflation. And the population is growing, and they are all going to want health care.

Fred Horne: In our public consultations, there were a number of people who suggested that we simply raise taxes, that they are willing to pay more. But I think the ship has sailed on the idea that spending more money on the system necessarily generates better results. We need to be honest. We have a structural problem in this country: as revenue goes up, we continue to spend more. The question for the average citizen today is one of value, and not only with respect to doing things that are new. It is not just the adoption of new technology. It is having the evidence and the political will to stop doing things that are no longer working, that have become obsolete. I think that until that value proposition is made for public health care in Canada, any discussion about simply raising revenues is an academic discussion and is not going to go far with the average person.

Arya Sharma, Chair of Obesity Research, University of Alberta: We do not just have a population that is growing older. We also have a population that is growing bigger in terms of weight gain. Much of the discussion on this has focussed on obesity prevention, when, in fact, we have an OECD report from last year showing that trying to prevent obesity will pay back, if you're lucky, maybe 40 years from now. This leaves us today with about two million Albertans who already have obesity and about 100,000 Albertans who have severe obesity.

Coming back to the question about evidence-based care and return on investment, when we look at the treatment options for people with severe obesity, we know that the evidence-based treatment for these patients in most cases is going to be surgery. There is not a shred of evidence that these people can be treated with diet and exercise. We have recent economic analyses, including one from the IHE, that shows that a quality-adjusted life year (QALY) for obesity surgery is about $2,500. Compare that to the cost of statin treatment in primary prevention, for example, where you're talking $70,000 per QALY.

The question here is — and this is for Alison — where do you see the hope of implementing this evidence-based treatment that will provide value on a scale that is big enough to make an impact? And a question, perhaps for Mr. Horne: We are continuing to spend a lot of money on things that are directly related to the obesity epidemic, like diabetes, hips and joints, cancer, heart disease, et cetera. When do we start spending money on obesity?

Alison Tonge: I am not sure I can answer the very specific question you posed to me, but I think that obesity pathways need to be absolutely clear. We need to be clear on how we assess patients and provide all the different options, from prevention to more active interventions, right through to surgery. When it gets down to surgery, we obviously have to ensure that it is affordable to the system. We need to look at the figures on the cohort of patients that would potentially benefit from surgery in order to make the choice to spend the money on that particular new intervention and opportunity versus another. That's why we need evidence-based decision making. We have to be quite transparent around those investment opportunities.

Fred Horne: I would concur. At the political level that is going to result in a high-quality decision.

Don Newman: Let me jump to Tim very quickly. If you are waiting for evidence-based knowledge and it is 40 years out, how do you put those two things together, as the questioner said? As you said about gene therapy, if there is a long timeframe on it, it is hard to get evidence in the short term with which to make these kinds of decisions.

Tim Caufield: He makes a very important point, and this is something we are struggling with right now in some of our research. You have to look at this stripped of all ideological perspective. You have to look at it clear-eyed, and the evidence about prevention, about getting people to lose weight, is grim. No one knows that better than Arya. It is grim. I am not saying that you give up on these individuals, because these are individuals who need to lose weight. But you have to look at that realistically, and you also have to look at the high-tech stuff realistically and accept the fact that the answers may lie someplace else.

Don Newman: And the last question.

Raj Sherman: I am just a simple, humble emergency doctor who has done a poll of about 100,000 patients over 18 years. I would like to tell you what the patient experience is.

First, many Canadians, 15 to 20 percent, don't have a family doctor. If you do, you cannot get in to see your doctor for two months. Once you get in, you get five minutes to discuss one problem.

We have to understand the fundamental reasons that we came to this situation. Health care spending was actually okay until 1993, until my good friend Dr. Daniel Bayersbrother's [phonetic transcription] report came out in British

Columbia. We reduced our ability to deliver health care at a time when the demand for health care was going to go up due to technology, due to people aging, due to the social determinants of health, inactivity, and processed food. It's a supply–demand issue. Secondly, it was the overspecialization of health care. Only 23 percent of our students want to become family doctors — maybe 30 percent across the nation. If they do that, they want to do a third year and work in emergency. If they do that, they want to work in a hospital. Nobody wants to be a primary care doctor, so patients can't get in to see a primary care doctor.

John Sproule: I'm sorry, Dr. Sherman, we have to leave in the next minute because another group is coming in.

Don Newman: The question I'm going to take from this — and thank you — is how do we get more primary care doctors? Anybody got a fast answer on that?

John Sproule: That's something perhaps we could discuss over supper. Thanks very much.

Appendix I – Program

INSTITUTE OF HEALTH ECONOMICS
ALBERTA CANADA

INNOVATION AND SUSTAINABILITY IN HEALTH SYSTEMS

October 14, 2010
Edmonton, Alberta, Canada
Art Gallery of Alberta

Moderator Don Newman
National Broadcaster and Journalist, Chair Canada 2020

2:30 – 5:30 Keynote Presentations and Panel Discussion

Keynote Speakers

Alexandra Bibbee
Senior Health Economist, Organization of Economic Cooperation and Development (OECD)

Don Newman
National Broadcaster and Journalist, Chair Canada 2020

Panellists

Tim Caulfield
Canada Research Chair, Health Law and Policy

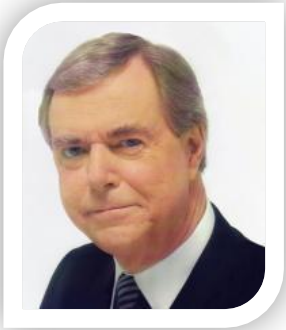
Marvin Fritzler
Chair, Alberta Research and Innovation Authority

