HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Health

HESA • NUMBER 113 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Tuesday, October 2, 2018

Chair

Mr. Bill Casey

Standing Committee on Health

Tuesday, October 2, 2018

● (0845)

[*English*]

The Chair (Mr. Bill Casey (Cumberland—Colchester, Lib.)): Okay, we'll call our meeting to order. Welcome, everybody, to meeting number 113 of the Standing Committee on Health. I would like to welcome all of our guests back for a repeat performance. There will be no votes today, I hope. We are going to continue our study on diabetes strategies. There will be no opening statements. We'll just go directly to questions.

First of all, I want to introduce, from Diabetes Canada, Kimberley Hanson, Director of Federal Affairs, Government Relations and Public Policy; from the Ordres des infermières et infermiers du Québec, Lucie Tremblay, President, and Joël Brodeur, Director of Professional Development and Support; from Diabetes Action Canada, Dr. Catharine Whiteside, Executive Director; and, by video conference, we have from Juvenile Diabetes Research Foundation Canada, Mr. Dave Prowten, President and Chief Executive Officer, and Mr. Patrick Towhill, Director of Government Relations.

I am going to go right to questions.

Ms. Sidhu.

Ms. Sonia Sidhu (Brampton South, Lib.): Good morning, Chair.

Good morning to everyone. Thank you for being here.

Canada is a very diverse country. As we know, diabetes affects certain communities more than others. For example, South Asians are more likely to develop type 2 diabetes, as are other communities such as the indigenous. What are the unique challenges that Canada faces when trying to develop a diabetes strategy that works for everyone equally? Some communities are facing more challenges than others. What are your thoughts about that?

Dr. Whiteside, perhaps you could start with that.

Dr. Catharine Whiteside (Executive Director, Diabetes Action Canada): This is a critically important question for Canada. I draw to your attention a recent publication from the Public Health Agency of Canada. It was published this summer, so it was after our initial meeting and does not appear in the documents we have prepared. This is a document focused on the health determinants based on inequalities in Canada. One of the major items raised in the chapter on diabetes is, in fact, ethnic groups. I draw that to your attention for reference.

Along with a number of determinants of health, including lower socio-economic status and education status, another issue is, in fact, those diverse groups in Canada in which there is a predilection for diabetes. These include East Indians, South Asians and, of course, our indigenous communities. To tackle this issue, one of the opportunities is to understand how to segment populations in Canada into high risk and identify solutions that are community-based particularly in primary care.

● (0850)

Ms. Sonia Sidhu: My riding is Brampton South, and I come from Peel Region. The 5-2-1-0 Healthy Communities Initiative did a report saying that at the present rate, it is expected that one out of every six residents in Peel Region will have diabetes and that the direct costs of medication and supplies range from $1,000 to $15,000 annually, which is a big number.

In July you were there when, on behalf of the health minister, we announced research money of $22.6 million—that was with other partners too—to reduce the incidence of diabetic foot ulcers, one of the most common and feared side effects of diabetes. The amputation rate is very high in Ontario. I know because I worked for 14 years as a health care professional. I ran a diabetes clinic. As a research coordinator, I know how hard it is when somebody loses a limb. There is a big fear of losing a limb. Untreated sores can lead to amputation. How will this funding make a difference in the lives of people living with diabetes?

Dr. Catharine Whiteside: Ms. Sidhu is referring to a very important study funded by the Canadian Institutes of Health Research, conducted in Ontario and a number of other provinces, looking at the highest risk individuals with diabetes, and demonstrating the importance of chiropody-led and nursing-led care pathways for individuals to address the issue of the prevention of amputations related to diabetic foot ulcers.

In the care of people with diabetes, complication rates are highest in the highest risk groups. You've just heard us discuss some of those populations at highest risk. In Canada today, we really have a very poor approach to the treatment of diabetic foot ulcers. In Ontario alone, every four hours there is an amputation for untreated diabetic foot ulcers. In Alberta this has been studied, and Alberta Health Services has identified that 85% of these amputations could be prevented.

The study that Ms. Sidhu is presenting is one to identify those care pathways that need to be initiated for the highest risk groups. We believe in a combination of early detection, particularly in the context of primary care, and potentially segmenting those people with highest risk into specific care that is chiropody-led. This doesn't require physicians. It really is a nursing issue. In most provinces, particularly in Ontario today, chiropody care in the community is not paid for. This is one of the biggest barriers to care. Furthermore, medication costs for individuals at high risk may not be covered by current provincial plans.

These are all areas that need to be studied, with evidence to support new pathways for the prevention of diabetic foot ulcers and amputations.

Ms. Sonia Sidhu: My next question is for JDRF.

The Minister of Health announced $7.7 million for type 1 diabetes research, in partnership with the JDRF. The funding will support the clinical trials of groundbreaking therapies in order to accelerate the development of new treatments for people living with type 1 diabetes. How has this investment helped in the fight against diabetes in Canada, especially in the Peel area? How can you help the patients from that area, where there's a high rate of diabetes?

Anybody from JDRF, Patrick or Mr. Prowten, can give the answer.

● (0855)

Mr. Dave Prowten (President and Chief Executive Officer, Juvenile Diabetes Research Foundation Canada): Can you hear me okay?

Ms. Sonia Sidhu: Yes.

Mr. Dave Prowten: Some of the trials, MP Sidhu, are based in Ontario and are going to be taking advantage of things like registries and having care provided using telemedicine. In essence, people will be able to access their care when they need it the most. This is actually trying to change the health care system. One of the other trials is actually testing a new therapy that's approved in type 2 diabetes for people with type 1, and that's being led by SickKids. Many of your constituents would be followed by a SickKids doctor. I think these are very important.

Some of these other projects that we're now working on with CIHR are to really understand the genesis or the immunology of type 1 diabetes, because it is an autoimmune disease. I think what you're going to see are advances in treatment and also advances in the understanding of how this disease begins. Ideally, in the future, we'll be able to shut the disease off before it even begins.

Ms. Sonia Sidhu: You have cited that an average of 830 diabetes patients in Ontario die every year because of a lack of access to insulin. If insulin were covered in a national pharmacare program, would this mean that no patient would die due to a lack of insulin? How can we prevent Canadians from a lack of access to medications, especially insulin?

Mr. Dave Prowten: This is a really important question.

Insulin was discovered in Toronto nearly 100 years ago. It is not available to every person in Canada. We believe that it should be part of a national pharmacare strategy and that all insulin should be available. There have been a lot of advances made, so giving people the most basic of tools to manage their type 1 diabetes, which is insulin, is a very important step that could be taken to prevent the deaths that you're referring to.

The Chair: Thanks very much.

Ms. Gladu.

Ms. Marilyn Gladu (Sarnia—Lambton, CPC): Thank you, Chair, and thank you to the witnesses for appearing today.

Welcome, Ms. Hanson.

Last year there was an issue where people with type 2 diabetes who were receiving the disability tax credit stopped receiving it because the Liberal government changed their policy. Has that been remediated since?

Ms. Kimberley Hanson (Director, Federal Affairs, Government Relations and Public Policy, Diabetes Canada): We understand that subsequent to their announcement of their intention to do so on December 8, the CRA reviewed about 2,300 cases of people with diabetes who had been disallowed between May and December of 2017.

On review, they approved 58% of them but re-rejected 42%. We've understood from the director general at the CRA that they don't plan to notify the 42% who were re-rejected of their status, so we've recently written a letter to them saying that we really feel that it's important, for the purposes of transparency and equity, that these nearly 1,000 people who were re-rejected be notified of that status. We're hoping they will do so shortly.

