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Chair

Mrs. Joy Smith

Standing Committee on Health

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● (1530)

[*English*]

The Chair (Mrs. Joy Smith (Kildonan—St. Paul, CPC)): Good afternoon, ladies and gentlemen.

We have a very interesting committee meeting today. For the first time in quite a while, we're actually going to have a teleconference, starting with Dr. Michael Rachlis. We also have with us Dr. Marc-André Gagnon, assistant professor at the School of Public Policy and Administration at Carleton University, and Steve Morgan, from the Centre for Health Services and Policy Research at the University of British Columbia.

Dr. Michael Rachlis is here as an individual.

Can you hear me, Dr. Rachlis?

Dr. Michael Rachlis (As an Individual): I can.

The Chair: You can, great.

You have 10 minutes to give your presentation and then we have two other presenters.

You know what they told me? They told me that having a telephone conference is somewhat like the voice of God, and it's a bit like that. We can hear you from above, somewhere. This is a big responsibility.

Dr. Michael Rachlis: I'm not as tall as I may sound.

The Chair: You do have 10 minutes and I will be ending it at that point, so please keep an eye out for that. We eagerly look forward to what you have to say.

Please begin.

Dr. Michael Rachlis: Well, thank you very much. I'm very pleased to be asked to address the committee.

I'm going to be addressing it from a particular perspective, as a physician who did practise clinical medicine for about 20 years all told, but not for most of the last 15 years. Now I mainly do consulting work as a public health physician for provincial government health authorities and health organizations, primarily around health care policy.

I'm certainly happy to be sharing this time with Marc-André and Steven, who can both address a very important issue around pharmaceutical policy. I will hardly touch on that.

I'm mainly going to quickly talk about the arguments around the sustainability of our health care system, which go to the newspaper headlines, and the kind political pressures that the health care system is feeling these days.

Then I will try to make some arguments about the need for best practices, to fix a lot of the—

The Chair: Excuse me Dr. Rachlis, but you know that our topic is technological innovation, so if you could weave that into your presentation, it would be relevant.

Dr. Michael Rachlis: Yes, and I will close with what the federal government can do, which I think is in the way of technology, important technology.

First of all, I'll talk about the key arguments around our health care system these days. I think the way technology veers into it is that it will save our system in terms of costs. Alternatively, there are concerns that new technology in health care tends to raise costs.

Currently I think people believe that health care costs are considerably out of control, and that there is a threat, with the aging of the population, that things will be even much worse.

As well, quite frequently in the public debate, which I'm privileged at times to be part of, the main alternatives being put out there are that there are no alternatives other than to cut some real services or to use more private-care finance.

This is where I think some of the new ways of delivering care and new ways of thinking about that and what we need to support these new methods of delivery come in. There is quite an argument about whether our system can be made more efficient.

Finally, there tends to be the argument that we need a so-called adult conversation, which is primarily used, I think, as a euphemism to reduce our expectations and make us see the need for alternative arrangements, particularly financial ones.

I've taken about a minute and a half to describe that argument, but usually it only takes 15 seconds in a sound bite, and that's the main theme that's driving our health care debate. On the other hand, as I've suggested to you, I think there is considerable evidence to the contrary on most of those points.

First of all, health care costs are not wildly out of control. They did jump to a new peak in 2009-10, to almost 12% of GDP overall, but that was largely due to a major recession and fall in the economy. Health care costs in those years in fact went up considerably less than the average for the previous ten years.

In fact, now it's predicted that over the past two years.... We just have estimates at this point, but it will likely be in the foreseeable future, even with economic growth, only about 3.5% in nominal terms. We're going to get a fall in health care costs against our gross domestic product growth, and therefore health as a share of our economy will go down and our health care system will be, by that definition, more sustainable.

This is particularly true of public sector costs, which in fact now are about 8% or 9% above the previous peak in 1992. They've been coming down for the last few years. It's private costs and in particular those related to pharmaceuticals, which I know we'll touch on later, that have gone up. Private sector costs have gone up 50% in relative terms over their previous peak in 1992.

Overall, if you look internationally, if you compare apples to apples and oranges to oranges, and if you compare the right years—because you can't compare, for example, as the OECD did, Canada in the recession year 2009 to other countries in the pre-recession year of 2007 or 2008. That report, which got a lot of play, was fatally flawed because they didn't take that into account.

When you look at overall health care spending as a share of provincial government spending, it has fallen in the last three to four years from about 40% overall in Canada to less than 38%. To the extent that Canadian health care spending is rising as a share of government spending, it's also due to the fact that government program spending in Canada has declined fairly sharply over the last 20 years.

Internationally, as I said, we are roughly comparable to others. We're a little bit less than what France and Germany spend, and a little bit more than what is spent in countries like Belgium, Austria, Finland, which have comparable health systems.

What's really different is that Canada, like these other countries, is at around 10% to 12% of GDP. Health care for Canada is estimated to be at about 11.5% this year. The United States is at nearly 18%.

Another issue is around aging of the population, which I think is seen as another area where technology may have some solutions and also some threats.

● (1535)

I want to make the point that it's been well known for over 25 years. Some research that I did a couple of years ago with Hugh Mackenzie , a Toronto-based economist, confirms what other people have shown for many years. Namely, the annual impact of aging on health care costs for the next 25 years will be about 1% per year. This is in the context of health budgets growing at 2% to 3% now, and 5% to 7% on average from the late nineties to about 2008.

I always like to quote Bill Dalziel, an Ottawa geriatrician, on the aging population:

> It is not the aging of our population that threatens to precipitate a...crisis in health care, but a failure to examine and make appropriate changes to our health care system, especially patterns of utilization.

Canada really does have remarkably archaic processes of care, like the fact we don't provide care out of hospitals. According to the Commonwealth Fund, an excellent, not-for-profit, non-partisan organization in New York City, Canadians, among 11 countries surveyed, are the most likely to say that they can't get care in their family doctor's office the same day but have to go to the emergency room. We also have the highest use of emergency rooms of these 11 countries. And we're the second longest in wait times to see a specialist.

This is often seen as a lack of money, or as a consequence of our not having a private system. In fact, it's due to archaic processes. This was nicely shown in a study in Ontario a couple of years ago, which followed patients who had seen spinal surgeons in Ontario. They might have waited a year to see them. It turned out that only 10% of patients referred to a spinal surgeon actually went on to have surgery in the following 18 months. These patients were waiting maybe a year to see a spinal surgeon. But if they're not going on to surgery, they should actually see a rehabilitation medicine specialist, a physiotherapist, or perhaps a multi-disciplinary team, including people like social workers. That's just one example of our many inefficient models of care.

More efficient models of care use electronic health records. When we take a look at the way we deliver services, we find that less than 5% of family practices are offering same-day services. At a large medical group in Cambridge, Ontario, the Grandview Medical Centre, Dr. Janet Samolczyk is now offering her patients the opportunity to book whenever they want to see her. In the U.K., the goal is that people will be able to electronically book their own appointments completely by 2015. Even without more doctors, but with doctors better integrated with nurses and other health professionals and using electronic systems, we could be more efficient.

● (1540)

The Chair: Doctor Rachlis, you only have about another minute left.

Dr. Michael Rachlis: Okay.

Most people who study this part of our system would say that most waits for family doctors in most parts of this country—and also most waits for specialists and ambulatory care—are not necessarily because of a lack of resources or the lack of a private system. These waits are caused by archaic processes of care. I'm happy to send the committee some more information on that. I would also be happy to talk about some of the community care programs that don't involve professionals. There are off-the-shelf programs waiting to be introduced that could reduce waits—

The Chair: Okay, thank you so much. I really appreciate your presentation.

Dr. Michael Rachlis: Can I have 30 seconds more?

The Chair: It has to be 30 seconds or I will cut you off.

Dr. Michael Rachlis: Okay.

Finally, what can the federal government do? The federal government's already involved with health care in its responsibility for aboriginal health and public health. The minimum it could do would be to provide some structured support for the quality improvement activities that need to happen. The provinces can't do this on their own, and I think we're admitting this. I would love to go further, and I'm happy to discuss with the committee—

The Chair: Thank you very much for your presentation, Doctor.

We'll now go to Dr. Gagnon. I understand you have a PowerPoint presentation, Doctor.

Dr. Marc-André Gagnon (Assistant Professor, School of Public Policy and Administration, Carleton University, As an Individual): Yes, and I think it was distributed to everyone.

The Chair: Yes.

Dr. Michael Rachlis: I'd be happy if somebody could send it to me. Thank you.

The Chair: Everything will be sent to you, Doctor. We'll now listen to Dr. Gagnon, and we have another presenter, and then we'll go to Qs and As.

Dr. Gagnon.

[*Translation*]

Dr. Marc-André Gagnon: Thank you very much.

With respect to my presentation, I'd just like to warn you that I found out I'd been invited to appear before the committee just last week. I had to submit my slides for translation the next day, so I've recycled a presentation I gave last month to McGill University's Faculty of Law for their Intellectual Property Week.