Alison Tonge
Executive Vice-President of Alberta Health Services

Fred Horne, MLA
Parliamentary Assistant, Senior and Community Supports

5:30 – 6:30 Reception and Guided Tour

6:30 – 9:00 Dinner



Mr. Don Newman

Don Newman is the Chairman of Canada 2020, a non-partisan forum to further the political, social and economic well being of Canadians.He is also a Senior Columnist with iPOLITICS.ca; Canada's leading online political news service, and Senior Strategic Advisor to Bluesky Strategy Group inc., a public affairs and communications firm. His career spans more than forty years as a public affairs broadcaster and journalist. As Senior Parliamentary Editor of CBC Television News, he anchored live specials and his own national weekly and daily political affairs programs. He helped launch Canada's first all- news channel, and reported with The National, and was a foreign correspondent, with CTV and CBC, reporting from Washington, New York and the United Nations. Don is a Member of the Order of Canada, and a life member of the Canadian Parliamentary Press Gallery, and has received numerous awards (including a Gemini lifetime achievement award in public affairs broadcasting, the Hyman Solomon Award for excellence in public policy journalism, the Charles Lynch Award for outstanding coverage of national affairs) and honorary degrees.

Dr. Alexandra Bibbee

Alexandra Iwanchuk Bibbee is a senior economist at the Paris-based Organisation for Economic Cooperation and Development, an inter-governmental organization comprising 30 mainly industrialised nations committed to democracy and the market economy. She has been a staff member of the Economics Department since 1990, having worked in the balance of payments, fiscal affairs and general economic assessment policy areas and on the country desks for Germany, Austria, Turkey, Italy, and Norway. She currently serves as head of desk for Canada and New Zealand. Before coming to the OECD Alexandra held positions at the International Monetary Fund and the US Treasury. She has a B.A. from Kent State University (Ohio) and a PhD from the University of Wisconsin – Madison (1988).

Tim Caulfield

Timothy A Caulfield has been Research Director of the Health Law Institute at the University of Alberta, since 1993. In 2002 he received a Canada Research Chair in Health Law and Policy. He is also a Professor in the Faculty of Law and the Faculty of Medicine & Dentistry.

His research has focussed on two general areas: biotechnology, ethics and the law; and the legal implications of health care reform in Canada. He has published well over 100 academic articles and book chapters and often writes for the popular press. In 2000, he was awarded the University of Alberta's Martha Cook Piper Research Prize, in 2002 received the Alumi Horizon Award and in 2004 received the University's Media Relations award. Professor Caulfield Chaired the Canadian Blood Services Ethics Committee; and is a Member of Genome Canada's Science Advisory Committee. He was on the Institute Advisory Board, Institute of Health Services and Policy Research, Canadian Institute of Health Research; was part of the Royal Society of Canada's Expert Panel on the Future of Food Biotechnology (2001) and was a member of the Canadian Biotechnology Advisory Committee (1998-2005).

Tim Caulfield chairs and serves on numerous other research policy and ethics committees, is an editor of the Health Law Journal and the Health Law Review, teaches Law and Medicine in the Faculty of Law, and provides health law lectures for other faculties.

Dr. Marvin Fritzler

Dr. Marvin Fritzler is Professor of Medicine at the University of Calgary where he holds the Arthritis Society Endowed Research Chair and is Director of the Advanced Diagnostics Laboratory. He served on the Scientific Advisory Board of the Centre for Environmental Health Sciences at the University of Montana and Chaired the Serology Committee of the International Union of Immunology Specialists and World Health Organization. He has served as a consultant to a number of diagnostic biotechnology companies including ImmunoConcepts (Sacramento), INOVA Inc. (San Diego), Immunex (Seattle); and Innogenetics (Belgium). He received the Distinguished Alumni Award and a number of Gold Star Letters of Excellence in Teaching from the University of Calgary. He served as the Associated Dean of Research and was Chair for the University Budget Committee for two terms. Prior to his appointment of Chair of ASRA, he was Chair of the Life Sciences Committee.

Ms. Allison Tonge

Alison Tonge is the Executive Vice President of Strategy and Performance, with responsibility for research and innovation, nursing strategies, health professionals strategies, strategic and service planning, data integration-measurement and reporting, health information management and system accountability.

Prior to joining Alberta Health Services, Ms. Tonge was employed in the United Kingdom's health care system. Her most recent post was the Executive Director of Health System Development at NHS North West responsible for innovation, transformation programmes, foundation trust development, strategic system review, consultations and market development. She also served previously as Deputy Chief Executive at Stockport Primary Care Trust, where she was responsible for finance, estates, commissioning services and performance.

Ms. Tonge is a qualified Public Accountant, holds a Masters in Business Administration (Health Economics and Management) from Keele University, a Post-graduate degree in Health Economic Research from Keele, and a Bachelor of Science (with honours) in Economics and Economic Policy from Loughborough.