Ms. Marilyn Gladu: Those people who are rejected, that 42%, will also lose any of the retirement disability savings plans that they had. Is that true as well?

Ms. Kimberley Hanson: That's correct. If a person is rejected from the disability tax credit and they had a registered disability savings plan, they would be required under the law to close that RDSP, and any monies that the government had contributed in the form of grants or bonds to that RDSP would be clawed back.

Ms. Marilyn Gladu: Yes. That is really unfortunate.

Turning to the rest of you, I've been listening to the testimony and following up on the briefs, and I'd like to hear from everybody on what you think the federal government should do to address this issue. I've heard about about chiropody care, medication costs, including insulin for those who can't afford it, telemedicine and broadening the program for kids.

I'm going to start with you, Dr. Whiteside. Tell me what you think the federal government should do.

● (0900)

Dr. Catharine Whiteside: From the perspective of Diabetes Action Canada, we are very much in favour of a national diabetes strategy that would begin to work with the provinces and territories on the standardization of early diagnosis of diabetes complications, on diabetes itself, type 2 diabetes, and on ensuring that the best evidence is brought to bear on solutions for individuals with diabetes, both in the treatment of their diabetes and in the prevention of their complications.

The evidence is available. The technology is available. The question is how to influence the current health system, province by province and in the territories, to ensure that people with diabetes are receiving the most timely and effective care.

Ms. Marilyn Gladu: That's excellent.

Monsieur Brodeur.

[*Translation*]

Mr. Joël Brodeur (Director, Professional Development and Support, Ordre des infirmières et infirmiers du Québec): Hello,

In Quebec, some specially trained nurses were recently granted powers to prescribe medicine as part of front-line treatment. They can treat wounds prior to medical treatment and offer front-line care in the community. The can also partner with a doctor in more serious cases where the doctor's expertise is essential.

I think measures such as these should be applied more broadly and the right to prescribe medicine should be expanded.

Ms. Marilyn Gladu: Thank you.

Ms. Tremblay, would you like to add something?

Ms. Lucie Tremblay (President, Ordre des infirmières et infirmiers du Québec): I have a very serious concern.

Ms. Sidhu was talking earlier about populations that do not receive the care to which they are entitled. We have a very specific situation in Quebec, which we pointed out the last time we were here. It is that nurses' initial training does not prepare them to treat diabetic patients in the community.

As Dr. Whiteside noted earlier, people must have access to care nearby, both prevention and quick treatment. Since not enough nurses receive that training, we fear that access to care could be reduced for all Quebeckers. That means that 8 million people do not have equal access to care to what is available in the rest of Canada. We know that close to 250,000 Quebeckers currently have diabetes and do not know about it.

It is very difficult to access care, yet it is essential for all Canadians to have access to care quickly, regardless of the province they live in. This is a real calamity because people are having amputations which could have been prevented. People are suffering from renal insufficiency which could have been prevented. Something has to be done. Now is the time to act.

[*English*]

Ms. Marilyn Gladu: Excellent.

I'm going to go to the video conference.

Dave Prowten, we'll start with you. What do you think the government should do?

Mr. Dave Prowten: I'm going to build on two things.

One would be to create a type 1 diabetes registry. Right now, we actually have very poor data that tracks people who have type 1 or type 2. Actually, they're very different diseases and we need to understand that. That could lead to different models of care for people. That would be a very important initiative and project to undertake.

The second is that we're starting to understand the genesis of this disease. We could have things like screening programs to understand who's going to get this disease and to shut it off before it begins. If we could actually prevent people from getting that disease, that would be incredible.

Two things for us would be a type 1 diabetes registry and a screening program.

Ms. Marilyn Gladu: Okay.

Mr. Tohill.

Mr. Patrick Tohill (Director, Government Relations, Juvenile Diabetes Research Foundation Canada): Obviously, like the other organizations here, we support the development of a national diabetes strategy and the diabetes 360° initiative that our colleagues started. We'd like more funding for research to prevent emergencies like diabetic ketoacidosis and to reduce emergency room visits due to diabetes, due to decay, and due to hyper- and hypoglycemia. These are all good areas that we should be exploring.

Ms. Marilyn Gladu: Okay.

Ms. Hanson.

Ms. Kimberley Hanson: I couldn't agree more with everything that the other witnesses have said. In fact, the final recommendations of diabetes 360°, which were published since we were last here at committee, really took into account all of those witness recommendations. They include that we should establish a national repository of information about diabetes; that all care should be standardized and all nurses and health care providers should be taught according to a set of standards; that better screening should be done so that everyone who lives with diabetes or is at risk of it is aware of that status; and that treatment should be standardized and made more available to all Canadians regardless of which province they live in or whether they live in a remote or a rural area, etc.

Those are all recommendations that have been factored into our approach.

● (0905)

The Chair: The time is up. Sorry.

Mr. Davies.

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you, Mr. Chair.

Thank you to all the witnesses, particularly those who have come back. Actually, all of them came back.

Ms. Marilyn Gladu: Again and again.

Mr. Don Davies: Yes.

Dr. Whiteside, your website states that complications are costing us $16 billion per year and that this cost is rising in Canada.

Can you please expand on that figure and tell us a bit more about that?

Dr. Catharine Whiteside: That's correct. Thank you for looking at our website, Diabetes Action Canada.

The cost that has been quoted is a combination of direct and indirect costs. Direct costs refer to hospital, physician and other remunerated costs related to provinces and territories, but the indirect costs are the costs to patients and their families, societal costs. Both of these costs are rising.

The reason is that both the prevalence of diabetes and its complications are rising in a population that has increased risk for diabetes, both type 1 and type 2, in Canada. This constitutes a major epidemic, I would say, of disease in Canada. Unless we intervene in Canada and unless we intervene to provide more timely diagnosis and treatment of diabetes and its complications, those costs will continue to rise.

Mr. Don Davies: This may be an unfair question but, as succinctly as you can say, what are the top one or two things you would do to start addressing that?

Dr. Catharine Whiteside: The first intervention that is required is really to identify those at highest risk, and that will require intervention at the community and primary care level, using methods that are simple. In other words, it will require, in any primary care practice, enabling a prevention practitioner, for instance, who could be a nurse, to identify those individuals and intervene with them with a shared decision-making set of targets for intervention. This means glucose control, obesity control, cholesterol control—all the risk factors with intervention and early diagnosis. This has been accomplished in other countries like Sweden, where the cost of diabetes care has been reduced by intervention early on.

Mr. Don Davies: Thank you.

Ms. Hanson, Diabetes Canada's submission to this committee's study on universal pharmacare said the following:

> Cost barriers are particularly difficult for chronic disease patients: research shows that 23% of people with chronic disease skipped medications due to cost, compared to 10% in the overall population. Similarly, 25% of people with diabetes who responded to a CDA's survey in 2015 reported that their adherence to therapy was impacted by cost. In 2014, 30% of people with diabetes that responded to a Statistics Canada survey indicated they had no insurance for equipment or supplies to monitor blood glucose, and 15% had no insurance to pay for prescription medications.

I have two questions. Number one, would you favour a universal pharmacare program which ensured that all diabetes patients had universal access to the diagnostics and treatment they need? Number two, can you tell this committee a bit more about the cost-related barriers to treatment and care faced by Canadians living with diabetes?

Ms. Kimberley Hanson: We know that costs, as you identified, are a significant barrier for people living with diabetes. Depending on where in Canada you live, what other private insurance you have and what your treatment protocol is for your diabetes, it can cost a patient out of pocket up to $15,000 a year to live with diabetes. That's a prohibitive level of cost.