I am reusing that presentation, and since it was originally done in English, I am going to speak in English. My apologies to the francophones.

● (1545)

[*English*]

I'll discuss the Canadian pharmaceutical sector from the innovation economy to corporate welfare. Basically, I'm going to focus on the first two points, the evolution of the Canadian pharmaceutical sector and then the cost and benefits of innovation policy in Canada.

There's a bit of a “done it” narrative, which, in fact, is mostly true. Before 1987, before the implementation of the new patent regime under the Mulroney government, the Canadian pharmaceutical sector focused mostly on generics. Then there were the negotiations to implement a new patent law, but at the same time negotiating conditions, meaning that if we extended privileges to drug companies in order to increase research and development, these were the conditions that we would impose. Basically we were asking for a 10% ratio of R and D to sales. At the time, the Patented Medicine Prices Review Board was created as a watchdog to make sure that this deal was respected.

What is wrong with this narrative? It hasn't been true since 2000 or 2001. This R and D-to-sales ratio is one of the most interesting indicators showing the intensity of research and development in the pharmaceutical sector. It's basically the proportion of sales that is being reinvested in research and development. We see that after implementation of the new patent law, it was really successful. There was an important increase in the R and D-to-sales ratio. Then things started to decline, and we did not enforce the 10% R and D-to-sales ratio. In fact, now the situation is worse than when we implemented the system in 1988, worse than when we just changed the patent law at the time.

Now, we would like to compare ourselves to leaders in terms of pharmaceutical innovation and R and D, such as France, Germany, the United Kingdom, but if we compare this R and D-to-sales ratio, we more comparable to Cyprus and Romania, in fact.

If you look at the evolution of revenues versus investment in research and development in the pharmaceutical sector, there's been a strong increase in the evolution of revenues. Sales are going up. This sector is very profitable; it's making more and more money in Canada. But if you look at it in terms of how that translates into more research and development, well, R and D has been stagnating, and in fact declining in the last years.

So providing more money, putting more money into this sector, giving it more privileges in order to get some R and D, is not how things work. This is not Canada. These are the 10 largest pharmaceutical companies appearing on *Fortune* 500, as compared to dominant companies in other industrial sectors. What we have seen since the mid-1980s is a strong differential increase in the rate of profit of drug companies. Overall, this sector remains a very profitable sector when compared to other industrial sectors.

What does the fact that the sector is profitable mean in terms of R and D, in terms of innovation? Looking at the cost structure over time, or its evolution from the 1970s to 2006, we see that there has been an important decrease in manufacturing and a bit of an increase in terms of research and development, which reflects the importance of tax credits provided in the 1980s for R and D investment. What we see, in fact, is a major shift or surge in marketing and administrative expenses.

If you look, for example, at Canada—this is a bit dated, but it represents well the proportion of employment in the sector—only 17% of employment in the pharmaceutical sector is R and D for Rx and D members, and the 3% is for distribution, marketing, and sales, or mostly sales reps.

What does that mean in terms of innovation? Well, it's very difficult to measure therapeutic innovation. One measure that is sometimes used, which I don't really like, is the global introduction of new molecular entities. Well, it's going down, but this is normal. In the 1960s you could enter anything on the market, for example, thalidomide for pregnant women, and thank God things have changed since then.

But the question is, even if there are fewer drugs on the market, does that mean they are better drugs that represent greater therapeutic advances? There's a fantastic French medical journal called *Prescrire*, and every year they assess every new drug that enters the market. They look at whether it represents a therapeutic advance or not compared to existing drugs. The blue section is the section representing positive therapeutic value. Those with neutral therapeutic value—the bulk—are shown in red, basically the me-too drugs that do not bring any therapeutic advantage as compared to the already existing drugs. And the negative therapeutic value is the drugs where the harms dwarf the benefits, drugs like Vioxx or Avandia, that according to *Prescrire* simply shouldn't be on the market. So for *Prescrire*, it's not clear if we have an improvement or a regression of the pharmacopoeia.

Now, should Canada provide more generous policy for its pharmaceutical sector? In order to answer this question it's very important to understand what we are providing right now. We have the patent system, yes, but over that we also have a series of innovation policies for that sector. There are tax credits for R and D, there's the way we price patented drugs in Canada. We had a 15-year rule in Quebec and we replaced it with more generous tax credits in Quebec. These are numbers for 2011. We also had some direct subsidies.

Going through this very rapidly—this is based on a report I wrote for Health Canada—if you look at tax credits, Rx and D members say they receive 48% of R and D costs back in tax credits. That represents something like $461 million in 2011.

In terms of pricing policy, we have a weird system for pricing patented drugs in Canada. Basically we look at the median of seven countries, including the four most expensive countries in the world. So Canada has a system where we're always aiming to be the world's fourth most expensive country. Now, if we compare ourselves with European countries such as France or the United Kingdom, for example, we pay 20% more for our patented drugs in Canada than they do in these countries. There's a lot of discussion right now, for example during the CETA negotiations, that Canada should be closer to the European system for its patent system. Well, if you want to be equivalent to Europe, basically start by reducing the cost of your patented drugs by at least 15%.

So if we reorganize pricing policy to be more at par with what is happening in Europe, we could easily save something like $2 billion per year in additional costs. These are the additional costs we're paying right now for our patented drugs.

In terms of the 15-year rule in Quebec, in 2011 the cost was $193 million. Direct subsidies were between $57 million and $75 million in Ontario and Quebec. If we sum all this up, we have tax subsidies, $461 million, and $2.2 billion in different types of subsidies due to the way we price our drugs, direct subsidies, and the 15-year rule.

Now, if we consider that the pharmaceutical R and D in the brand name sector in Canada was $960 million in 2011, and the tax credits were approximately $461 million, it means that the total private spending in R and D, net of tax credits in Canada, was $499 million. So Canadians paid at least $2.2 billion in public financial support in order to generate $499 million in private R and D expenditure, net of tax credits.

This is absolute nonsense. I am a fiscal conservative. I want to get bang for my public buck, and I can't wait for somebody at Industry Canada to wake up and start doing some cost-benefit analysis, because this is pure nonsense here.

I'll skip the part on CETA.

● (1550)

I would like to finish with some numbers on the funding for R and D in the health field.

Now we have an innovation system that is—

The Chair: I just want to tell you that you have one more minute.

Dr. Marc-André Gagnon: Fantastic. That is all I need.

We have an innovation system that is broken, but we still have the possibility of transforming the financial incentives for innovation. Instead of just plowing more money in the current system, we need to rethink the way we use that public money right now in order to reorient the research niche, which could be made more promising in terms of innovative therapeutics.

For example, public research is so important right now. We always try to articulate public research with commercial needs. Right now the business model for commercial needs is still focusing on me-too drugs that represent no therapeutic—

● (1555)

The Chair: Your time is up, so could you wrap up, Doctor.

Dr. Marc-André Gagnon: If you look at the funding for R and D in the health field, not just pharmaceutical health field in general and you take into account tax credits, basically business expenditures in R and D represent only 19% of the total spending.

I'd really like to finish with this last slide. It doesn't appear any more, but it said that somebody has to do something, and it's incredibly pathetic that it has to be us.

The Chair: Well, we certainly understood that. Thank you so much.

Now we'll go to Dr. Steven Morgan, associate professor at the Centre for Health Services and Policy Research.

You will have to keep your eye on my signals, Dr. Morgan. You have 10 minutes. We look forward to hearing what you have to say.

Dr. Steven Morgan (Associate Professor, Associate Director, Centre for Health Services and Policy Research, University of British Columbia, As an Individual): Thank you very much. I appreciate the invitation to speak today.

I am going to keep my remarks to pharmaceutical policy and the management of pharmaceutical technologies, in part, because I run a research network funded by the Canadian Institutes of Health Research, which involves experts in pharmaceutical policy at universities across Canada, and in part because I host an annual meeting of decision-makers in the pharmaceutical sector from 12 countries around the world that are reasonably comparable to Canada. And so I bring some insights gathered over years of research and knowledge exchanged both with academics and policy-makers on this file.

Pharmaceuticals are arguably the biggest technological cost driver in the Canadian health care system. Data from the Canadian Institute for Health Information suggest that from 1980 to 2005, pharmaceuticals were by far the fastest-growing component of health care costs. Pharmaceutical spending during this era in Canada grew elevenfold. No other component of the health care system grew more than fivefold over the same period.

Today we are spending more on pharmaceuticals than we are on all of the care provided by all of the doctors in this country. Pharmaceuticals are also a good case for understanding the financial impacts of technology in health care, in part, frankly, because Canada does such an exceptionally bad job of managing this cost driver.

First, it is important to say and be clear that drugs can and do save lives and improve the health of patients and populations. Waves of new drugs have come to market since the 1960s that have expanded the range of conditions that we can now treat out of hospital in quite a considerable way. Some of these drugs are unquestionably cost-effective and value for money in our health care system, but no new technology commands its own utilization.