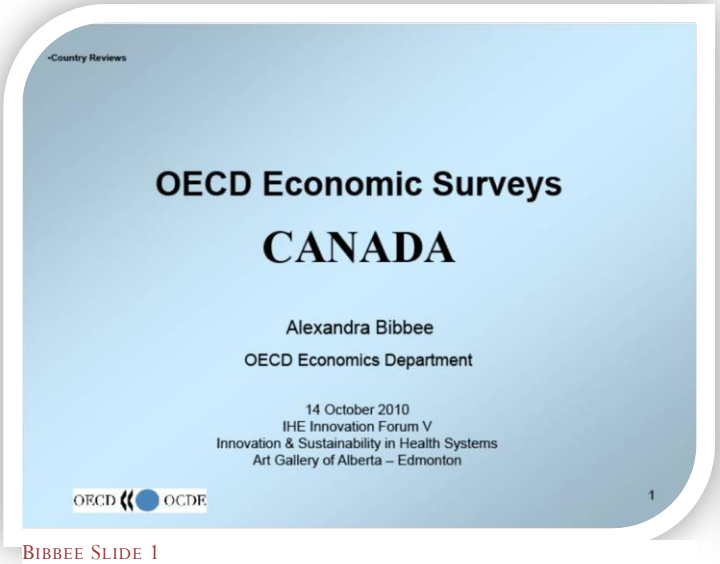
Mr. Fred Horne

Mr. Fred Horne was elected to his first term as a Member of the Legislative Assembly for Edmonton-Rutherford on March 3, 2008. In addition to his regular duties as MLA, Mr. Horne serves as chair of the Standing Committee on Health, deputy chair of the Premier's Council on the Status of Persons with Disabilities and is a member of the Agenda and Priorities Committee, Private Members Business Committee, Legislative Offices Committee and the Select Special Chief Electoral Officer Search Committee. Prior to serving with the Legislative Assembly of Alberta, Mr. Horne worked as a health policy consultant for over 25 years, serving various government bodies and regional health authorities in addition to the public, private and not-for-profit sectors.

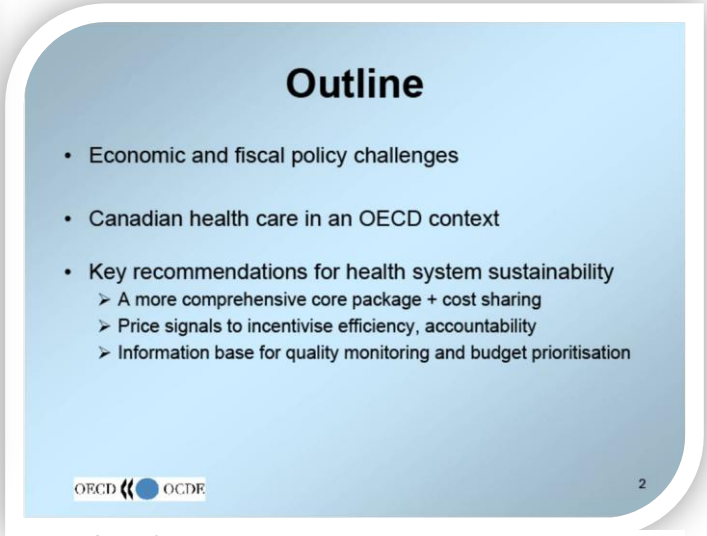
Throughout his career Mr. Horne led initiatives to improve access and quality in Canadian public health care and has worked extensively with the Conference Board of Canada, the Alberta government and the Mayo Clinic. An avid volunteer, Mr. Horne has served on numerous boards including: Alberta Mental Health Board, Athabasca University, Mediation and Restorative Justice Centre of Edmonton, Canadian Student Debating Federation . Additionally, Mr. Horne is a former debater and coached Team Canada at the World Schools Debating Championships. For his continued contributions to the development of debate and speech programs Mr. Horne received the Queen Elizabeth II Golden Jubilee Medal in 2002. Mr. Horne and his wife, Jennifer, have lived in Edmonton since 1992.

Appendix II –Presentation Slides

Alexandra Bibbee



BIBBEE SLIDE 1



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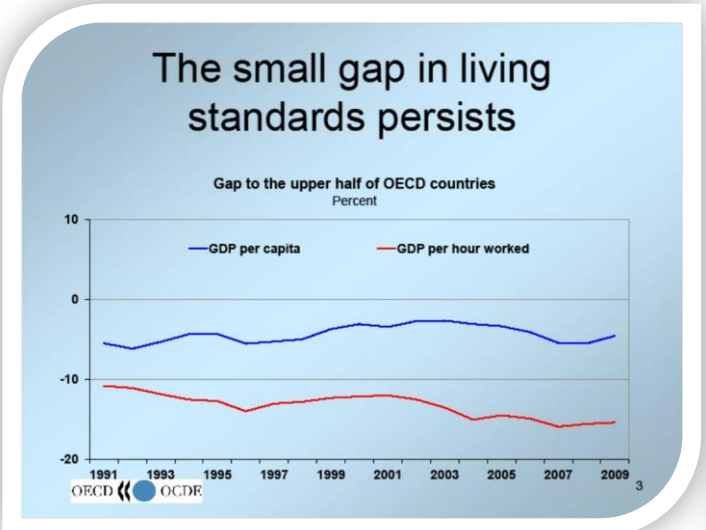

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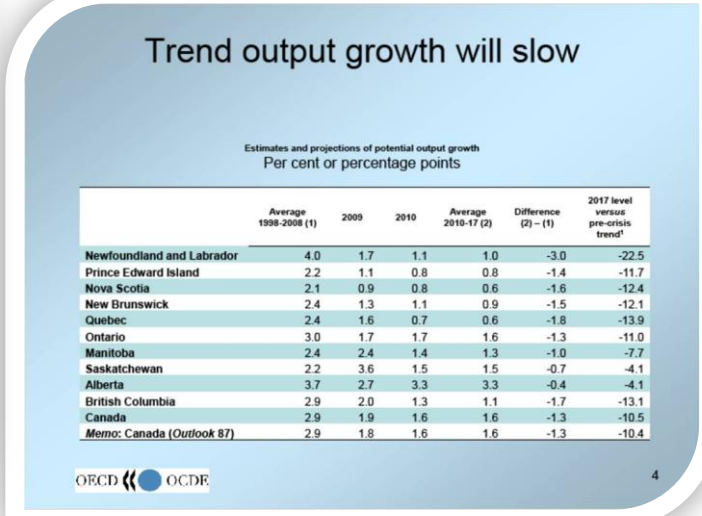