We know the vast majority of people with diabetes face costs of at least 3% of household income, or $1,500 a year, which the Romanow commission identified as a catastrophic level of out-of-pocket health costs. It really is a barrier, as you identified, Mr. Davies, to people following their prescribed care regime which imperils their health in the short term and long term, which costs our health care system.

It's critical that we address those barriers in terms of costs. Those apply, I really want to stress, not only to medications, but also to the devices and supplies required as part of diabetes care. I quip sometimes that insulin doesn't do much good if you haven't a syringe to inject it.

We would definitely support a national approach to pharmacare that would ensure that all Canadians have access to the right medications that they need at the right time. That would also include devices and supplies such as test strips, syringes, and for many with type 1, some with type 2, things like insulin pumps or continuous glucose monitors that can really make the difference in the long-term health prognosis of the individual with diabetes.

● (0910)

Mr. Don Davies: Thank you.

This question is for anyone who would like to answer it. In his spring 2013 report, the Auditor General said this:

> The success of the Canadian Diabetes Strategy depends on partnerships that are only partially in place. The Agency established a forum to get advice from diabetes experts, but it has not functioned as intended. A committee established to coordinate activities within the federal health portfolio is no longer active. For example, the Agency aims to deliver evidence-based diabetes policies and programs, but it has established no mechanism for collaborating regularly with the Canadian Institutes of Health Research on its research needs. As a result, federal diabetes activities are fragmented, and the impact of efforts and money spent has not been maximized.

Has anything improved in the last five years since 2013? Do you have any advice to give us as a federal committee as to how we could address those concerns?

Ms. Kimberley Hanson: Perhaps I could start. We really took those findings of the Auditor General very much to heart as we began the effort of developing the diabetes 360° strategy. I think a critical underpinning of it to date has been the collaboration among 120 expert stakeholders, many of whom are here today from across the country. All of our recommendations are founded on the principle that this ongoing collaboration among various levels of government, among civil society and the private sector, is critical in order to operationalize a strategy moving forward.

I think the other important thing that the Auditor General called out in that report that is a critical foundational element of diabetes 360° is that we have to establish as quickly as possible a mechanism to understand the measurable impact of the interventions that we propose.

Dr. Whiteside talked about establishing a national diabetes repository. That is essential in order for us to be able to understand whether we're actually moving the yardstick in terms of reducing the burden of diabetes on Canada with the interventions. That will be one of the key pieces we'll implement right away as part of diabetes 360°, and that will help avoid the outcome that the strategy would suffer from a lack of measurable impact the way that the last one did.

Mr. Don Davies: Thank you.

The Chair: Your time is up. I'm sorry.

Mr. Grewal, you have seven minutes.

Mr. Raj Grewal (Brampton East, Lib.): Thank you, Chair.

My apologies to the witnesses for being late. The traffic in Ottawa was more than I anticipated.

I'm a new member of this committee. I used to be on the finance committee.

I read the Auditor General's report which said, “seven years after the renewal of funding”—for the Canadian diabetes strategy—”the Agency still does not have a strategy in place to guide its activities relating to chronic diseases, including diabetes.”

As a practical example, in Brampton East, 86% of our population is associated with a visible minority, which is the second highest visible minority population in all of Canada. There is a huge South Asian population, Sikhs, Hindus and Muslims, including my own family. I just got married this summer and all the food had sugar in it, from breakfast to evening. Diabetes is a massive concern in our ethnicities. In my generation, we're much more cognizant of eating healthier, going to the gym and being physical active.

A lot of the testimony focused on prevention, to catch this early on. Why isn't it being caught early on? Is there a correlation with people not doing their annual physicals? Is that why it's not being caught early on? They do blood work every time I have a physical and they check for this stuff. Are people not having their physicals? If we had a concentrated strategy for sending people to the doctor, would that help?

They are broad-based questions, so everyone can answer.

● (0915)

Dr. Catharine Whiteside: Perhaps I could start.

We know that the prevalence of diabetes and its complications really focuses on those populations with risk related to socio-economic factors. Again, I referred to the Public Health Agency of Canada's report this summer indicating that individuals who live in a lower socio-economic bracket have over four times the risk of developing diabetes as compared to those in the highest socio-economic bracket.

The population issues are not just related to ethnicity. You are absolutely correct. South Asians and Asians are more susceptible to diabetes and its complications, but the idea is to understand how to intervene with any at-risk population early on to prevent diabetes. It's not just a health issue. It's also a social issue. It's an education issue. It's a food security issue. It's an issue that requires multiple levels of intervention, so not just health, but intervention in schools. Its a public health issue that requires intervention in communities.

I would be interested to know how the community in your riding could band together and begin a program that would intervene, with cultural sensitivity and with education, about how to prevent diabetes. It's really a multi-factor disease that requires multi-factor intervention, not just a trip to a doctor.

Mr. Raj Grewal: I didn't want to simplify it that much by inferring that it's just a trip to the doctor. I'll give you an example again, which comes from my very narrow lens on the topic.

My riding is upper middle class, where the average house price is $1 million. It's still predominantly South Asian, but the socio-economic factors aren't the factors driving the diabetes. It's the “I want to eat what I want” attitude. I have this conversation daily with my dad. He's a heart patient. He's not a diabetic, but I'm shocked that he's not. He just eats whatever he wants and that's just how he's going to live his life. There are programs in Punjabi, Hindi and Arabic about diabetes. The community knows full well that they're at the higher end of this. They hear about it on ethnic TV programs. It's not making a difference at all.

Our community also believes in going to the doctor, especially the seniors. It's almost like a social outing for them. My grandma, when she was alive, used to go to my family doctor and it was a once-a-week trip, even if there was nothing wrong with her and she wasn't sick. It goes back to the question that, for example, schools in Peel Region have made a concerted effort to take away anything that has sugar in it, from the time that I went to high school and middle school. We're obviously understanding the impact.

Parents take their kids to the doctor, so I don't understand why we wouldn't be catching it at a younger age. Kids that go to university have access to medical services as well. Every trip to the doctor is free. My question still focuses on how you get people to get the test done.

Ms. Kimberley Hanson: I can add to what Dr. Whiteside said. You raised some excellent points. There are so many factors that contribute to the risk of people developing diabetes. Even if everybody went to their doctor for an annual physical, one of the challenges we face right now is that not all health care practitioners are screening people for the risk of diabetes consistently with the clinical practice guidelines that are based on best practice.

One of the things that diabetes 360° would do is work to address that as quickly as possible by integrating prompts within electronic medical record systems and that kind of thing, to make sure that if your grandma goes to the doctor, any doctor or nurse she sees will screen.

The second thing is we need to make screening more available where people are, so maybe in the pharmacy or the grocery store or the community centre, so that people are more likely to become aware that they're facing the risk of diabetes.

Unfortunately, it's the kind of thing you have to keep doing, because one year you might not have diabetes or prediabetes, but the next year that might have changed. It's not a one-time thing that you can do and then you're done.

Overall, we have to try to find ways to make screening and treatment more consistent across the country, as well as improving the primary prevention environment the way that Dr. Whiteside was identifying. All of those are part of our recommendations.

● (0920)

Mr. Dave Prowten: If I could make one additional comment, it would be that there's a difference between type 1 and type 2 for prevention and screening. You're talking a lot about type 2, but there is some new research going on that suggests we could screen children and look for biomarkers at ages three and five, and determine who's on a trajectory to get this disease. If you know which individuals are predisposed to it, you could then develop intervention strategies for those people.

I just wanted to delineate the difference between a type 1 and a type 2 strategy.

The Chair: Thanks very much.

The time is up, but thanks for your questions, and we are certainly pleased to hear about your grandmother.

We're starting our five-minute round.