It is systems that drive the financial impact of technological change in health care. People often talk about the idea of unleashing innovation in health care systems, but, in fact, systems ought to be designed to very carefully harness innovation so that we get the best possible improvements in the level and distribution of health in our population for the investments we are making.

The problem in Canada is that nobody holds the reins in the pharmaceutical sector. We are the only system in the world that offers universal coverage of medical and hospital care yet excludes the prescription drugs used outside the hospital. Our patchwork of private and public drug plans in Canada effectively leaves nobody in charge of managing this critically important component of the health care system.

What is the result? Paradoxically, our fragmented system means that many Canadians are unable to use the drugs that perhaps they should. Last year my colleague Michael Law and I published a paper in the *Canadian Medical Association Journal* showing that one in ten Canadians cannot afford to fill the prescriptions their doctors write for them. By international standards, that is a very poor record on access to medicines and therefore a very poor record on access to important health technologies.

Yet spending on pharmaceuticals in Canada is greater and growing faster than in every other OECD country, with the exception of the United States, which is hardly a lofty comparator for us as a nation, given that the U.S. has the most expensive health care system in the world, .

A study by my colleagues and I published a few years ago in the *British Medical Journal* showed that in British Columbia, 80% of the increase in prescription drug costs from 1996 to 2003 was attributable to the use of new, patented medicines that had entered into therapeutic categories established by earlier innovations. What was important about that finding was that these newer patented medicines were priced, on average, at four times the level of older generic alternatives within the same therapeutic categories.

People in the federal government would be right to point out that we have a system that limits the list prices of medicines in Canada to levels established by list prices of medicines in seven comparator countries. While list prices may be in fact kept to levels found in other countries, this does not equate to management of the pharmaceutical technologies in question.

● (1600)

Per capita spending on pharmaceuticals in Canada was well below the median in our seven comparator countries during the 1980s. This was just before waves of blockbuster drugs came to market in therapeutic classes that still dominate the pharmaceutical sector today: drugs for gastrointestinal disorders, anti-depressants, hypertension drugs, cholesterol medicines, asthma treatments, and the like.

During the era of the blockbuster drug, pharmaceutical costs in Canada grew faster than most other OECD countries. In fact, by 1997, per capita spending on pharmaceuticals in Canada was then equal to the median of the seven comparator countries that we use for pharmaceutical price regulations.

At that time, the National Forum on Health had called for universal first-dollar pharmacare, in part because it was clear that would be an effective mechanism for managing pharmaceutical technologies and the costs they impose on the health care system. We did not move forward on the recommendation for a universal pharmacare system as per the call from the National Forum on Health, and since then per capita spending on pharmaceuticals in Canada has continued to outpace other OECD countries.

As of 2010, the most recent year for which data are available, per capital spending on pharmaceuticals in Canada has exceeded the median of our seven comparator countries by $280. To put this in perspective, if we had held our spending at the level of our median comparators over this period, we would now be spending $9 billion a year less than we are today—that's $9 billion, with a “b”.

The root cause of our trouble in managing pharmaceutical costs is that our system is fragmented. Again, it bears emphasizing that no reasonable comparator country with universal health insurance excludes prescription drugs from the management and financing of health care.

Because pharmaceuticals are integral to all health care systems of our comparator countries, the managers and the practitioners in those systems have far greater opportunity and incentive to consider very carefully the value proposition of pharmaceutical technologies. They would have appropriate incentive to adopt technologies that are of value for money and to reject those that are not. They would also have more purchasing power and legitimate authority in price negotiation with suppliers.

The pharmaceutical industry is changing today, and changing quite dramatically. I believe Canada needs to be prepared to manage these changes, in particular to manage the changes in technology that we can expect over the next decade.

First, increased generic availability is currently providing us with a window of opportunity for considerable savings. Patent expiry is in effect the end of the innovation cycle in any sector, including pharmaceuticals, and it offers a tremendous opportunity for payers to secure real value from innovations of yesterday. International evidence shows that universal coverage of generics is the best mechanism to secure savings for payers, access for patients, and rewards for manufacturers who are willing to compete on price.

Once we have a system in place to secure generic savings, we must be prepared for the changes in technology coming from the patented pharmaceutical sector. The pharmaceutical industry's research and development pipeline is currently filled with specialized drugs that come at very high costs. We used to think in pharmaceutical policy that hundreds of dollars per patient was an expensive price for a drug. Then it was thousands of dollars per patient. Now it is hundreds of thousands of dollars per patient for drugs used to treat specialized diseases and conditions. We need to develop a national strategy for sorting out the innovations that represent value for money and, frankly, for saying no to the rest. It's a tough political challenge, and I think we need a national framework for it.

Finally, the global pharmaceutical industry is making a profound change in its pricing paradigm for these technologies. In a sense, today's list prices for pharmaceuticals are tantamount to list prices found on auto dealership lots. Nobody is meant to pay those prices; instead, they are meant to be a starting point for negotiations, where secret rebates will be paid between the manufacturer and the insurer. Those rebates ought to be negotiated on a framework that sets the price at a level that represents value for money in the health care system relative to other investments that could be made. This is a profound change in pricing, and it is a profound challenge for a system that is as fragmented as ours.

● (1605)

I think Canada needs a national strategy for managing these new technologies, for negotiating their prices and, most importantly, for making sure that Canadians can access the care or technology they may need, and that no patient and in fact no province is left paying artificially inflated prices when they do so.

Thank you very much.

The Chair: Thank you very much, Doctor, for your insightful comments.

I just want to remind the committee that we will be suspending at 5:15 to go over some points of business that have to be brought to the committee. We'll have a very short business meeting.

That said, we'll go into our first seven minutes of Qs and As with Ms. Davies, please.

Ms. Libby Davies (Vancouver East, NDP): Thank you very much, Chairperson.

Thank you to our guests who are appearing today. I know that each of you is considered a real expert in your field. You do a lot of research and I think you've given us a lot of really illuminating information.

I do find it ironic that as Canadians we're so proud of our health care system, yet when we look at the facts and see how the costs are going up, we don't seem to be tackling what I think Dr. Morgan said are some of the root causes of the cost drivers. For example, the cost of drugs is going up so high, yet we don't seem to be able to rein that in and have the systems in place to deal with it. I think your testimony today is very important in helping us, one, understand the problem and, two, giving us some ideas about what we need to do. I'd like to pursue that.

Dr. Gagnon, I know that one of the programs you've proposed is something called “reference pricing”, similar to what we see in New Zealand. I wonder if you could just explain it for us, because I think that once we understand what the problem is, the next thing is, what should we be doing about it? There are models out there, as you've said. What is the reference pricing and why is it a better system?

Also, Dr. Rachlis, at the end of your presentation, you talked about how the federal government, at a minimum, needs to provide a structured support. I wonder if you would be able to elaborate on that. When we look at the health accord from 2004, we can see that a lot of commitments were made around drug coverage and innovation, yet that seems to have fallen flat. How do we pick up the pieces here? How do we focus on this federal role?

Finally, Dr. Morgan, first of all, congratulations on a very successful conference that was held in Vancouver just recently on this whole question. When you say that we should increase generic availability and that we need a national strategy, how do you envision that coming about? It seems to me that it's critical that the federal government be involved in that. I just wonder what ideas you have.

Those are the questions I have for the three witnesses.

The Chair: Thank you.

Who would like to begin?

Perhaps we'll start with Dr. Gagnon.

● (1610)

Dr. Marc-André Gagnon: On reference-based pricing, first we need to understand how weird the market is for pharmaceuticals. You can imagine this market as a dinner for three, basically. You go for dinner, and there's one guy ordering the meal, the physician. He's prescribing the product, but does not pay for it and doesn't care, as he doesn't have budget constraints. Then you have the patient, who is eating the meal, and then the drug plan, private or public, that is paying for the meal.

The question is, if you have a very aggressive waiter in terms of promotion and marketing who is saying that you need to take the most expensive meal because that's the best one for you, for sure the third party payer would like to have some words to say in terms of which meal should be ordered, and basically how the payer can get some bang for their buck. Reference pricing is basically just the capacity of the third party payer to say when, based on clinical evidence, there is...some drugs aren't therapeutically equivalent. We need to keep in mind that 80% of the new drugs that arrive in the market do not represent any therapeutic advances compared to already existing drugs.

Reference-based pricing is just saying that we'll set a reference price for this therapeutic category for all drugs considered therapeutically equivalent. Based on that, basically, usually we take the drug with the lowest price, we say that this is what we accept in order to reimburse for the product, and—

Ms. Libby Davies: Is this where we could generate a $10 billion saving, from your research?

Dr. Marc-André Gagnon: Absolutely.

New Zealand has other ways as well, but reference pricing is really the central way to do that. That's because what you're doing here is a very clever way to use market forces, market competition, in order to lower the price of drugs. You still respect patents. If the drug companies arrive with a new product that does not provide any therapeutic benefit compared to what already exists—

Ms. Libby Davies: You don't lose it.