	Average 1998-2008 (1)	2009	2010	Average 2010-17 (2)	Difference (2) – (1)	2017 level versus pre-crisis trend[1]
Newfoundland and Labrador	4.0	1.7	1.1	1.0	-3.0	-22.5
Prince Edward Island	2.2	1.1	0.8	0.8	-1.4	-11.7
Nova Scotia	2.1	0.9	0.8	0.6	-1.6	-12.4
New Brunswick	2.4	1.3	1.1	0.9	-1.5	-12.1
Quebec	2.4	1.6	0.7	0.6	-1.8	-13.9
Ontario	3.0	1.7	1.7	1.6	-1.3	-11.0
Manitoba	2.4	2.4	1.4	1.3	-1.0	-7.7
Saskatchewan	2.2	3.6	1.5	1.5	-0.7	-4.1
Alberta	3.7	2.7	3.3	3.3	-0.4	-4.1
British Columbia	2.9	2.0	1.3	1.1	-1.7	-13.1
Canada	2.9	1.9	1.6	1.6	-1.3	-10.5
Memo: Canada (*Outlook* 87)	2.9	1.8	1.6	1.6	-1.3	-10.4

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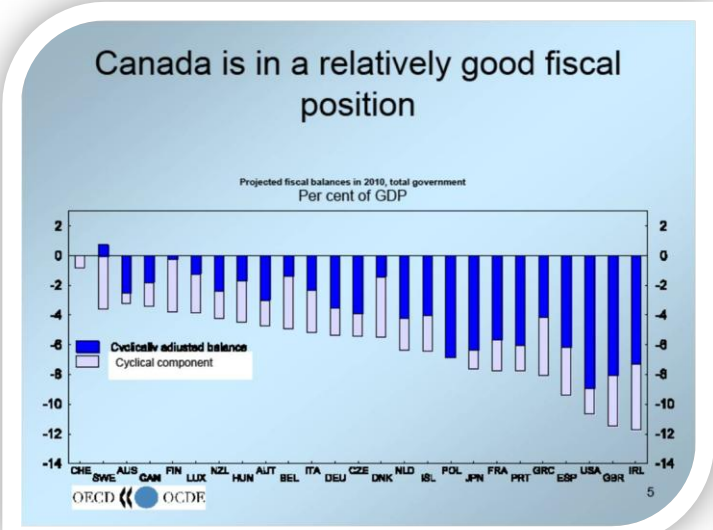

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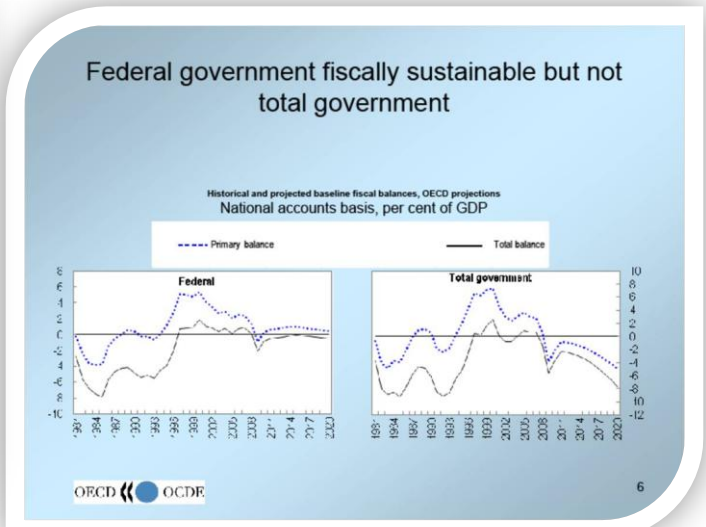

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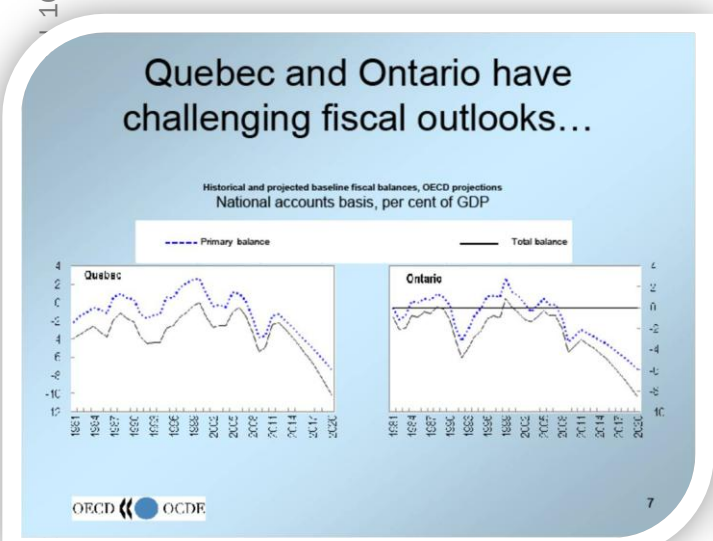
10/14/2010