I want to go to Mr. Lobb now.

Mr. Ben Lobb (Huron—Bruce, CPC): Thanks very much, Chair.

My parents and Mr. Grewal's parents have a lot in common. I wonder how mine don't either sometimes.

Voices: Oh, oh!

Mr. Ben Lobb: One question I have is which provinces will pay for the testing strips. Which provinces will do that today?

Ms. Kimberley Hanson: Most of the provinces have some coverage for test strips under certain circumstances. If a person has type 1 diabetes they generally have much broader access to test strips than if they have type 2 diabetes. Different provinces have different limits. For example, Alberta's provisions for test strips are quite low. Ontario's are higher, and then there are programs that are available if a person is a senior or on social assistance. It really varies.

Mr. Ben Lobb: In Ontario, for example, I've talked to many seniors about this, and they tell me that if it's a choice between buying the strips or having money to pay their heating bill, they're going with their heating bill. We're doing this study here, and it's as basic as that. The provinces have to step up to the plate here. We can have conference after conference on how to do this, but if a 70-year-old widow can't test her blood levels at regular intervals.... I asked her and she said, “Well, I just go by feel.”

I know there's a lot of brain power looking at this issue, but if the provinces don't want to do this, it's never going to work.

Ms. Kimberley Hanson: You're absolutely right.

First, it is critical that people have access to the test strips they need based on their experience of diabetes, and that really varies from individual to individual. That's why we stress that coverage for devices and supplies such as test strips must be part of a national pharmacare approach, because that is just as critical as the insulin or the metformin those people need to live.

You're also right that the provinces have a critical role to play in implementing this strategy. Really, the diabetes 360° recommendations are founded on the basis that we will collaborate with the provinces and the territories in order to implement them. We want to create greater alignment from one province to another, wherever possible, in the coverage available. We think this is possible based on the state of negotiations we've been having with the provinces to date.

Mr. Ben Lobb: I just can't imagine the succession of health ministers and deputy ministers who are within each province and they don't know this. They have money for almost everything else when it comes close to an election, but for something like this which is so common sense, there is no money. It's probably political will and an old system at work.

There's a company in Hamilton which I toured in the spring. They are a software company specifically for chronic health disease issues, specifically around diabetes and other issues. It's a great Canadian story about a female CEO. Guess where they sell all their products? They sell in the United States of America. I asked her why. It's pretty easy because Medicaid and Medicare have framed it so that doctors and the clinics they practise under are forced to have a system where patients who have left the hospital don't go back because they aren't following their diet with respect to chronic diseases.

You asked a question around why not our provinces in this country. There's no system in place to allow to pay for these devices to be implemented and help. There's a high rate of uptake. There's a high rate of success. In the United States they're signing up thousands and thousands of patients every month, yet we have a system here where we can't do anything about it.

What do we do to break through here? It's almost like all the answers are there, but it's just that nobody has the will to get it done.

● (0925)

Ms. Kimberley Hanson: That's exactly why a strategy is so needed. Currently today, we have no overarching framework, no guidelines, no standards that we're working towards, no targets that we're working towards in any kind of coordinated way.

We think that strategy can really help achieve that. It can look at the health care system from a systems perspective to ask why we aren't incenting health care providers to ensure that their patients don't need to come back. There are actually countries where doctors are paid by their patients not coming. That has other issues associated with it.

I think that there are opportunities to find ways to make the system work much better if we could do it in a coordinated way and with an understanding of the outcome of our interventions.

The Chair: Sorry, but the time is up.

Mr. Ayoub, you have five minutes.

[*Translation*]

Mr. Ramez Ayoub (Thérèse-De Blainville, Lib.): Thank you, Mr. Chair.

Thanks to the witnesses for being here once again.

I will continue in the same vein as my colleague, Mr. Lobb.

We certainly have a lot of information, and we have talked about research before. We know there are action plans. According to research since 2009, there is a difference between treating people early and treating sick people who require immediate care. This is an urgent issue. I will not go into the details, but I don't think we will find a quick solution.

Before we talk about urgent matters, let us try to figure out what has been ineffective since the first action plans, the first observations, because nearly 10 years later, we are no further ahead. The studies have apparently not shown any concrete improvements or change of course.

So my question is fairly simple. What is not working—we have answered that in part—and what do we have to improve now? What best practices from elsewhere in the world can we draw on?

I invite anyone who wishes to answer to take the question.

Ms. Lucie Tremblay: First, I think we have to make what is invisible visible.

Until a person has been diagnosed with diabetes, has been identified as diabetic and has access to care, that in itself is a major problem. I have heard about a register to notify the persons affected and provide for early intervention. As a result, I think we need to invest more in prevention, in something that is invisible. As one of my friends often says, an ounce of prevention is worth a pound of cure.

Contrary to what Mr. Grewal said earlier, not all Canadians are aware of this. There is still a lot of work to be done in the areas of prevention and health promotion. That involves more than a mere visit to the doctor; a real continuum of measures is needed. Although diabetics need access to needles, injection supplies and test strips, they should also benefit from prevention and health promotion policies.

Mr. Ramez Ayoub: Who should do that?

Ms. Lucie Tremblay: I think the message has to be clear.

Mr. Ramez Ayoub: Where should the leadership come from?

Ms. Lucie Tremblay: Dr. Whiteside said earlier that certain countries have managed to stand out. At some point, we in Canada have to send a strong message.

Mr. Ramez Ayoub: What is preventing us from doing that right now? What is in the way of showing leadership? Why is there no leadership?

Ms. Lucie Tremblay: I will let others answer your question. They probably know more about it than I do.

Mr. Ramez Ayoub: Dr. Whiteside, let me turn to you.

[*English*]

Do you want to answer that question? Where is the lack of leadership?

Dr. Catharine Whiteside: I think the lack of leadership is actually sitting with the provinces and the provincial ministries of health. As Mr. Lobb has said, this kind of issue needs to be prioritized politically.

If we look around the world.... I take Sweden as an excellent model. Sweden is the size of Ontario. Ninety per cent of individuals with diabetes are registered. They're followed carefully and the outcomes are tracked. They have the best outcomes for diabetes and complications in the world because they use information and tracking of performance as the gold standard for improving care.

It's the lack of tracking individuals with chronic disease—like diabetes and its complications—province by province, that really hides this issue of lack of care.

● (0930)

Mr. Ramez Ayoub: How do we compare with Sweden, for example, on the prevention side and the identification?

Dr. Catharine Whiteside: We compare relatively poorly. I draw to your attention a very important assessment of value-based outcome measures that was published by the Economist Intelligence Unit in 2016. This indicates that one of the very important shortcomings of Canada, across the provinces, is the lack of registries of individuals with certain types of diseases. This is in contrast to a country like Sweden, where most of the chronic diseases—heart disease, diabetes, kidney failure—are all tracked, measured and managed in community sites that enable the individual with a disease to co-design their prevention strategies with health care professionals.

That is the model I think Canada should adopt. I think it could be a fundamental outcome of a national diabetes strategy, if the provinces are willing to work on that strategy.

Mr. Ramez Ayoub: Thank you.

The Chair: Thanks very much, but the time is up.

We are moving to Mr. Webber.

Mr. Len Webber (Calgary Confederation, CPC): Thank you.

I have a couple of questions on the actual products that are out there. For example, insulin pumps haven't been brought up.

A few years back, during a provincial election in Alberta, there was a lot of talk about the coverage of insulin pumps and who would provide it if they were elected and who would not. Of course, I just assumed at the time that test strips and syringes and all that were covered in Alberta, but Kimberley, you mentioned that's not the case in Alberta or in Canada.