Dr. Marc-André Gagnon: Well, there is no reason why this drug should not be competing with the other already existing drugs.

If you don't put any market competition in place, if you basically agree to pay for any drug that does not represent a therapeutic advantage and pay the full price for that, then there is no financial incentive to drug companies to come forward with new products that do represent a real therapeutic advantage

The real problem here is how to reorganize these financial incentives by using market forces to lower the cost of drugs when there are no therapeutic benefits, but at the same time offering real incentives to drug companies to come forward with innovative therapeutics.

The Chair: You have about a minute and a half left.

Ms. Libby Davies: I actually had two other questions I directed to Dr. Morgan and to Dr. Rachlis.

The Chair: You have a minute and a half.

Ms. Libby Davies: I'm turning it over to them to respond.

The Chair: Okay, go ahead.

Dr. Michael Rachlis: I'll jump in quickly.

I'm very concerned about the accord. It was weak when it was drafted in actually giving the federal government any control over the $41 billion it planned to transfer to the provinces over 10 years. But even when there were pledges, as there were for a national pharmaceutical strategy—which, just as an example is supposed to enhance action to influence the prescribing behaviour of health care professionals.... I very much agree with the problems that have been outlined about our not having generic drugs, not using therapeutic substitution, all of which would be good things to do. But also, doctors end up prescribing drugs when often no drug would probably be better.

We look toward the next couple of years in the drafting of the next accord. We need to look at the failure of this accord to actually put in the teeth needed to even enforce what was there, as well as the fact that it was probably inadequate to promote reform across the country as it was.

The Chair: I'm sorry, the time is up.

We'll now go to Dr. Carrie.

Mr. Colin Carrie (Oshawa, CPC): Thank you very much, Madam Chair, and I want to thank the witnesses for being here today.

I wanted to start with Dr. Morgan because I think you hit the nail on the head when you said that our system is fragmented. The more I look at this situation, it seems that we have the provinces and territories deciding which drugs they cover, but there doesn't seem to be a lot of strategy or control in looking at what drugs they do cover.

When you've presented this idea of trying to make the system less fragmented, have you actually presented to the Council of the Federation? They seem to be in a position...because the provinces are the lead on this particular issue as far as many of the drugs that are prescribed in Canada. Have you ever talked to them about looking at a way of containing the costs or expenditures on these drugs?

● (1615)

Dr. Steven Morgan: I've not personally had the opportunity to present to the Council of the Federation. I do know that the Health Care Innovation Working Group is currently focusing on generic drug prices, and there have been some interprovincial collaborations around the setting of pricing for generics.

The biggest challenge, frankly, in trying to harmonize the formularies and the contract negotiations between the provincial drug plans and the pharmaceutical manufacturers is the fact that our provincial drug plans vary so dramatically in structure. We have a huge variety of drug benefit plans in this country, and those differences, both in structure and administrative processes, in part, make it difficult for provinces to see a particular drug in the same light in terms of its priority for investment.

One of the next most important steps is to actually try to harmonize coverage, harmonize the structure of how we reimburse medicines, and then you can follow with the harmonization of what's actually being covered. But until you get commonality about who is covered and on what terms, it's difficult to get commonality on what's going to be listed, and particularly on the kind of reimbursement deal there will be.

Mr. Colin Carrie: I was just wondering if they have ever been presented with the amount of savings they could get if they could come together. I think Dr. Gagnon mentioned $9 billion. That's a phenomenal amount of money.

I wanted to ask you something, Dr. Gagnon, because you mentioned that you'd like to shake up some people at Industry Canada. As we're doing the study on technical innovations, I suppose one of the technological innovations we could look at is a way of analyzing these products.

I was wondering if you could explain to the committee how new drugs are tested today. You mentioned that one can get an old drug, or one can get a new drug. I'm a chiropractor. In Oshawa I used to get people coming in with a lot of arthritis. One person would be on aspirin, but immediately when the COX-2 inhibitors came out, they all wanted that. The aspirin costs 2¢ a tablet and the COX-2 inhibitors at the time were $2 per tablet. At the end of the day, what was the clinical difference in each individual patient? I don't know. Sometimes I'd see a difference, sometimes I wouldn't see any difference at all.

I heard that sometimes we test new drugs against placebos, but there's not necessity of testing a new drug against an old drug. If you're thinking of making recommendations for an innovation, could you tell the committee what we could maybe suggest to Industry Canada—if maybe that's the way we're challenging these drugs, the new drugs on the market? Could you give us some advice?

Dr. Marc-André Gagnon: There are two things. To get a drug approved for the market, you simply need to compare it to a placebo and show that its has more benefits than the placebo has. But then to get the drug, especially on provincial public formularies, you need to prove minimally that you can get some bang for the buck if you accept reimbursement for the drugs. This is what we call health technology assessment. This is something a bit different from the approval process with Health Canada. This is with CADTH and the common drug review. Basically, we assess the cost of the drug versus the therapeutic benefits it can provide.

The way the system is now organized in Canada, the CADTH, the Canadian Agency for Drugs and Technologies in Health, provides recommendations to all provinces and based on that, the provinces decide if they will reimburse the drug. They ask themselves, do we get enough bang for the buck? Do they list the drug or not?

But the problem is not there. We have estimated that right now in the United States drug companies spend $61,000 per physician to promote new products. In France it's €25,000. In Canada we estimate it's at least $20,000 per physician to promote the new products. As soon as the drug gets listed, the issue becomes the way the drug is prescribed. Are prescribing habits by physicians such that they will respect evidence-based medicine or will it be more marketing-based medicine, based on promotional campaigns? Promotional campaigns are still very efficient right now. The problem is the health technology assessment must be organized as well with some way of influencing prescribing habits. For example, it can be through academic detailing and stuff.

We need to find some way of translating evidence-based medicine prescribing habits. Right now these prescribing habits are still influenced way too much by marketing campaigns. In the end, we have irrational habits. Atypical antipsychotics, for example, are not shown to have any more clinical benefits than older antipsychotics. They cost 10 times more.

But this problem is all over the place. This is what we're prescribing massively off label as well. These are the problems that we need to tackle. It's not just a question of more innovation, but how you organize the prescribing habits as well.

● (1620)

Mr. Colin Carrie: Thank you.

I was wondering—

The Chair: You only have 20 seconds, Dr. Carrie.

Mr. Colin Carrie: All right.

I was just wondering if other countries have a system where they actually test the drugs a little more carefully.

Dr. Marc-André Gagnon: In the U.K. they will implement something interesting called value-based pricing. Basically, instead of paying for drugs, they will pay for the health outcomes related to these drugs, which is something completely different. You don't pay for the product, you pay for health outcomes. This is something new. This is something we need to follow.

The Chair: Thank you, Dr. Gagnon.

We now go to Dr. Fry.

Hon. Hedy Fry (Vancouver Centre, Lib.): You have just made me think of not asking the question I was going to ask. I wanted you to follow through, Dr. Gagnon, on the value-based pricing that is now beginning to be looked at in the U.K. How does it work based on outcomes of the drug? There could be all kinds of other reasons why that particular drug will not work on that particular patient, which may give you a skewed outcome. What if the patient has pre-existing illnesses that are conflicting with the drug? I'd like to see how that works. I'd like to hear more about it because I think it's interesting. I think the reference-based pricing idea is a good idea. I think it should be used. But I think it's something we need to delve into a little more.

How do we harmonize coverage? Many provinces pay for certain drugs on their formulary. Let's imagine they are doing the right things. But they are paying for certain drugs on their formulary because it's all that province can afford based on its GDP, its size, and a whole lot of other things. So how do you harmonize something when you have such unequal players in the game? Who will harmonize it, and how should it be harmonized? What would we do with drugs that are not on formularies, the 20% of new drugs dealing with new and specific diseases that aren't yet generic because they haven't reached the end of the patent? How would you deal with those drugs? I think the most important thing is to ensure that all Canadians, regardless of where they live, will get the therapy they need, when they need it, in the most cost-effective way. In other words, what are the outcomes? Do they work or not?

I wouldn't mind listening to you expand a bit on some of those things. Maybe Dr. Gagnon can start, because I picked up on your value-based pricing first.

Dr. Marc-André Gagnon: Perfect, and I'm sure Steve will be able to add something as well.

Value-based pricing is very interesting. You pay for the health outcomes and not for the products. What we negotiate with the drug companies is how much they will contribute to improving the health of the population. We will pay for this incremental improvement. There are ways to do that. There are standards in health economy, life years. It's complicated. It's not an easy science for sure. Some things are debatable.

But the proof is in the pudding, and I think in the U.K. it will be interesting to see what goes on there. One thing about value-based pricing is that it doesn't work with a fragmented system. If you have a fragmented system to pay for your drugs, there's no way you can address the health outcomes for the population.