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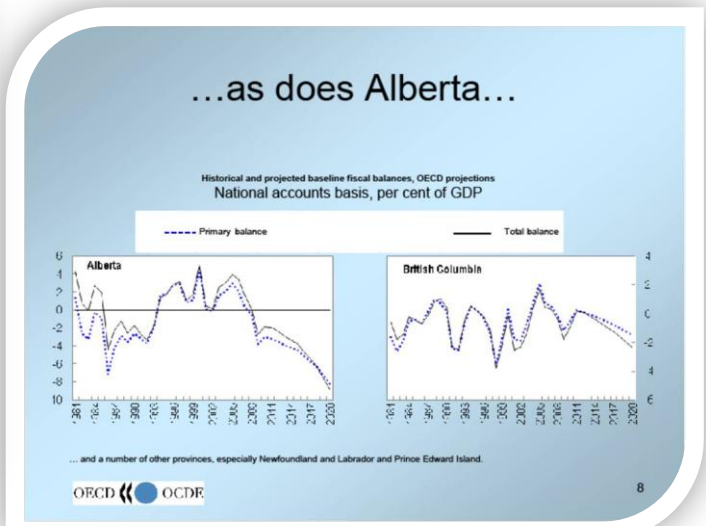


Bibbee Slide 8

Health care: a growing provincial budgetary burden

	Health expenditure 2008		Average annual change in public health expenditure per capita	Average annual change in own source revenues	Share of public health spending in total programme expenditures	
	Per capita (CAD)	% of GDP				
			1998/2008	1998/2008	1997	2008
Newfoundland and Labrador	5 532	9.0	7.6	10.5	33	39
Prince Edward Island	5 224	15.8	7.5	4.3	33	42
Nova Scotia	5 504	15.1	7.2	6.5	42	48
New Brunswick	5 329	14.5	7.3	4.2	34	42
Quebec	4 654	11.9	5.8	3.4	39	45
Ontario	5 314	11.7	6.3	3.0	49	52
Manitoba	5 560	13.2	6.9	8.9	45	43
Saskatchewan	5 495	8.8	7.2	7.9	45	45
Alberta	5 795	7.2	8.3	6.0	37	42
British Columbia	5 024	11.1	5.4	3.5	38	44
Yukon	7 586	13.2	7.5	5.4	19	22
Northwest Territories	9 564	8.2	6.1	10.8	26	27
Nunavut	11 561	22.8	9.0	7.6	24	29

OECD OCDE 9

Bibbee Slide 9

Some peculiarities of the Canadian health care system

Medicare
- Drugs, dentistry and community therapies not covered
- No patient co-payments/deductibles (or PHI) allowed

In general
- Lack of cost-saving incentives (DRGs, etc.)
- Gaps in information on performance
- Spends most on prevention and public health

Political economy
- Spending almost entirely decentralised to provinces and below (funding only partially)
- Doctors fiercely independent
- CHA has almost iconic status

OECD OCDE 10

Bibbee Slide 10

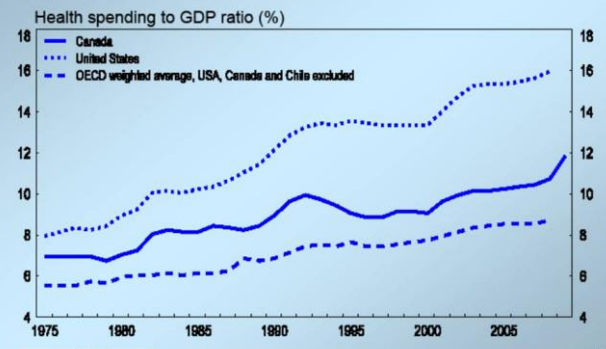
Some consequences

- Strong, UK -style equity in Medicare (narrow but deep coverage) *good*
- US-style inequity in non-Medicare (high out-of-pocket and private insurance costs) *bad*
- No possibility of physician "dual practice" (unlike UK) *good or bad?*
- Medicare services effectively firewalled from private competition (unusual), fragmented system *bad*
- Strong macro budget control for Medicare… *good*
- …but weak or no micro price signals (queues) *bad*
- Does the CHA (as interpreted) inhibit innovation?

OECD OCDE 11

Bibbee Slide 11

Health spending trends not sustainable



OECD OCDE 12

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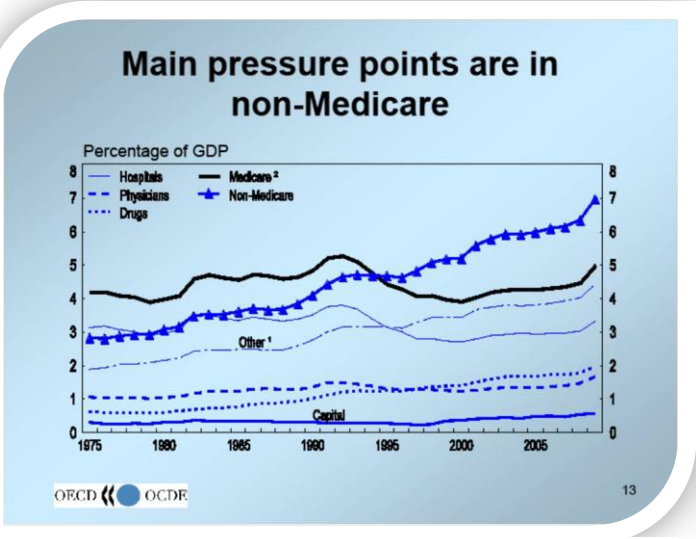