Could you elaborate on that? Are any of the provinces doing this right?

Ms. Kimberley Hanson: Currently, there are critical gaps in what is covered in terms of diabetic supplies and devices in every province and territory in Canada.

I'm remiss in not having mentioned an insulin pump because I have been wearing one for 23 years and literally couldn't live without it.

In this day and age, it's actually kind of shocking to me that we're still at the point where, in many provinces, there is no coverage for insulin pumps or that coverage is limited by age. In some places, they are only covered for children until age 25. Type 1 diabetes is not a disease we have any cure for; it certainly doesn't disappear when you're 25. In fact, the longer you have it, typically, the more complications you're at risk for, etc.

Currently, no province is getting this right. Further to Dr. Whiteside's comments in response to Mr. Ayoub's question, I think there is currently a lack of leadership, and that leadership can't come from one body. It has to be a collaboration among all of the actors that are affecting the health care system: provincial and federal governments and civil society organizations like ours that advocate for the patients. The private sector also has a role to play in making these really valuable interventions available to everyone. The companies that manufacture insulin pumps, test strips and syringes have a role to play in making them more ubiquitously available in a manner that's sustainable for our economy.

Mr. Len Webber: In the long run, are insulin pumps perhaps a way of saving costs, keeping people from having to go the syringe route for the rest of their lives?

Ms. Kimberley Hanson: We are seeing data suggesting that for people who are good candidates for insulin pumps the pumps do prevent long-term complications, thereby saving costs to the health care system. Insulin pump technology is still relatively new and data are emerging as more and more people are coming to wear them. As we come to better understand the longer-term experience of living with a pump, we will know more, but it certainly stands to reason that there are long-term complications to be avoided.

The other really important thing I should say is that, as Mr. Prowten and Mr. Tohill mentioned earlier, the risk of diabetic ketoacidosis, DKA, which is really high blood sugar, a crisis the body gets into that's potentially fatal, is particularly high for people with type 1 diabetes. These people are also particularly at risk of severe hypoglycemia, which can put them into seizures and comas.

Insulin pumps can be critical in helping to avoid conditions that cause hospitalizations and expensive emergency interventions in the short term.

● (0935)

Mr. Len Webber: How much is an insulin pump?

Ms. Kimberley Hanson: An insulin pump costs about $8,000 to buy and then about another $3,000 a year to run.

Mr. Len Webber: Is the supply of insulin around the world a concern? Are there shortages of insulin?

Ms. Kimberley Hanson: There are no shortages of insulin. There are a lot of news stories in the United States right now about people not having access to it due to costs. That's for a variety of complicated reasons we're fortunate not to be experiencing in Canada to the same degree.

No, there's no shortage. There are sometimes issues with access to certain newer kinds of insulin. Some provinces are reluctant to add newer kinds of insulin that can improve people's glycemic management quickly. That's another thing we want to ensure as we work through the strategy. As new medications become available, and they are shown to be improving patient outcomes, we need to ensure that they are made available more quickly.

The Chair: Thank you very much.

We will move to Dr. Eyolfson.

Mr. Doug Eyolfson (Charleswood—St. James—Assiniboia—Headingley, Lib.): Thank you, Chair, and thank you all for coming.

I have the disadvantage of being further down the list, so much of what I was going to ask has already been asked.

I particularly appreciated the comments about the incidents that occur when people get sick go to emergency departments. I'm a recovering ER doctor with about 20 years' experience. Much of my career was in a hospital in one of the poorest area codes in Canada, so we saw a lot of non-compliance with all sorts of diseases but particularly in problems with insulin.

In regard to the costs of diabetes, particularly to the cost of non-compliance, I have lost count of the number of times I treated DKA. We could actually write out the initial orders before seeing the patient because we saw it so often. We knew that if they ended up in the intensive care unit, it would cost tens of thousands of dollars. If they ended up needing coronary bypass surgery, for example, it would be about $60,000. One shocking number that came up is that when someone ends up on dialysis, it costs $70,000 a year per patient.

We've been trying to look for these numbers, which I've been using to defend whether we can afford pharmacare. I've always been of the mind that we can't afford not to.

In respect of cost-related non-compliance for all diseases, there are various estimates. It might be about $5 billion a year nationally. Do we have any estimates of cost-related non-compliance for diabetes alone? Are there any numbers out there to show what we might save the health care system in costs due to cost-related non-compliance if we supplied only the costs for diabetes?

Ms. Kimberley Hanson: I can give you a partial answer to your question partly because we lack the central data that would be necessary in order to properly answer your question, and that must be remedied.

What we know is that just through identifying people with prediabetes and offering them a proven coaching program to help them manage their weight and physical activity and thereby reduce the risk of developing diabetes, we can prevent nearly 60% of them from going on to develop type 2 diabetes. That would amount to, in Canada, about 110,000 people a year, or a million-plus people over the next decade. If we prevented them from developing diabetes, we could prevent, according to studies, at least 5,000 lower limb amputations every year and at least 35,000 hospitalizations every year in Canada. That would save us about $18 billion over the next 10 years in health care costs associated with treating people presenting with type 2 diabetes, by treating those amputations and the ongoing rehabilitation, and the cost of those hospitalizations.

I should say that's using an average cost per hospitalization of $6,000, which is very low for what most people with acute diabetic ketoacidosis or on dialysis would require.

● (0940)

Mr. Doug Eyolfson: Thank you. That's an extremely useful number.

From what I understand from the brief as well is that we talk about type 1 diabetes, but actually type 2 diabetes now is actually much more prevalent. Would that be a fair assessment?

Ms. Kimberley Hanson: Yes, between 90% to 95% of people with diabetes have type 2.

Mr. Doug Eyolfson: Yes.

Thank you.

Dr. Catharine Whiteside: May I just add one other comment?

Mr. Doug Eyolfson: Please do.

Dr. Catharine Whiteside: I am a recovering nephrologist. So for this issue of people with diabetes and early signs of kidney disease, their treatment is predominantly medication. It's treatment for high blood pressure, high cholesterol, and specific treatment for diabetic kidney disease. Those drugs are quite expensive. If you can prevent the onset of end-stage kidney disease requiring dialysis, you will save $70,000 per year per patient, and that's quite doable. The problem is early intervention and compliance with medication. It comes back to the fact that those at greatest risk—lower socio-economic—may not be able to afford those medications. So if you want a link to pharmacare, it's those cardiovascular and renal risks that are particularly important.

Mr. Doug Eyolfson: All right. I believe that's my time.

Thank you.

The Chair: Now we go to Mr. Davies.

Mr. Don Davies: Thank you.

I just have one correction.

Ms. Hanson, in terms of insulin pumps, in British Columbia, the province I come from, effective July 3, the Minister of Health, Adrian Dix, announced that the province would cover the cost of insulin pumps for all British Columbians. I think prior to that there had been a restriction. They only covered it for people under 25.

Is that the only province that you're aware of in the country that covers insulin pumps for all citizens, or do other provinces do that?

Ms. Kimberley Hanson: No. In other provinces, it's not age limited. I'm not a deep expert on all provinces, but I know, for example, in Ontario, the assistive devices program covers insulin pumps for people of any age. There are provinces where it's provided regardless of age and then there are provinces, as I mentioned earlier, where there is currently little or no support for insulin pumps.

Mr. Don Davies: Okay, thanks.

Mr. Prowten, what challenges are specific to diagnosing and managing type 1 diabetes particularly among children and adolescents?

Mr. Dave Prowten: I think it's things like compliance which has been talked about a lot today. It's a big burden for the child, but it's a big burden for the parents as well, so it's very much a family disease at that point.

