

# When Tea and Sympathy are not Enough: The Catastrophic Gap in Prescription Drug Coverage in Atlantic Canada

9:30 Panel – What Canada has Learned So Far about Catastrophic Drug Coverage



This is the transcript of remarks made by **David Griller**, during the first panel of AIMS “When Tea and Sympathy are not Enough” conference.

*Dr. Griller is a partner at SECOR, where he focuses on life sciences. He has worked with many stakeholders in the pharmaceutical sector, including researchers, multinational pharmaceutical firms, generic drug firms, regulators, start-up companies, grant agencies and spin-offs. He has a Ph.D. in Organometallic Chemistry from the University College London and was active in research for a number of years. He is a Fellow of the Royal Society of Canada and of the Chemical Institute of Canada.*

## **Dr. David Griller:**

My mandate today is really to speak about the relationship between catastrophic drug coverage and innovation. The link may appear a bit tenuous because catastrophic drug coverage is essentially insurance. So it is not necessarily obvious how it should link to innovation.

But I would like to speak about innovation in two senses. One, innovation with the health care system, and then also, innovation within the pharmaceutical industry, because I think with the advent of catastrophic drug coverage and this will prompt us to rethink the way that we use pharmaceutical products in the health care system. So we'll take a fresh approach.

So here are the questions that I would like to address. Let's assume that coverage goes through. I would like to consider what's best for the patient, beyond tea and sympathy, how pharmacare innovation could be encouraged at two levels within the health care system, and then to generate new products. Then I will consider how provinces should respond, because at the end of the day, provinces will implement catastrophic coverage and will manage the health care system.

I think the first important thing to recognize, is that pharmaceutical products have generated a huge beneficial impact in the health care system over the last quarter of a century, and they've led to many cost reductions. There have been major improvements in patient outcomes. In cancer: a steady chipping away at the

disease. In heart disease: death through heart attack is down by about 70% over the last 25 years. Ulcers: now you take an over-the-counter pill and you don't have ulcers anymore. Ulcers used to be operated on 25-30 years ago, but those operations didn't really work, because ulcers were caused by bacterial infection. So people were dragged in and out of hospital and never got better. Diabetes: much improved. HIV AIDS: not cured, but it is sort of under control. In HIV AIDS, cancer or respiratory disease, arthritis, hospitalization times are down by 40-50% over the last 25 years. So there's been a huge improvement, thanks to the use of pharmaceutical products. Many diseases have been eradicated now, through the use of vaccines. Chickenpox, mumps, measles, these are all the diseases which I had as a child.

In fact, to illustrate how we used to manage them, I just want to name-drop here. We used to live in a relatively poor area, in apartment buildings, and one of our neighbours was Vidal Sassoon, the famous hairdresser. He's the only famous person, really, that I know, and his mother was a mentor to my mother. When there was an outbreak of chickenpox, measles, or something like this in one of the families around us, Mrs. Sassoon would tell my mother to go and get the kids to play with the people in this family, and we would contract chickenpox, and we would get mumps or measles, my sister and I. And every day, Mrs. Sassoon would come with jello with grated apple, and check on the children, and that's how it went. That's how those diseases were managed then.

Now there are vaccines for probably between 10-20 diseases, which we've been able to completely forget about. And there are more to follow. There's already a vaccine for cervical cancer. There is work on vaccines for AIDS; there is work on vaccines for Alzheimer's disease. There's a huge body of evidence in the literature that innovation, the use of drugs in the health care system, leads to overall savings. At the front end, you are paying an expense, but the downstream cost of hospitalization is much reduced. They understand this principle very well in the fruit and vegetable business. They know that the first cost reduction to get rid of your produce is the cheapest cost reduction you can do. By the time everything goes rotten you write off the whole cost or your investment is toast. This is a parallel of what happens in the health care system. The first intervention is really the cheapest.

Innovation continues to be needed. We still need cures for many types of cancer, we still need cures for mental illness, and we still need cures for neurodegenerative disease. A lot more innovation is required.

What are things that would specifically impact the patient? We should think about these in the context of catastrophic drug coverage, because we will review the whole agenda. The first thing would be to bring physicians up to best practices. In diabetes, for example, there's a recent study out of Western University, which shows that physicians under-medicate diabetics about 38 percent of the time. There's a very big age bias in treatment. The elderly tend to be under-treated. So there's a lot of sub-

optimal use for drugs. Reducing insurance co-payments for chronic disease is also another thing which encourages patient compliance. It encourages patients to take needed drugs. And Karen specifically mentioned the work of Pitney-Bowes in this area, which I think is very interesting. Pitney-Bowes actually reduced or eliminated co-payments for diabetics in its workforce, because it found that a lot of them were showing up in the emergency rooms of hospitals. Now Pitney-Bowes is an interesting case, because the firm was managing the cost of medication, the cost of hospitalization, and the cost of disability, and it picks up the losses in productivity. So it starts to manage in a holistic way, and it found that reducing the up front cost to the patient actually had a huge and beneficial impact in reducing the health bill for the company as a whole. So even if you forget the more ethical issues associated with patient care, just from a purely economic point of view you do better by paying the up front cost, which is really the spirit of catastrophic drug coverage for chronic disease.

And of course, we need holistic approaches to disease management in order to get patients to comply. That means more information, nurses, better community development and so on.