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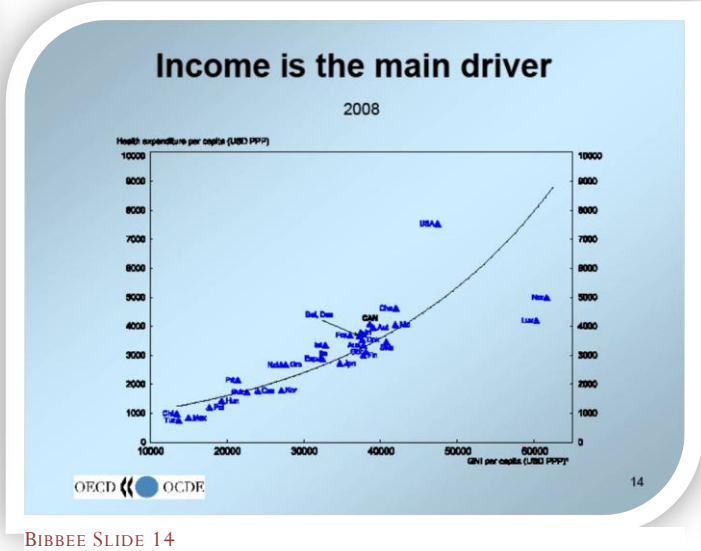

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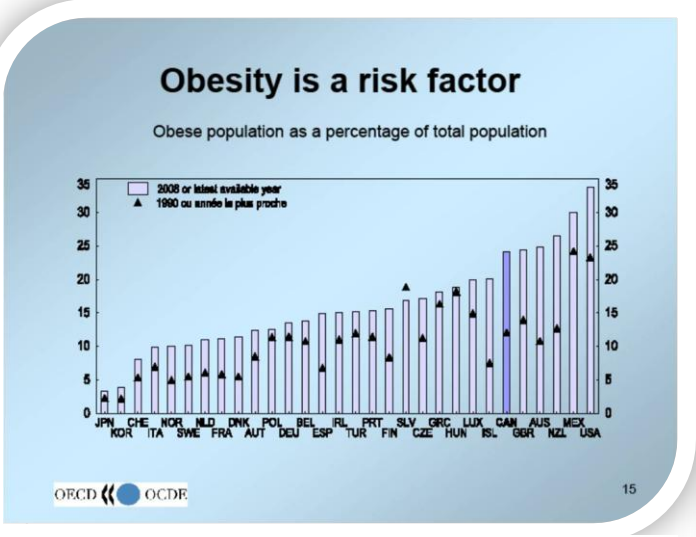

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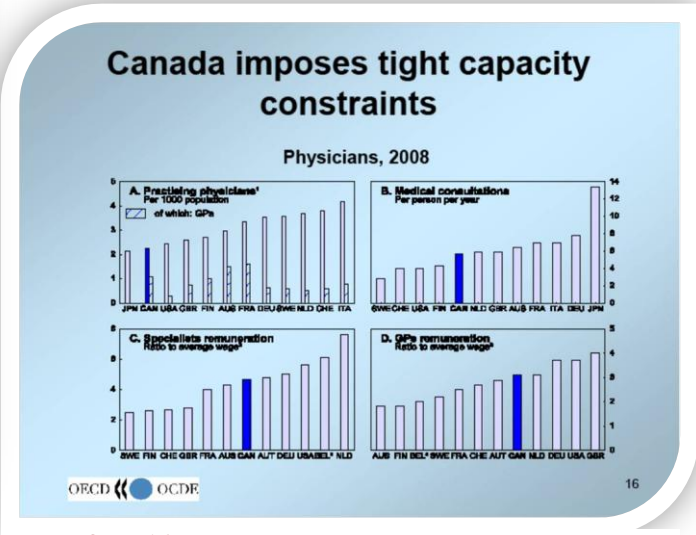
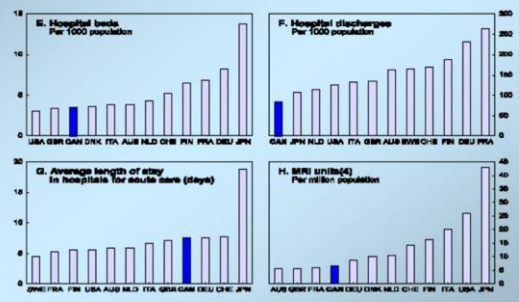


Bibbee Slide 16

Canada imposes tight capacity constraints (cont.)

Hospitals, 2008



OECD OCDE 17

BIBBEE SLIDE 17

Canada's generic drug prices highest

Average foreign-to-Canadian drug price ratio, 2005

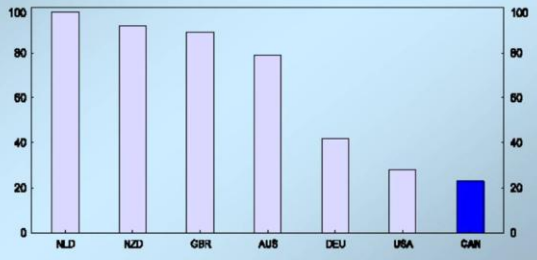
	Non-patented branded	Generic	Patented
Canada	1.00	1.00	1.00
Australia	0.81	0.85	0.78
Finland	0.75	0.49	0.88
France	0.76	0.71	0.85
Germany	0.91	0.84	0.96
Italy	0.73	0.76	0.75
Netherlands	0.72	0.80	0.85
New Zealand	0.64	0.23	0.79
Spain	0.59	0.58	0.73
Switzerland	1.34	0.99	1.09
United Kingdom	0.87	0.80	0.90
United States	2.46	0.65	1.69