We've talked a lot about insulin pumps, but we haven't really talked a lot today about continuous glucose monitors. There's more technology that is here today. Continuous glucose monitors are not approved by any province in Canada right now. They're not being reimbursed. I was at a dinner last night with two families that have a child with type 1 diabetes. They're monitoring their child on their phone because they can check and correct the blood sugar through the continuous glucose monitor.

We have an opportunity to give people better technology right now to manage the disease, but also, in essence, to de-burden this disease. It's better for the child, but it's also better for the family. I would really encourage us to think about giving access to all of the technology that's out there right now to help families and particularly the kids have healthier lives.

Mr. Don Davies: To follow up on that, I was doing a town hall in Nanaimo this summer, and a man came up to me afterwards. He had type 1 diabetes. He told me that when he was sleeping, he had to have a particular kind of monitor because he could go into diabetic shock while he was sleeping. Is that what he was referring to, a continuous glucose monitor? Is that what people need when they're sleeping?

I realize you're a juvenile diabetes specialist, but do you have any information on that?

Ms. Kimberley Hanson: Dave, can I show them?

Mr. Dave Prowten: Yes, that would be great.

Ms. Kimberley Hanson: I wear a continuous glucose monitor. That's a readout on my phone of what my blood sugar is. It's high because I was running late due to traffic and I'm stressed out. This monitors me all the time. If I start to go low, which can happen to many people with type 1 in the night and they might not wake up, it will start alarming me audibly. If I don't respond and tell it that I'm conscious, I'm aware and I'm treating my low blood sugar, it will start pinging my husband's phone so that he'll wake up and save my life.

I cannot overstate the criticality of this for parents of children with type 1 diabetes who are being counselled now, when their child is diagnosed, that they have to get up at least once, if not two or three times in the night, just to make sure that their child is still alive. Imagine the terror they feel all the time; whereas if they had these kinds of devices, that would allow them to sleep knowing that the technology will tell them if their child is in jeopardy of going into a coma, and they can get up and act.

It is not for all five million people in Canada with diabetes. That would be maybe overkill for many, but for people with type 1, it is almost essential. I couldn't manage without it.

● (0945)

Mr. Don Davies: What percentage of people with type 1 in Canada do have that?

Ms. Kimberley Hanson: Extremely few have it, because this is also extraordinarily expensive to run. It would cost another $3,000 or $4,000 a year to operate this system. As Dave mentioned, there is currently no province that provides any coverage.

Mr. Don Davies: A recent study by the Canadian Federation of Nurses Unions found that cost-related non-adherence results in the deaths of 270 to 420 working-age Canadians with diabetes every year. I think it's important to note that, while we're talking about deteriorating health, this is a life-and-death matter for many people.

You just talked about people who could die in the middle of the night because they don't have access to technology that exists, because our health care system is not making it affordable. Should we be covering that for every Canadian who needs it?

Ms. Kimberley Hanson: I think, if their health care team asserts that they need it, then yes, I do think we should be covering it.

Diabetes kills a minimum of over 7,000 people in Canada; that is, diabetes is listed as the cause of death for over 7,000 people a year. We know that diabetes is a leading cause of heart disease, stroke and kidney failure, which can also be listed as the causes of death. We think that 7,000 is masking the real number, which is likely in the tens of thousands of people who die due to diabetes or its complications in Canada every year.

It's a disease that we kind of think of as not a big deal. You take a pill, you watch what you eat a little bit and you live a long life. For some people, that is true, but it is more true for more of us that it is debilitating. It impedes our financial productivity and our ability to work. That costs our employers as well as our health care system. The more we can do to help people live well with it now and manage it well, the more we can save costs down the road.

Mr. Don Davies: Thank you.

Thank you, Mr. Chair.

The Chair: The time is up.

I'm going to propose we have another five-minute round of questions.

Every time somebody asks a question, you open a new page for us, and you shine a light on something that we didn't even know about.

We're going to go an extra round. We'll start with Mr. McKinnon.

Mr. Ron McKinnon (Coquitlam—Port Coquitlam, Lib.): Thank you, Chair.

I'm going to start with Ms. Hanson, because I'm a techie.

You showed us your continuous glucose monitor. You mentioned that you also have an insulin pump. Are these things interconnected? Is that something that can be done? Is it a good idea?

Ms. Kimberley Hanson: Yes, it can be done, and it often is done. In fact, there's exciting technology that's just recently been made available in the United States and that we're hoping is coming to Canada in the next little while that would not only allow the insulin pump to have the readout from the continuous glucose monitor, which is possible today, but would allow the glucose monitor to talk to the insulin pump and say, “Oh, she's starting to go lower on her blood sugar. Please give her less insulin so that she won't have a crisis that puts her in a coma” or “She's stressed out because she's stuck in traffic and she's late for HESA. Give her a bit more.”

Mr. Ron McKinnon: That sounds a little bit invasive. You would have to do blood tests on a continuous basis. Is there a periodic pinprick all the time?

Ms. Kimberley Hanson: Yes, if a patient wears a continuous glucose monitor, currently, with most systems, they have to calibrate it at least twice a day, which means take the finger prick and use the test strips that are more commonly used. The continuous glucose monitor checks my blood sugar every five minutes and sends the readout to my phone. In that regard, it's much less invasive. Before I had my continuous glucose monitor, I was testing my blood sugar by pricking my finger up to 12 times a day.

Right now, the technology has gotten more all-consuming, but it's provided us with better care, so most people are willing to make the trade-off of dealing with the technology more often in order to feel better. As technology continues to improve, we're hoping that it's going to make the disease less invasive to manage, as well as provide better care.

● (0950)

Mr. Ron McKinnon: You mentioned this is quite expensive. We heard the cost of an insulin pump is $8,000 to purchase initially and $3,000 a year to operate. We heard that the glucose monitor is $3,000 a year or so to operate. What is its initial price?

Ms. Kimberley Hanson: The system that I wear costs about $2,000 to set up, and then about $50 a week to continue to operate.

Mr. Ron McKinnon: I'm going to follow up on some of your conversation with Ms. Gladu. You mentioned that many of the people who had been denied disability tax credits had been re-evaluated and only 42% of them were rejected again.

Can you tell me on what basis they were rejected a second time?

Ms. Kimberley Hanson: Regrettably, I can't, because I don't know what their applications were. I obviously can't see their applications, and because many of those people aren't aware that the review of their file has been concluded, they haven't reached out to JDRF or Diabetes Canada to say they've been re-rejected and ask for help.

We're assuming that a portion of those applications may have contained errors or were legitimately ineligible for the disability tax credit, but 42% seems like a high percentage to have legitimately been disqualified.

Pat, do you want to add anything?

Mr. Patrick Tohill: It could be there was information that CRA was looking for from the doctors. It could be that incorrect boxes were ticked.

I agree with Kim that it does seem really strange that such a high number would be disallowed. If there are 2,300 adults being assessed every year, if this year was a typical example, or this eight-month period was a typical example, and 42% of them are being denied, that does seem like a very high rate of denial.

CRA likes to say their overall numbers for life-sustaining therapy have an 80% approval rate, which is a 20% denial rate, but if it's 42% for adults with type 1, that's concerning.

Mr. Ron McKinnon: This 42% was not out of the general number of people who had applied, but of the people who had previously been denied. The more interesting question is the 58% who had been previously denied and were subsequently accepted. One of the things the government had done was provide more medically trained people to evaluate these claims. I believe they mentioned nurse practitioners.

Could that have been a factor in why they were accepted on their second go around, or whether there's any other factor that you can think of?