I think the really interesting innovations in the way we organize pricing and the way we organize financial incentives in the pharmaceutical sector come from countries where you don't have the fragmentation of drug coverage that we have in Canada. I think this is the best way to say exactly what we want, what we expect from the drug we buy, and what conditions we need to impose to make this happen. I strongly believe that when you're clear about what you want, other people might not like you, but they will respect you.

● (1625)

Hon. Hedy Fry: Whom do you see harmonizing that?

Dr. Morgan?

Dr. Steven Morgan: I want to pick up on a couple of points. First, we just completed a study in which we interviewed decision-makers from nine high-income countries comparable to Canada about issues like value-based pricing, reference pricing, and contract negotiations with pharmaceutical manufacturers.

The punchline of that story—there are two of them—is that there's no question that the global pricing paradigm for pharmaceuticals is now one of secrecy, starting with an inflated list price that everyone in the world can see, but then negotiating rebates from that list price based on some kind of contracted outcomes.

Those outcomes might be something simple like the volume of sales in your country, or they could be something complicated like a true pay-for-performance contract. That is, if the patient survives a certain period, or if they live without a hip fracture for long enough, the manufacturer gets a bonus. Or, on the contrary, if they break their hip early or they pass away early, the manufacturer may need to rebate the cost of drugs.

Second, as Marc-André Gagnon just mentioned, you cannot do this in a fragmented system. You have no technological capacity nor moral authority to negotiate value-based pricing for pharmaceuticals, unless you are also the actor paying for medical and hospital care for the affected population. That's a clear message from international experience.

As it relates to who can help coordinate federal arrangements, this is unquestionably going to be a classic case of the federalism challenge for Canada. We need, in my view, a strong role for the federal government because horizontal policy collaboration, as it's known in the policy literature—that is, collaboration in a voluntary way among partners like the provinces—can only be sustained to the point where partners can afford the collaboration and they can support it in terms of their political will. In essence, in health care, that is the job of the federal government. Canada is to take the provinces places they would like to go but cannot go on their own in a sustainable way.

By the way, this is vertical policy integration, having some meaningful skin in the game financially so that the provinces have an incentive to continue the partnership, but also having some centralized capacity.

Value-based pricing and other mechanisms for negotiated pricing are extremely costly in legal and administrative terms. Small provinces—I would venture to say any province with fewer than a million and a half people—simply can't get in the game in a meaningful way. Again, coordinated capacity such as through the common drug review or other mechanisms is essential, in a sense, for the national equity interests here.

Hon. Hedy Fry: Thank you.

The Chair: Thank you very much, you have about 20 seconds more. It's not that long.

Hon. Hedy Fry: No, that's fine. My questions were answered very well.

The Chair: Okay, thank you so very much. Now we'll go to Mr. Wilks please.

Mr. David Wilks (Kootenay—Columbia, CPC): Thank you, Madam Chair. Thanks to the witnesses for being here today. It's interesting that all of you have mentioned your concerns about pharmaceuticals and their drastically increased costs over the years.

As we go through this study on technological innovation, can each of you tell me how we might be able watch pharmaceutical pricing or the pharmaceuticals as they're made in order to make comparisons? What type of future technology can you see assisting us or those who are trying to control this?

The Chair: Do you want to start with Dr. Rachlis, Mr. Wilks?

Dr. Rachlis, can you begin?

Dr. Michael Rachlis: As have been outlined, I think there are several different levels that are needed. The first is that there needs to be some sort of national pharmacare program to deal with the reality that millions of Canadians cannot really afford the medications they're taking, or need to take. That is a very serious issue. We also need to deal with the fact that there is a real waste of administrative costs on financing private drug insurance programs. That's one of the main reasons that Justice Emmett Hall concluded that medicare was a waste of administrative costs with hundreds of companies selling medical insurance. That would be a great savings.

Then we also need to get better regulation around the safety of drugs at the national level. I think the federal government also has a major role, as has been mentioned, to try to do something about developing a common drug list, which the provinces cannot do themselves, and also to move into improving the prescribing, because that's another huge issue. Reference-based pricing, which has been mentioned, can be of great assistance to payers and to providers in ensuring that the right drugs are being prescribed. When Vioxx, an anti-arthritic drug, was costing the Ontario drug benefit plan $55 million in 2003, it was being held under really tight control. I think just a few million dollars were spent on it in B.C. because of reference-based pricing. Of course, Vioxx was taken off the market the year before, as it may have caused 30,000 to 40,000 premature deaths from heart attacks in the United States, and maybe several thousand in Canada. But in B.C., because of reference-based pricing, it was largely not prescribed as much as in Ontario, which saved the province a lot of money and the lives of dozens of people.

Finally, the federal government has been talking for almost 20 years now about helping the provinces reform primary health care, and for its own fiduciary responsibility to its own groups—

● (1630)

The Chair: Dr. Rachlis, excuse me, but I think we're going to have to give the others a chance to speak now, too.

Dr. Morgan.

Dr. Steven Morgan: Quickly, just as a point of clarity, Vioxx was not withheld from the B.C. pharmacare formulary through reference pricing. It was just not listed as a benefit in British Columbia. It wasn't part of the reference drug categories.

If you're thinking about federal involvement in a technology that will help us monitor value for money in this sector, there are two areas in which I think we need investments. First, we need foundational platforms for information and electronic prescribing. British Columbia, Manitoba, and Saskatchewan are the only three provinces in the country that collect information about every single prescription dispensed to every single patient, no matter who paid for it. Those databases are essential for understanding the population's use of medicines and, frankly, for understanding their safety and effectiveness in the long run. It's long overdue that Ontario and Quebec, the big provinces, got up to that level of drug information systems. I think the federal government can take a leadership role in helping spur the provinces on in that capacity.

The other thing that the federal government can play an important role in, and it is making investments in a couple of these files, is in the evaluation and monitoring of these technologies as they're on the market. We have investments from the federal government through things like CADTH, the Canadian Agency for Drugs and Technologies in Health, which does, I think, a laudable job with the common drug review process. We could probably strengthen some of the investments that the federal government makes on drug safety and effectiveness in the post-market world once capacity is up to speed.

Lastly, I think the federal government can take a real leadership role in the emerging paradigm of personalized medicines. Increasingly, prescription drugs are going to be given to people based on the pairing of a diagnostic test and the drug itself. Often, that diagnostic test may be a genetic test. We need to be developing what they call bio-banks, that is, information systems to store that information, and the capacity to analyze that information. That's going to be a scientific paradigm that requires all provinces to be banded together, because in order to detect the signals that you need to do in that era of medicine, you're going to need 20 million or 30 million people in your database.

The Chair: Dr. Morgan, I'm going to have to go to Dr. Gagnon now. Mr. Wilks would like to hear from him, but thank you both for your comments.

Dr. Gagnon.

Dr. Marc-André Gagnon: I think we need federal leadership.

In the last two or three years we've massively reduced the price of generics. We've also had the patent cliff, so a lot of the blockbuster drugs turned into generics. So it seems as though the cost containment has been working, but, basically, these are windfall savings.

Now the new business model is in place. It's about niche busters for specific niches—biologics, anti-cancer drugs—with very, very high prices. We're not ready for that. Provinces are not ready. We need a bulk-purchasing agency with a strong bargaining position in order to be able to negotiate lower prices for both biologics and anti-cancer drugs.

Can the Council of the Federation do that? I don't think so. The problem with provinces is that the new norm right now is the product listing agreement. Every province tried to get some deal with the drug manufacturers. But the product listing agreement, by definition, is a secret deal, and it's a way to lower the price for you by shovelling the cost to somebody else. Really, it's how you can play one province against another.

● (1635)

The Chair: Sorry, but our time has run out. I don't mean to be rude, but I have to be fair to the rest of the committee. Thank you, Mr. Wilks.

We're now going into our five-minute Q and A. We have to be very sharp with the time so that everyone can get a chance to ask questions.

To all the doctors involved, you're very good at answering questions and very good at keeping to the time. That's our biggest challenge here. Thank you.

Now we'll go to Dr. Sellah for five minutes.

[*Translation*]

Mrs. Djaouida Sellah (Saint-Bruno—Saint-Hubert, NDP): Thank you, Madam Chair.

I have two questions.

First off, I want to thank all of our speakers here today for giving us insight into pharmaceuticals and our health system, and helping us determine whether it can adapt to innovation.

I have tremendous respect for innovation and its value, but my sense is we're putting the cart before the horse.

That said, it's distressing to hear that one in ten Canadians cannot afford their medicines. So that group of Canadians doesn't benefit from the same accessibility, treatment or even modern technology.

According to health economists, the total number of new innovative or breakthrough drugs being discovered has been stable, if not declining, since the 1990s. How do you account for that slower pace of innovation in the pharmaceutical industry since the 1990s? Is the pharmaceutical industry actually innovating or is that more of an illusion?

[*English*]

The Chair: Dr. Morgan, would you like to begin with that?