The other important thing which is very critical for the patient is having multiple choices of medicines, because people react to medicines in very different ways. In extreme cases, for example, in the case of breast cancer, the drug Herceptin which has recently come out will treat only about 30 percent of patients that have a very specific genetic variation, which causes a protein to be expressed in their cancer cells. The same would be true of the drug Rotoxin in non-Hodgkin's Lymphoma. These are extreme cases, but generally, people respond to drugs in different ways, and their doctors know this. If they respond poorly to drug A, they get put on drug F. So if you reduce diversity, you actually reduce outcomes. What you need to do is match patients and pills. There are new diagnostic tests coming forward which allow this to be done quite explicitly. So in order to optimize outcomes for the patients, we need to maximize diversity.

So the keys to success for improving health and cost savings, compliance, and getting the right drug to the patient, are not reducing the formularies, but expanding the formularies.

If we think back to the way that Kirby described catastrophic drug coverage in his report, there was a notion that the federal government would put about a billion dollars into the system and this would be distributed over all provinces, and there would be some winners and some losers. Ken, this morning, when he described the situation, described the impacts on Atlantic Canada, but presumably, in any national scheme, all provinces would want a share. Under that situation some provinces would actually come out as winners. Ontario, Quebec, Manitoba and Saskatchewan would actually gain cash. The Atlantic Provinces would presumably expand their drug coverage in the way that Ken suggests. Some costs would be incurred, but as

I've suggested if there's good innovation there could be the promise of long-term savings. That's to say, spend on pills, reduce hospitalization costs. And the question then remains, what will the attitudes of stake holders be towards innovation? Will they put the patient at the top of the health care agenda?

Well, here are some of the trends which are already emerging. Ontario, which would be a good cash winner, has a generally negative approach. It is now squeezing the drug budget, without too much regard to the hospitalization cost. It's limiting doctor and patient choice, in the availability of drugs, and it is forcing drug substitution at the pharmacy. So if your doctor prescribes drug A, but drug B is cheaper, the pharmacist will automatically switch you to B.

Quebec has a much more positive attitude. It's been, over the years, very supportive of the pharmaceutical industry. It is investing heavily in health sciences. Its reimbursement rules favor greater diversity of pharmaceutical products, and as a consequence of this, is likely to capture more R&D from pharmaceutical firms. It already has twice as much as Ontario on a per capita basis and firms will probably switch their investment increasingly over to Quebec. And in terms that Brian was describing, Quebec is moving somewhat more towards its actuarially-based system than most other provinces. They're learning this from Kaiser Permanente, the HMO in California, so they're moving in the direction which you are proposing, which is obviously the best way to go.

How will firms react? Interestingly enough, firms, and we speak to a lot of firms, they want to be judged by what's best for the patient, and they're willing partners in research and disease management, and that's to say they would like their drugs to be assessed on the basis of whether they deliver a benefit or not, because they know that there's no win in trying to promote a drug that at the end of the day doesn't have a benefit. They're very sensitive, the Canadian firms, are very sensitive to global pressures for R&D investments and they're constantly struggling to bring R&D money into Canada, but other countries, China and India, are now producing research at about a tenth the cost that we are, and the United States, with its fairly liberal market for pharmaceutical products, is also attracting a large amount of R&D investment.

So we have to think how we in Canada, from an industrial innovation point of view, ought to behave. Catastrophic drug coverage will prompt a rethinking of our attitudes in this area. We do have a very strong life science innovation agenda, but less than 40 percent of the drugs approved by Health Canada as being safe, efficacious, and of good quality, are actually covered by provincial insurance. So 60% of the new drugs are toast in the system as we have it now.

What would the opportunity in Canada be for innovation if we rethink this whole thing? Well, the status quo now is managing health care spending in silos. We try and control the drug budget, typically, without consideration of the hospital budget. This is the antithesis of the approach which I mentioned that Pitney-Bowes has used. And we fail to optimize the overall impact of spending in the health care system. The opportunity and innovation for us, is to act in the best interests of the patient. Not because, necessarily, it is nice from a moral and ethical point of view to do that, but because it makes sense from an economic point of view to act in the best interests of the patient and use any new funding that comes under catastrophic drug coverage to expand choice, to expand coverage. We should do the smart thing, which is to assess drugs by measuring their outcomes, the economic and the health outcomes, and to rely on economic analysis of costs and benefits.

In Atlantic Canada, there is an important innovation opportunity that could be grasped, which is to conceive of a major project or maybe multiple projects in health outcomes research. What happens when about 600,000 people living in Atlantic Canada go from being uninsured to insured. That is a huge number of people with which you can do outcomes research because their status will change, more or less overnight. So you have a potential benefit from doing this. You have an opportunity to optimize health care, to understand and to reflect on how the system should be ideally structured.

In Nova Scotia, in particular, has the ideal population and size. There are excellent resources, concentrated in Halifax, but all the other regions of the province are readily accessible from Halifax. And then there is also the founder population, whereby you can trace families back through generations. Within the context of pharma-code you are now making genetics research of this tremendous tool, to be able to understand the genetic component in health care management. And certainly, potential partners in this would be governments, granting councils, pharmaceutical firms, and IT suppliers. So there is within this switch in Atlantic Canada an opportunity to do a really good innovation experiment.

To summarize, what could innovation look like under catastrophic drug coverage? Based on the evidence it makes the most sense to put the patient first, make more drugs available, encourage best practices, measure outcomes, and then refine and go through the loop again. It would be an innovation strategy, but it would also be a cost minimization strategy. And all of you here today, are here because in some way or other, you'll influence this agenda. So I would strongly encourage you to consider such an approach with a patient at the centre of consideration, increasing diversity of drugs, and basically taking an outcomes approach to the system.

I hope we'll think along on the same wave length, and you will act, in order to bring this about. Thank you very much.