OECD OCDE 18

BIBBEE SLIDE 18

Low ICT use in health care suggests missed opportunities

Percentage of primary care physicians using electronic medical records, 2006



OECD OCDE 19

BIBBEE SLIDE 19

Quality indicators are mixed

Age-sex standardised rates, 2007

Indicator	Rank within OECD	Canadian data	Highest and lowest in sample (per cent)
Breast cancer 5-year survival rates (2002-07)	3 out of 16	87.1%	(90.5; 61.6)
Cervical cancer 5-year survival rates (2002-07)	2 out of 14	71.9%	(76.5;50.1)
Colorectal cancer 5-year survival rates (2000-05)	6 out of 16	60.7%	(67.3; 38.1)
In-hospital mortality rate within 30 days, stroke			
Hemorrhagic stroke	9 out of 19	23.2%	(30.3; 9.5)
Ischemic stroke	17 out of 19	7.6%	(9.0; 2.3)
In-hospital mortality rate, myocardial infarction	13 out of 19	4.2%	(8.1; 2.1)
Reduction in in-hospital case- fatality within 30 days after admission for stroke, 2002-07			
Hemorrhagic stroke	4 out of 13	5.5%	(0.5; 33.8)
Ischemic stroke	2 out of 13	1.6%	(0.4; 39.8)
Asthma admission rates (population aged 15 and over)	2 out of 22	18 per 100 000	(17;120)
Prevalence of diabetes (population aged 20-79, 2010)	20 out of 22	9.2%	(10.8; 1.6)
Amenable mortality	6 out of 19	76.8 per 100 000	–

OECD OCDE 20

BIBBEE SLIDE 20

Canada ranks poorly in patient satisfaction

The Commonwealth Fund Health Survey, 2010 update

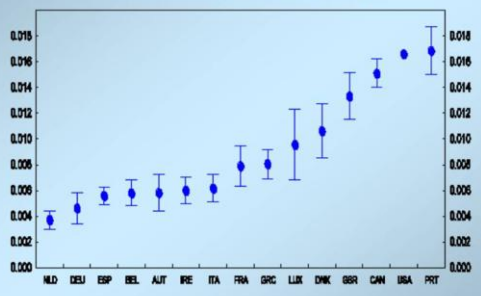
	Netherlands	United Kingdom	Australia	Germany	New Zealand	Canada	United States
Overall ranking	1	2	3	4	5	6	7
Quality care	2	3	4	5	1	7	6
Effective	3	1	2	6	5	7	4
Safe	1	2	6	3	4	5	7
Co-ordinated	2	3	4	7	1	5	6
Patient-centred	6	7	2	3	1	5	4
Access	1	2	6.5	3	4	5	6.5
Cost-related problem	2	1	6	3.5	5	3.5	7
Timeliness of care	1	4	6	2	3	7	5
Efficiency	3	1	2	5	4	6	7
Equity	1	2	4	3	6	5	7
Long healthy and productive lives	4	6	1	3	5	2	7
Health expenditure per capita, 2008	USD 4 063	USD 3 129	USD 3 353	USD 3 737	USD 2 883	USD 4 079	USD 7 538

OECD OCDE 21

BIBBEE SLIDE 21

Health still depends heavily on socio-economic status

Income-related health inequality



OECD OCDE 22

BIBBEE SLIDE 22

10/14/2010

Public burden set to grow

Public health and long-term care spending as a per cent of GDP

	2005	2050	
		Cost-pressure	Cost-containment
I. OECD cross-country projections			
Canada	7.3	13.5	10.8
France	8.1	13.4	10.8
Germany	8.8	14.3	11.8
Italy	6.6	13.2	10.7
Japan	6.9	13.4	10.9
United Kingdom	7.2	12.7	10.0
United States	7.2	12.4	9.7
OECD average	6.7	12.8	10.1
II. Canada: domestic projections			
Robson (2009)	7.5[1]	12	-
Lee (2007)	7.5[1]	12.5	8
Brimacombe *et al.* (2001)	2.2% annual growth in real per capita expenditure, 1999-2020		
Di Matteo and Di Matteo (2009, Alberta)	1.9-6.1% annual growth in real per capita expenditure, 2007-30		
TD Economics (2010, Ontario)	6.5% annual growth in health expenditure, of which 2% real per capita, 2010-30		

OECD OCDE 23

BIBBEE SLIDE 23

Health care reform recommendations

Promote cost awareness and accountability

- Demand side price signals
  - Eliminate zero patient cost sharing for core services by imposing co-payments and deductibles, potentially adjusted for social benefit of the service.
- Supply side efficiency incentives
  - Devolve integrated, formula-based budgets for hospital, physician and pharmaceutical services to RHAs.
  - Introduce an element of capitation or salary for doctor payment with fees regulated by RHAs.
  - Move to activity-based (*e.g.* DRG) budgets for hospital funding.
  - Contract with private and public hospitals on an equal footing, *via* setting service prices.
  - Allow competition to drive generic drug prices to internationally comparable levels.
- Federal role
  - Base federal funding to provinces on rules and envision tax points in lieu of cash transfers.
  - Clarify the CHA to facilitate provincial experimentation with private entry of hospital services and mixed public/private physician contracts.
  - Impose value-for-money conditions on the CHT.

OECD OCDE 24

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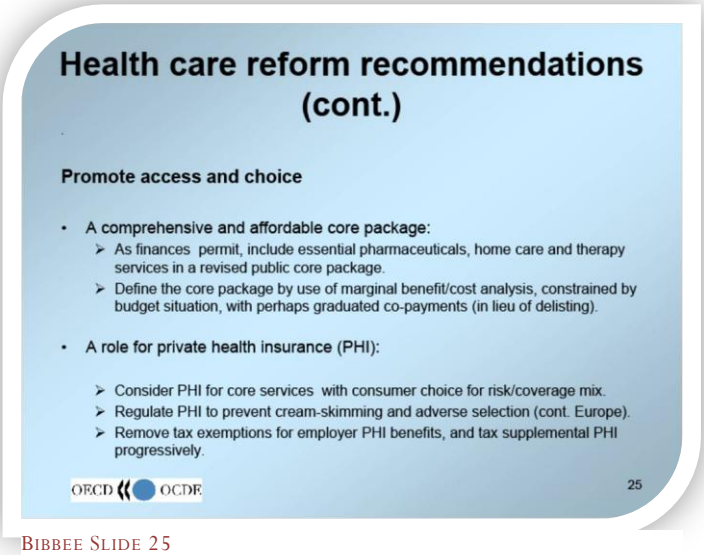