Dr. Sellah, who do you want to begin?

Mrs. Djaouida Sellah: It's up to them.

[*Translation*]

My question is for everyone.

[*English*]

The Chair: Dr. Gagnon has raised his hand.

[*Translation*]

Dr. Marc-André Gagnon: First of all, it's important to know how innovation is being defined. Normally, innovation is defined on the basis of patents or financial gain.

Financially, the pharmaceutical sector is very innovative. It makes a lot of money. The issue comes into play on the therapeutic side. The indicators we have right now tell a very different story in that regard. What we see in place is a dominant business model that actually favours little therapeutic innovation and often produces "me-too" drugs. The industry uses existing molecules and tweaks them slightly.

For instance, Prilosec became Nexium. It isn't any better than Prilosec, but the manufacturer launches a huge marketing campaign, endeavouring to change doctor's prescription-writing habits, and then everyone starts prescribing Nexium because it's the flavour of the week or month.

That practice is based on a business model. There aren't any financial incentives to encourage companies to invest in more innovative therapies.

I'll give you an example. The year that Merck closed its Merck Frosst facility in Quebec, its profit margin was 47%. Just try to make a 47% profit margin. The company merged with Schering-Plough. It closed two labs: Merck Frosst in Quebec, and Organon in Holland. Those labs were recognized as the company's two most innovative facilities. The reason they closed is simple: under the business model, that type of innovation is less profitable than the "me-too" innovation that will be done in other labs.

What we're saying to these companies is, "we're going to leave the financial incentives in place for you to maintain the business model supporting mediocre but profitable therapeutic innovation".

● (1640)

Mrs. Djaouida Sellah: Because it's profitable.

[*English*]

The Chair: Dr. Morgan.

Dr. Steven Morgan: I wonder if it's okay if I answer a little bit on this question as well.

The Chair: Please do.

Dr. Steven Morgan: I have actually published a couple of papers on innovation in the pharmaceutical sector over the past roughly half century. Although it is true that the total number of drugs being developed in the pharmaceutical sector has fallen quite considerably since the 1990s, if you look at the number of new drugs that are what you might consider novel in their therapeutic or pharmacological properties, that are close to something that is breakthrough medicine, the rates of those truly innovative or at least pioneering medicines have actually been fairly stable over time.

The cycles of drug development that we observed in the 1990s were largely a function of a business model focused on basically leveraging as well as possible both the clinical and the economic opportunities of treating risk factors for disease and other chronic treatment categories. Those economic and clinical opportunities began to wane, in essence, around the turn of the millennium, and we've seen a subsequent decline in that business model. We've seen the pharmaceutical industry lay off literally tens of thousands of people in both research and development and marketing—

The Chair: Dr. Morgan, I'm sorry. You're over time, so can you just wrap up your sentence?

Dr. Steven Morgan: Very quickly, I think changes in innovation are explainable in part just by different changes in scientific paradigms, and they're not necessarily a major problem for us.

The Chair: Thank you.

We'll now go to Ms. Block.

Mrs. Kelly Block (Saskatoon—Rosetown—Biggar, CPC): Thank you very much, Madam Chair.

I would like to welcome all of our witnesses in every format they have joined us today. It was good to hear from you.

I am very interested in what you had to say, Dr. Gagnon. It sounded to me as though you were saying we are not getting the biggest bang for our buck when it comes to return on investment and how well the pharmaceutical industry is doing in comparison with the innovation that we may not be seeing and the need to transform therapeutic innovation.

We've heard often throughout this study that there are barriers to innovation. I am wondering if any of you can identify for me what you see as some of the barriers, whether they have to do with intellectual property—where the research is done and who owns the intellectual property—or whether they have to do with regulatory restrictions.

Would any one of you like to answer that question for me?

The Chair: Go ahead.

Dr. Marc-André Gagnon: In terms of getting bang for the buck, when it comes to innovation policy, I always think it is a bit weird that basically our industrial policy for developing the pharmaceutical sector is based on how much we will pay out of the health budget. For me, the health budget should be paying for health services and not for developing industrial sectors.

With regard to barriers to innovation, I did my post-doc at the Centre for Intellectual Property Policy and we worked a lot on the whole question of pharmaceutical patents, especially with biologics. We need to understand that patent protection can help innovation and help to attract R and D investment, but it can also be a barrier to therapeutic innovation. The thing is if you have new research based on a specific biomarker, and if in terms of the genes there are already 40 companies that own patents over the genes you need to do some research on in order to develop your product, basically there is no financial interest for you to develop this type of research.

So what do you do? Well, you stick to the drugs you already own and you try to work from those molecules and try to adapt them a little bit and find a new patent on those, rebrand it, and resell it.

It's not only that. Just in terms of basic research, I was talking with people at the University of Minnesota at one point and they were telling me it cost them $26,000 just to find out if there might be a possibility they were infringing on a patent. They were doing the research and they didn't know if there were patents. They didn't care, but they needed to spend $26,000 just to kick-start the research to know if they were infringing upon patents or not. So patents are becoming more a part of the problem rather than the solution to this sometimes.

● (1645)

Mrs. Kelly Block: Okay. Thank you.

Dr. Morgan.

Dr. Steven Morgan: I would very briefly say that if we want to actually secure investments in innovative activities in Canada in the health field, we need to start thinking very strategically about how we invest directly in innovative platforms and science. Think tanks on the left and right of the political spectrum in Canada have pointed out that we rely far too heavily on indirect incentives created by tax expenditure subsidies and by the presumable argument that if we pay more for medicines in Canada we'll get more R and D.

The fact is that if you really want to attract excellence in R and D, you have to invest in the capacity, and, in a sense, that will come, because building capacity will attract R and D. It does require that we be strategic. Canada has never been a major player in what you would call the "small molecule pharmaceutical sector", the traditional drugs of the past, but we have been a major player in biotech and other parts of the emerging pharmaceutical paradigm. What Canada may need is a national strategy to leverage where we're already fairly good and to take us from being fairly good to excellent as a mechanism to attract private investment.

The Chair: There are a couple of seconds left. It's impossible to ask any questions in that time, so we'll go to Dr. Morin, please.

Thank you.

[*Translation*]

Mr. Dany Morin (Chicoutimi—Le Fjord, NDP): Thank you, Madam Chair.

My questions are for Mr. Gagnon.

First of all, even though you didn't tailor your presentation specifically to us, I thought it was excellent, full of information that I look forward to absorbing later when I read it more closely. The more we talk, the more the same questions keep coming up, although we are delving deeper into the subject.

The fact is the pharmaceutical sector is very lucrative, as we all know. I will explain what I mean a bit more afterwards. You showed where things stand on slides 6 and 7. The industry is even more lucrative than any other area of activity. Slide 11 illustrates what is, to some extent, idleness on the part of companies as far as focusing on innovation goes. They prefer to fall back on molecules that require less effort, but promise just as much profit.

Furthermore, I'm glad my colleague Mr. Carrie mentioned an industry problem when he asked a question earlier. New molecules and new drugs are tested against placebos as opposed to existing molecules whose therapeutic properties have already been approved.

Slide 19 shows that public financial support is a bad investment. At the very least, we could make public investment in the industry more effective, both federally and provincially.

The conclusion I draw from all of that is there is too much marketing and too little innovation. You made four suggestions. We hope the government will take our study of technological innovation under consideration and adopt the right solutions. In the short term, what should we target first?

Dr. Marc-André Gagnon: I want to come back to the fact that new drugs are tested against placebos. It is important to understand that the scientific research that the pharmaceutical and medical sectors engage in is set up like a marketing campaign. Private research serves to produce private arguments that support the sale of a product. The issue is whether the product is better than the other guy's.

For example, a study conducted by Merck will show that its product is better than the other guy's. Otherwise, there's no way Merck would publish the study in medical journals. A competitor, Johnson & Johnson, will claim its product is better than Merck's. Who cares. What doctors want to know is which is the better drug to prescribe to a specific population with a specific problem.

That research doesn't happen in the private sector. Pharmaceutical companies aren't going to engage in that kind of research. Their sole aim is to research their own drugs to find out whether they are more effective than a placebo, plain and simple. Then, they more or less choose the data they want published, that which demonstrates the most beneficial properties.

I know this opens another door, but the important thing to consider is, where is this research being done. Where is the research that seeks to answer questions for the public good being done? Who is determining the best treatment option for the population suffering from condition X?

In the U.S., the National Institutes of Health produces this kind of research from time to time. Every time, the agency does extraordinary studies based on public clinical trials that can show whether prescription habits are problematic and whether the best drugs are not being prescribed. That's the kind of public research needed.

As long as we continue to dump public funding on a private sector that produces therapeutic innovations based on rather mediocre testing, nothing will change. We won't be able to equip ourselves with the techniques or the health technology assessment capacity needed to support the best possible innovation outcomes.