Mr. Patrick Tohill: Well, remember that all of these claims were being reassessed because of a directive and some new clarification language that was added to the clarification letters which said that adults with type 1 would not generally qualify unless they had one or more chronic conditions in addition to their diabetes. The ones who would have been accepted prior to the review presumably had other chronic conditions that caused them to be approved. These people were all denied on the basis of that clarification letter, so they would normally have been approved prior to May 2017.

● (0955)

Ms. Kimberley Hanson: We think the bigger impact was likely that on December 8, Minister Lebouthillier asked the CRA to revert to its previous language in its clarification letter. That had been in place before May and we think it's the removal of that interpretation that allowed the 58% to be approved.

There remain significant issues with how the CRA is assessing the applications of people with diabetes, and we continue to try to work with them to have these addressed. We really support the recommendations of the Senate Standing Committee on Social Affairs, Science and Technology on the disability tax credit and the registered disability savings program, because it's a system that is not working for many of the people who need it most right now.

The Chair: Ms. Gladu, you have five minutes.

Ms. Marilyn Gladu: Thank you, Chair.

I've heard there is an artificial pancreas technology that is available. Does anybody have a status update on that?

Ms. Kimberley Hanson: That's the technology I was describing a couple of minutes ago: the insulin pump that can talk to the continuous glucose monitor and make adjustments. It's the closest thing to an artificial pancreas that has yet been developed. It's currently available in the United States and has been for about the last 10 months. The company that manufactures it, Medtronic, has told us that their application is with Health Canada. Really, it's up to Health Canada when or whether they will make it available for sale in Canada, but I for one am really hoping that will be sooner rather than later.

Ms. Marilyn Gladu: That's very good.

I have looked at the diabetes 360º report, and it looks to me like the government doesn't need to go out and develop a framework. They just need to do that one.

If you haven't looked at it, you should look at page 12, which has a beautiful table of the summary of all recommendations. It looks like a very well-thought-out plan of what you should do to address this issue in Canada.

Specifically, on obesity, I think this is an area where we need to do something more. We've fallen away from many of the interventions that happened when I was growing up and we had Participaction, where they made us run around and do all kinds of sit-ups and things. I think that in public schools the amount of physical activity that's happening has been reduced, and I know that in high schools, in many cases, people are allowed to opt out totally from physical education. They're not made to run around or dance or do anything like that. Then, of course, we come to our professional careers. As a parliamentarian, I certainly would say that you have to be extremely disciplined to make sure that you get your exercise in.

Because obesity is such a hugely important factor in diabetes, I think we have to do something on that in conjunction with the provinces. There's another thing that would be very helpful. I know that there was a day on the Hill when people came and did the screening for us to see whether or not we had diabetes. It didn't take very much time, and it was something that I could see being transferred to public schools, through the public health nurses or a mechanism like that, where kids could be screened and interventions could be taken.

Do you have any helpful suggestions on what we should do about obesity or how better to get screening happening early?

Ms. Kimberley Hanson: All your points are very well taken.

Primary prevention of type 2 diabetes is a critical piece of the strategy that we're recommending. To my knowledge, I think it's a much stronger element of the strategy than it was in the previous strategy.

It means ensuring that we address food insecurity so that people have access to healthy food. For many people who are living in poverty, it's just really impossible to eat a healthy diet due to costs and due to the availability of foods.

Also, it's really important that we ensure every Canadian is getting their 150 minutes of moderate to vigorous physical activity every week. We were really fortunate to have Participaction as part of one of our working groups in developing the diabetes 360° strategy. Implementing these recommendations would be a partnership with organizations such as Participaction, which are experts in making sure that we're getting everybody moving to the greatest extent possible.

We really have to do a number of things to improve the environment in which we all live, including everything from ensuring movement to making healthy options available in the vending machines. My child plays competitive hockey. It's terrible trying to eat while you're on the road. We need to make healthier options available more regularly.

Then, in terms of screening, I think that anywhere we can screen, we ought to, with the understanding that it's not as easy as just bringing a glucometer or a questionnaire and getting people to fill it out wherever they are. If we can't help to put some context around what the results mean for that individual and then guide them towards the appropriate health care intervention if they need it, it falls a bit short.

What diabetes 360° recommends is that we first of all make sure that all health care professionals who are seeing patients are screening according to the guidelines, and then, secondly, that we do a number of initiatives based on those that have been proven by research to make screening more available where people are—in pharmacies.

If you are on the Hill on November 6, we're bringing a bus here for our Diabetes Day on the Hill, and we'll do a screening not only for diabetes but for all cardiovascular risks. There are limited spots. Do sign up now.

● (1000)

The Chair: Your time is up.

Mr. Davies.

Mr. Don Davies: We've heard over and over again that among the various vulnerable populations, diabetes rates are disproportionately high among indigenous Canadians. What I want to turn to is what to do about it.

A lot of health care programs, of course, are delivered by the provinces, but indigenous health is squarely within the purview and the responsibility of the federal government and the role of our committee here. What specifically can the federal government do to better support the health of indigenous people living with diabetes? What concrete actions can we take to address, as you called it, Dr. Whiteside, an epidemic?

Dr. Catharine Whiteside: I'd like to start by indicating that the calls to action of the Truth and Reconciliation Commission really must be addressed.

In Diabetes Action Canada we have a large contingency of indigenous people who are engaged with our researchers. They have articulated that it's very clear that just trying to address food security and physical activity is necessary, but it's not sufficient.

I'll bring to your attention a very impressive program that has been established by some of our investigators called the aboriginal youth mentorship program. This is a program that is in 13 first nations communities today in Canada, including one in inner city Toronto, whereby the youth are mentored by older adolescents and elders to understand what is important about their health. This is physical health, spiritual health, mental health. It's a community engagement program that is truly creating good results. It's preventing type 2 diabetes in aboriginal youth. This is a program that we hope will be scaled up to at least 30 communities in Canada. I think it presents an excellent model for indigenous communities about the engagement of youth and adolescents to prevent obesity and type 2 diabetes in their communities.

Mr. Don Davies: If I could pick up from there, we also know that nutrition and diet are huge, particularly in type 2 diabetes. I'll put a couple of proposals out.

Is it time for a sugary drink tax in this country? Is it time for a national school nutrition program in this country? Are these good ideas?

Ms. Kimberley Hanson: Those are certainly ideas that Diabetes Canada is in support of our looking into further, because we know that the impact of consuming sugary drinks can increase the risk of even a person of a normal BMI developing type 2 diabetes. They've consumed too much in certain populations and they can really increase the risk of those people developing chronic diseases, including diabetes. I think that a school nutrition program is also an excellent thing for us to consider because we have to make healthy foods available to everyone in Canada.

In terms of supporting the unique needs of indigenous people, we had a working group look specifically at those unique needs as part of developing our diabetes 360° strategy. In addition, I would echo Dr. Whiteside's call that we implement the health-related recommendations in the Truth and Reconciliation Commission's report. We also need to ensure that we enable any indigenous nation or group that wishes to embrace or adopt a diabetes strategy for themselves to do so. It would be the approach of diabetes 360° when implemented to partner with any groups or nations wishing to embrace that in order to support them in doing so.

I think that some of the recommendations we would propose for the general population will really help address some of the key issues that are experienced disproportionately by indigenous nations. For example, many people in indigenous communities are unable to access medical care physically. We can do a lot to provide them with remote-based telemedicine that can really help improve their management of diabetes, or the risk of developing it. There are a number of interventions that we can start to put in place for the whole population that will have an extra big benefit on those communities because of some of the ways they are disadvantaged right now.

● (1005)

[*Translation*]

Ms. Lucie Tremblay: If I may, I would like to add something.