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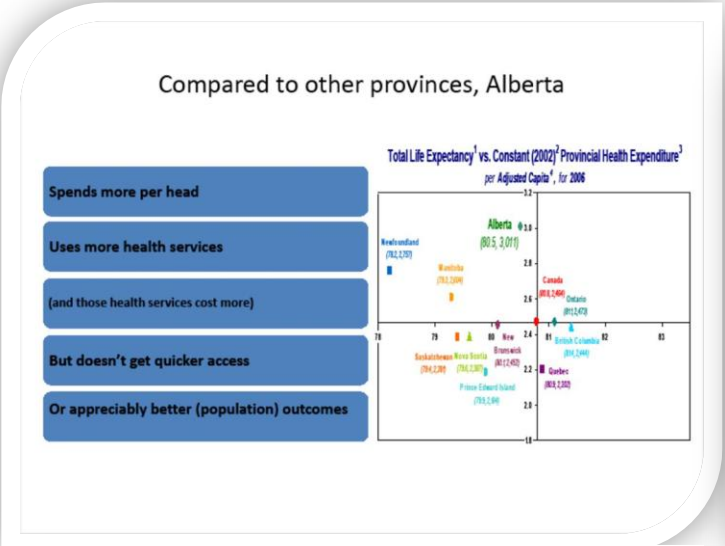
Alison Tonge



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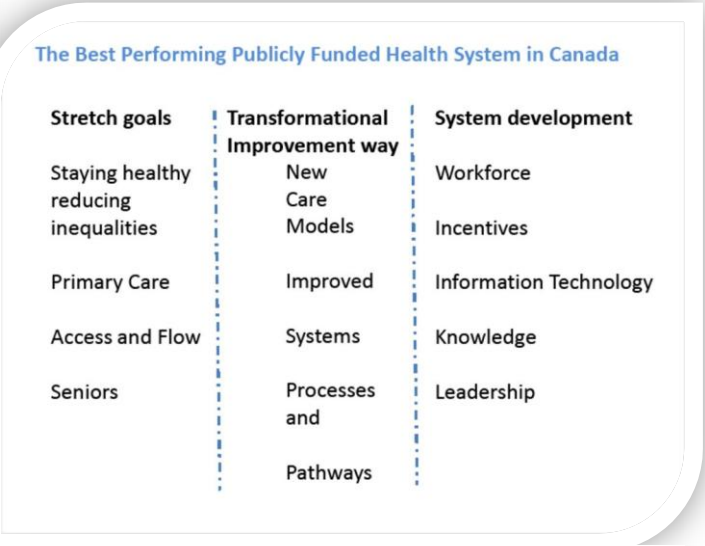

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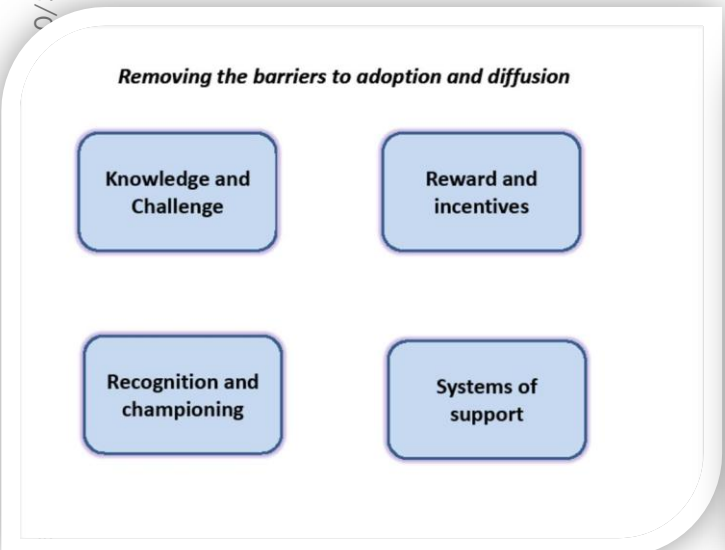

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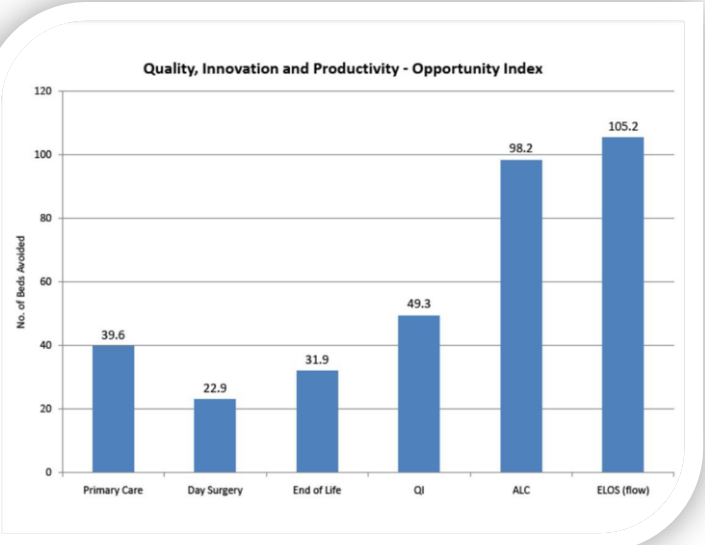

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