● (1650)

Mr. Dany Morin: I agree with you, but I also wonder whether the government shouldn't endeavour to limit the marketing side of things.

Before becoming a health professional myself, I was a medical secretary in an office. I have respect for pharmaceutical representatives, but I did observe certain things regularly. For example, to learn more about a company's drug, doctors would be offered the training on cruise ships. Ethically speaking, as a politician, I wouldn't be comfortable accepting that kind of reward-based training.

Should the federal government do something about improper marketing tactics like that?

Dr. Marc-André Gagnon: Something very simple could be done: address the culture of marketing-based medicine by favouring evidence-based medicine.

[*English*]

The Chair: I am so sorry. Our time is up.

[*Translation*]

Dr. Marc-André Gagnon: Right now, CADTH assesses health technologies. It could be given more resources to share its research findings with all doctors.

[*English*]

The Chair: Thank you so much. Thank you, Dr. Morin.

Mr. Brown.

Mr. Patrick Brown (Barrie, CPC): Thank you, Madam Chair, and thank you to the witnesses for your comments today.

I've asked a variety of panels on technological innovation about the federal regulation of medical devices. I want to get your feedback on that too. Obviously, a lot in health care is administered by the provinces. The one area in which we do have a direct role is the regulatory process. I know that we've heard comments on both sides.

I had one doctor, Dr. Rob Ballagh, say that it was extremely frustrating. I had another one, Dr. Emad Guirguis, who thought it was actually quite seamless, in his opinion, compared to the U.S.

Is this an area that we could improve on, and what type of improvements do you envision?

Dr. Marc-André Gagnon: In terms of medical devices in the pharmaceutical sector, we still have a lot of regulations. Sometimes there is maybe too much regarding some issues; sometimes not enough on other issues. As for medical devices, the problem is that it's still a bit of the far west out there in terms of the regulatory process, both in the U.S. and Canada. With regard to the health technology assessment, we have very little capacity to really determine the value of these new medical devices.

You have this whole sector where the type of marketing you have in the pharmaceutical sector is also evident among the manufacturers of medical devices. You don't have the regulations to ensure that it's not going adrift. For this not to go adrift...the regulations in the pharmaceutical sector are at least embedding the practices. With medical devices, we're seeing weird stuff going on.

Maybe Steve Morgan could add to this. Basically, from what we see from the FDA and the reports out there, the problem of evaluating value for money for that and the marketing practices that are going on as well.... My understanding is that it's very problematic. I know that we're trying to beef up our understanding.

● (1655)

The Chair: Perhaps we could get Dr. Morgan to comment. Would you like to—

Dr. Michael Rachlis: Yes, Madam Chair.

The Chair: And Dr. Rachlis, so both of them.

Could you give a succinct reply, Dr. Rachlis, so that we could get Dr. Morgan in as well, please?

Dr. Michael Rachlis: I think that Marc-André has characterized it well. Clearly, some organization, I would argue, at a national level, the federal level, should keep track of the drugs that Canadians are getting and properly link those to side effects that they're experiencing, because both marketing and surveillance is a huge problem.

I agree with Marc-André that it's even worse around medical devices. We very much need the federal government to be involved in ensuring that there are registries for joints, heart valves, and other products at the very least, to ensure that we're tracking what people have inside of them. That's the very least we can expect from the federal government.

The Chair: Dr. Morgan.

Dr. Steven Morgan: I don't think I'll add much to this other than to emphasize that yes, medical device regulation is a particular challenge for a number of reasons.

It would strike me that one of the questions to ask might actually be the extent to which Canada is collaborating with regulatory agencies abroad on device regulation. I know that our regulatory agencies have meetings of what they call the heads of agencies network.

It would seem to me that this would be the kind of topic they should be discussing at an international level, in part because the science undermining devices or medicines isn't just brought to bear to Canada, but is brought to all sorts of markets comparable to us. We basically struggle with very similar problems in different countries. We probably could learn what they might call regulatory innovations from other countries.

Mr. Patrick Brown: That's actually a perfect question; it was going to be my follow-up about international collaboration. I've asked this at previous panels, so thank you, Mr. Morgan, for raising that.

I think of juvenile diabetes, where they're building an artificial pancreas both in Canada and in Australia on parallel timelines, but they're sharing information. Do you believe that in Canada we do enough international collaboration with the health sector in terms of technological innovation? Are there examples that you can pick up to prove it?

The Chair: Your time is just about up.

Quickly, please, Dr. Gagnon, if you want to answer.

Dr. Marc-André Gagnon: One of the main collaborations that I think we need to recognize right now is the sharing of clinical data. The European Medicines Agency is going forward by making full disclosure of all clinical data for drugs and medical devices, starting in 2014. On disclosure of data and on transparency, Canada is still a laggard. It's way behind—

The Chair: Thank you, Doctor.

Dr. Marc-André Gagnon: —and I think this is maybe the first thing that needs to be done, sir.

The Chair: Thank you, Dr. Gagnon.

We'll now go to Mr. Kellway.

Mr. Matthew Kellway (Beaches—East York, NDP): Thank you, Madam Chair.

Thanks to our witnesses for coming here today.

Dr. Gagnon, can I start with you, please? I was flipping through the deck you provided us, which is very much appreciated. On page 25, there's something that you term "A Modest Proposal", which talks about patent restoration and extended data exclusivity. Is that to suggest that the 1987 deal that was implicit in the Patented Medicines Price Review Board makes some sense if enforced and administered properly?

Dr. Marc-André Gagnon: The thing is that the deal is kind of dead now.

Mr. Matthew Kellway: Right.

Dr. Marc-André Gagnon: I don't know.... Basically, we're not enforcing it any more. Drug companies say, "Well, you know, things are different now so this is normal, and we're not respecting the deal anymore." For me, what it would mean, basically, is that if the deal is dead from the side of drug companies, the deal should be dead as well from the side of the government—so maybe not less generous patent protection, but at least transforming the way we price drugs in Canada, the fact that we're always aiming to be the world's fourth most expensive country....

Basically, the idea of "A Modest Proposal" was suggested in the context of the CETA negotiations. The idea is that if you want to go forward with increasing patent protection in order to be more at par with Europe, well, if you want to be at par, decrease patented drug prices by 15%. Scrap the patent linkage system that we have in Canada. Italy tried to implement a patent linkage system, and Europe basically said no, that it could not do that, that it did not have the right to do that, but they're imposing on us to extend even more the patent linkage system.

In these conditions, if then you want to bring in patent restoration, which is something that is also sensible and could make sense, the idea is, well, if you provide any privileges, impose conditions. It is a kind of nonsense to say, okay, let's provide more privileges and magically we'll get some spinoff out of that. This is not how things work. It worked in 1987 because we imposed conditions, and we need to impose conditions now as well.

● (1700)

Mr. Matthew Kellway: So it's in the CETA context—

Dr. Marc-André Gagnon: Yes.

Mr. Matthew Kellway —that this is the kind of bargain. Okay. That's helpful for me to understand.

Dr. Morgan, as I understood your statement, you were suggesting that the way to increase innovation in Canada was to build capacity and that will attract private investment. Could you expand on that notion of building capacity? How does one do that and what does that mean?

Dr. Steven Morgan: I certainly can.

In general, I think, the strategies of countries that have been relatively successful in attracting R and D have been to make strategic investments in personnel and in networks and infrastructure for conducting scientific research. It's investment in landing great minds in this country and, in particular, in regions of the country, so that in a sense you develop clusters of innovation based, in a sense, on great scientific research being done, in part funded by government, in part funded by taxpayers, and in part funded by the industry that will be attracted to the capacity that's there.

Using direct investments is preferable over indirect incentives, based on international evidence, in part because at the very least you're getting a dollar-for-dollar return from your investment in research that's conducted within your borders. Of course, typically you do attract private sector investment that wants to leverage those great minds, those databases, and those networks, etc.

Mr. Matthew Kellway: So with regard to the institutional context for this capacity, are you talking about the post-secondary facilities such as universities, or do you have something else in mind?

Dr. Steven Morgan: In the Canadian context it's a combination of a variety of actors. Most notably you have your university systems, you have your hospital systems, and you have your national agencies that might be related to health innovation strategy.

I would consider targeting investments to areas where we have done fairly well, for instance, in areas of biotech. Canada might actually be a reasonably important player in the era of personalized medicines. In areas like that you'd be leveraging the reality that Canada has a universal publicly funded health care system that allows us to run reasonable clinical trials and collect data on a very large population if trials are run in our country.

The Chair: Thank you, Dr. Morgan. I'm sorry, our time is up. Sorry about that.

We'll now go to Mr. Lizon.

Mr. Wladyslaw Lizon (Mississauga East—Cooksville, CPC): Thank you very much, Madam Chair.

Thank you, gentlemen, for coming to the committee this afternoon.

The first question I have is for Dr. Gagnon. On page 5 of your presentation you show the R and D-to-sales ratio. I need some clarification. If you are listing countries, in Switzerland it looks like they reinvest 35% more than total sales. Can you maybe explain how this works? Where does the money come from?