I was saying earlier that not all nurses in Quebec are prepared to provide care in communities, such as diabetic care, especially in indigenous communities. If a nurse arrives in a remote region where there are not many services, and she is not prepared to deal with a major health problem—we talked about epidemics earlier—, that is already a crisis.

I sincerely hope that your recommendations will highlight the need for this kind of training for all nurses so that all Canadians have access to care. I cannot overstate the importance of this.

You talked earlier about people who are dying, and that worries me. I am a nurse and cannot help thinking about patients' well-being. When people have a limb amputated or have to undergo dialysis, both of which could have been prevented, this leads to costs not only to the health system, but also to society. It means that these people do not contribute fully to the country's economy. This is a very important point and I have to stress it.

In the case of the first nations, this is especially serious because access to care is already limited. If, in addition, people are not prepared to deal with the challenge, that poses a further problem.

[*English*]

The Chair: Thanks very much.

Before we go to Ms. Sidhu, I want to ask a question on that.

Earlier, Dr. Whiteside, I think you said that people in lower socio-economic levels are four times more likely to get diabetes. How do indigenous communities rate? Are they four times more likely to get it?

Dr. Catharine Whiteside: No. The indigenous communities are three to five times more likely to develop diabetes.

To give you a sense of this problem related to complications, I mentioned there is an amputation every four hours in Ontario because of untreated diabetic foot ulcers. In the northern regions of Ontario, the amputation rate is much higher.

The reason is exactly as Ms. Tremblay has indicated. The access to care is highly limited and the intervention early enough to prevent these amputations simply doesn't exist. This is a huge problem, not just in Ontario, but in the northern regions of all the provinces and territories.

Alberta is probably the furthest ahead of the provinces. They have instituted a province-wide foot care program for individuals with diabetes, with particular emphasis on the indigenous communities. They have set up hubs of aggressive treatment centres for diabetic foot ulcers throughout the province.

Again, there are examples in Canada where this problem is being addressed more aggressively. I think a national diabetes strategy would enable the sharing of some of these better and best practices province by province to improve these outcomes.

The Chair: What causes the foot ulcers?

Dr. Catharine Whiteside: The foot ulcer is a biomarker of some of the most problematic complications of diabetes. It includes peripheral vascular disease and neuropathy, which is the effect of diabetes on nerves. It often is associated with poor glucose control, and emphasizes that when you identify someone at risk for a diabetic foot ulcer, you've identified those individuals with diabetes who have the highest risk of all complications.

Again, this is an area where I think evidence and the application of information at the level of point of care would be absolutely critical to address this particular issue.

● (1010)

The Chair: Okay. Thanks very much.

Ms. Sidhu, you have five minutes.

Ms. Sonia Sidhu: Thank you, Mr. Chair.

I consulted last year on healthy eating defeating diabetes. If someone needs that information, they can get it from me.

The point I got is that from Winnipeg to Vancouver, early detection would be beneficial. The cost of medical coverage needs to be standardized across the country, for example, glucose testing strips, lancets, and educational awareness for non-compliance. Then I think we can save hundreds of dollars with less burden on the health care system.

Diabetes 360° is a comprehensive strategy that will cover all these things that are outlined in detail, concrete steps that government can take to address the growing issue of diabetes in Canada.

Diabetes Canada, can you explain how your strategy covers all the local, regional, provincial and other jurisdictions to fit into the national framework?

Ms. Kimberley Hanson: I think the key guiding principle of the architecture of diabetes 360° is that it's meant to be an overarching strategic framework to improve patient outcomes, which must be implemented in partnership with various levels of government, NGOs and the private sector. It is intended to be implemented in a way that is customized province to province to territory, region by region in some cases, based on the unique needs of those communities.

To Mr. Grewal's points earlier, we might have a different set of priorities in the Region of Peel from what we would have in Yellowknife. That's intended, and will be supported by the national data repository, which will let us know how those various interventions are working in those regions. The national partnership that we're recommending be implemented for seven years in budget 2019 will be specifically designed to work with the provinces and territories, and other actors, to implement the recommendations.

Ms. Sonia Sidhu: As JDRF has suggested, there's a lack of a registry. Sweden has a successful one. Do we address that matter, too, the lack of a registry?

Ms. Kimberley Hanson: Absolutely. We have a series of recommendations for what we're calling foundational elements, or elements that will support the implementation of all of our diabetes 360° targets. The first among them is a national registry or repository of data about not only who has diabetes and who doesn't have diabetes, but the kind of health care interventions they are getting. Then, ideally, it would include what lab tests they are getting, what lab results, what prescriptions they're filling at the pharmacy. When we can get an integrated perspective of the health care interventions that a patient is receiving, we can much better understand the value of each of them and where Canada can best invest its health care dollars for greatest benefit to the patients.

Dr. Catharine Whiteside: May I add, actually, that Diabetes Action Canada has already launched a national diabetes repository. By the end of this calendar year, we will have 100,000 subjects with diabetes in our repository of data. These data are being derived from electronic medical records in primary care from the provinces of Ontario, Alberta, Manitoba, Quebec and Newfoundland. Our intent is to include all of the provinces and territories in Canada by the end of our five-year mandate. These data will be linked to provincial administrative data to do exactly what Ms. Hanson has just described, and that is to be able to understand the extent of diabetes, its complications and what the outcomes are like.

We're starting. It took Sweden about a decade and a half to get to its full registry. With JDRF, we're also launching a type 1 diabetes true registry. This work is already beginning.

Ms. Sonia Sidhu: Thank you.

On the education perspective, I know TGH is managing diabetes by apps. Old people are not tech savvy. How can we educate them? Do you have any examples? Can we educate them through YouTube, as an educational element? Is your strategy addressing that kind of population?

● (1015)

Dr. Catharine Whiteside: I'd like to mention that there are groups in Canada, particularly the aging, community and health research unit, led by nursing at McMaster University, which are leaders in the world in this area. They're doing a study right now in Ontario, Alberta, Quebec and P.E.I., to address exactly this issue. How do you intervene with seniors who have diabetes and multiple chronic conditions, so that they improve their self-management, are able to navigate the system and literally stay out of acute care and emergency? They will be testing an app, but actually, it's more direct intervention with nurse navigators and nursing.

Ms. Kimberley Hanson: In that vein, one recommendation that we have in diabetes 360° is to support greater connection between the patient and community-based supports. Right now, as a patient with diabetes, there is nowhere I can go to know where to find a cooking class, or if there is a local support group of people like me with type 1, or how I could maybe connect with a local group that walks, to improve my fitness.

There's no central hub for that kind of information. If we were to create that, we would be able to really easily connect a patient with local support programs that were in their mother tongue, perhaps, that were culturally relevant and specific, and that would help people like seniors, perhaps, who might be less inclined to engage with an app, connect in real life with people in their community, who are often doing this already on a volunteer basis. It increases the patients' ability to manage their disease without increasing the burden on the health care system, just by putting the information all together in one spot. That will be one plan we would implement with diabetes 360°.

The Chair: Time is up.

That concludes our meeting. I often say that this committee has the very best witnesses of any committee on the Hill, and you have certainly been the top of the best. You've provided us with a ton of information in a short period of time. I want to thank you all on behalf of the committee.

I want to thank the committee, too, for doing their homework and asking the right questions.

Ms. Sidhu, I believe it was you who pushed for this study, so thank you for that.

I hope we add our voice in a successful and effective way to what you're advocating. You've certainly painted quite a picture for us today.

Again, I want to thank you very much for taking the time to come back to our committee.

The meeting is adjourned.

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its Committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its Committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the
following address: http://www.ourcommons.ca

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur.*

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes
à l'adresse suivante : http://www.noscommunes.ca