Dr. Marc-André Gagnon: The R and D-to-sales ratio is basically a ratio comparing the amount invested in R and D in the country to the amount of total sales at the ex-factory price of patented pharmaceutical products.

Switzerland is basically the exception. It is clear on the graph that there are two major drug companies, Hoffman-La Roche or Roche, and Novartis, located in Switzerland. They have massive investment in R and D in the country, and it's a very small country so the sales are very low. That's the reason you have an R and D-to-sales ratio that is over 100%.

Mr. Wladyslaw Lizon: Are you comparing sales in the country? Therefore, for Canada it would be sales in the country because Swiss companies would sell all over the world.

● (1705)

Dr. Marc-André Gagnon: Absolutely, but this is a comparison of national R and D investment in the pharmaceutical sector versus national sales of the products.

Mr. Wladyslaw Lizon: Okay, because if we look at Canada, it's currently under 7.5%, and that includes only Canadian sales. As you very well know, the major market of Canadian-based companies is actually not Canada but the United States of America. Therefore, if I were looking at a clearer picture of the total sales, how much is reinvested?

Dr. Marc-André Gagnon: Okay, I can understand your confusion here.

The idea is that it's only national R and D inside the country versus all the sales of all the companies around the world inside that country as well. So basically in Canada we spent something like $18 billion to buy patented pharmaceutical products in 2011, but what we got in terms of R and D investment in the pharmaceutical sector in the country was $960 million.

So the comparison is based on all investment nationally, but also all the sales of all pharmaceutical companies around the world in that specific country as well. This is what is used here as the main comparator for R and D intensity in different countries.

Mr. Wladyslaw Lizon: Okay, thank you. That's a bit clearer.

The second question is for all the gentlemen and goes back to our topic of technological innovation. Can you give an example from your field of the technological innovations that you are aware of or familiar with that would move the treatment or patient care to the next level?

The Chair: Mr. Morgan, would you like to—

Dr. Steven Morgan: I'll take a step up and in part get back to the question of generic drugs.

The innovations that occurred in the pharmaceutical sector in the eighties and the nineties were profound and important for the health of a large number of people in Canada. It's unfortunate that many people can't afford to fill their prescriptions, but one policy innovation would be to give away those drugs that are now generic to all Canadians for free, and to acquire those drugs using a tendering process that drives the prices down to the point where it would actually cost the government less to give these away than it does today to basically subsidize the purchases of the poor and the elderly.

I really think we need to think about managing health care innovation as a whole, not just one-off technologies. Generic acquisition is one way to manage the technologies of the past and actually secure some savings so that we can better afford the technologies of the future.

Dr. Michael Rachlis: Can I just quickly give a response to that?

The Chair: Yes, absolutely.

Dr. Michael Rachlis: Of course, one way of looking at this is when we have an expensive drug prescribed when less expensive drugs are available, or when quite often drugs are prescribed when they should not be prescribed and when other non-pharmacological therapies—by, for example, chiropractors, physiotherapists, or social work counsellors—are often as effective, or more effective, without the side effects of medication.

To a certain extent, the fact that we have so much mis-prescribing of drugs is a failure of the health professions but also specifically of how we organize primary health care. We still have most family doctors in Canada working not with a professional team of social workers, physiotherapists, chiropractors, and others who could deliver non-drug therapies.

They also are still not working with electronic health records. Canada's record there is very poor compared with other countries.

The Chair: Dr. Rachlis, thank you very much.

We'll now go to Dr. Carrie and Ms. Block. You're sharing your time.

Mr. Colin Carrie: Thank you very much, Madam Chair.

Dr. Rachlis, I want to talk to you for a moment. I'm a fan; I've read at least one of your books. I appreciate your opinion today on innovation and best practices.

You mentioned something earlier about how we have an archaic process of care in this country. I'm wondering if you could give us some advice. What do you think is holding the Canadian system back from adopting some of these innovative best practices?

I had a conversation with a friend of mine recently who was posted down in the U.S. She said that when she had to get some health care, she went to a nurse practitioner first. She had a lesion on her nose. The nurse practitioner took a bunch of pictures of it and e-mailed it to a specialist, who, according to her, was analyzing over 100, sometimes 200, patients a day, whereas in an old model of care, maybe he could see 30 or 40.

You mentioned chiropractors. As well, even in the U.K., to prevent readmission into hospitals, they will send people out, right into people's homes, to give diabetic care. It's a lot cheaper in the long run.

We had a witness earlier who said that in Canada we pay for the most expensive form of care. I was wondering if you could give us your opinion on why we don't utilize other health professionals to their full scope of practice. What is holding the Canadian system back from using these best practices that we're hearing from around the world, and even in our own country?

● (1710)

Dr. Michael Rachlis: The so-called quality agenda in health care is something that all countries have heard of, and some are actually moving on.

I was in the U.K. last week, and Scotland I think is considerably ahead of most jurisdictions in Canada in appreciating that we need to move to make our system more patient-friendly. If we do that, that's the answer to our system: enhanced quality.

I think all systems have trouble dealing with this, primarily because we have providers, especially physicians, who are very powerful at maintaining doing what they have been doing. With that last federal agreement on health, I think one of its biggest faults was that there were not enough mandates in it, and providers ended up getting paid a lot more just for doing what they traditionally had been doing.

I think the federal government has a role in creating dialogues that can move the political agenda around. I think one of the reasons why we're less successful than a lot of countries is that so much of this goes down to the provincial level, and in many small jurisdictions we're not able to sort of move the ball.

I was working with a nurse practitioner almost 35 years ago. I had no idea that this would be still rare now.

I think we know what we should be doing. We have been talking about it for so long that I just know the whole script for any meeting I go to these days. But as opposed to other systems that are, I think, grappling with some of these issues more effectively, we don't do this well in Canada. The fragmentation of a lot of these issues down at the provincial level is one of our biggest problems.

I think the federal government doesn't have to take over provincial jurisdiction, but just to be way more.... Even if it were an effective head waiter—as it may have been described 30 years ago in constitutional terms—I think our country's health care system would be a lot more effective.

Mr. Colin Carrie: Do I have any time left?

The Chair: You have about a minute.

Mrs. Kelly Block: I don't know if I can do justice to the question that I wanted to ask Dr. Morgan.

You may have been answering this in response to another colleague's question, but you've mentioned a number of times a national strategy for innovation in R and D with pharmaceuticals.

I'm wondering if you could explain—in about a minute—how you would engage the private sector, entrepreneurs, that group of people, in a national strategy.

Dr. Steven Morgan: You're going to have to have a consultative process to create a strategy and to identify where your niche areas are. Canada is still lagging in its comparators, for instance, in coming up with a national strategy on personalized medicines. If even half the promises of this scientific paradigm in medicine come true, we really need to be on the ball with that.

So I might start with a process, that might be led by Genome Canada and other partners, around creating a strategy for personalized medicines, and go from there.

The Chair: Thank you very much.

Dr. Fry, we only have a couple of minutes. You have time for one question.

Hon. Hedy Fry: Thanks very much.

I just want to follow up on your statement about basic research. In number four, your emerging trends are indicating that public money funding basic or clinical research is not organized as commercial campaigns.

We've heard that from many people who have come here, that in fact what would happen if you took basic research and you found a way to "build it and they will come", with the basic research going on here that's feeding some of the innovations—including the translational research we need because of our national health care system—this would move. Do you actually believe that if we build it, they will come, i.e. pharmaceuticals from across the country, people who want to look at innovative ways of delivering health care?

The federal government has a huge role because we did this under Technology Partnerships Canada for about 10 years, and then it was cancelled in 2007. So there is a blueprint for doing it. Do you believe it really will pay dividends?

Dr. Marc-André Gagnon: On the question, if you organize basic research based on the idea of getting monetary dividends out of that, I think—

Hon. Hedy Fry: Coming in and investing it.

Dr. Marc-André Gagnon: If, at the university level, you can really develop an important expertise with lots of Ph.D.s and professors, you can do amazing research.

Basic research right now, first and foremost, is already public research, not only in Canada but all around the world. Basically this is what is feeding the beginning of the pipelines of most drug companies. They just acquire some of the promising molecules one can find and bring them into the pipeline.

The problem with that is what we are seeing right now, namely drug companies externalizing more and more research. That in itself is not really a bad thing because we know that innovation happens—with smaller biotech companies, for example—but the problem is why then do we still need the major drug companies in all of this in order to commercialize the product—

● (1715)

The Chair: Thank you, Dr. Gagnon. Thank you very much.

I'm sorry our time is up, and we do have to go into a business meeting, but I want to especially thank Dr. Gagnon, Dr. Morgan, and Dr. Rachlis for their very insightful comments today. They have been very helpful.

I'm going to suspend for two minutes, and then we'll go in camera to committee business.

Thank you so much.

[*Proceedings continue in camera*]