HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Health

HESA NUMBER 065 1st SESSION 41st PARLIAMENT

EVIDENCE

Thursday, November 22, 2012

Chair

Mrs. Joy Smith

Standing Committee on Health

Thursday, November 22, 2012

● (1100)

[*English*]

The Chair (Mrs. Joy Smith (Kildonan—St. Paul, CPC)): Good morning, committee.

I need to inform you that today the bells will ring at 11:15 a.m., at which time we have to leave in order to go and vote.

As well, because I have an announcement that I'm going to be doing with Minister Toews, Ms. Davies will be taking the chair to listen to the rest of the witnesses.

Following that, we were going to have business today, but we will not have that today. We will have it next day.

Okay? Great.

We have before us, from the Ottawa Hospital...“Dr.” Dale Potter, is it?

Mr. Dale Potter (Senior Vice-President, Strategy and Transformation, Ottawa Hospital): I'm “Mr.” Dale Potter. I'm not a doctor.

The Chair: Thank you. I don't see your name tags up there yet.

Welcome, and thank you for coming.

From the National School of Public Administration, we have Marie-Claude Prémont.

Welcome, Marie-Claude.

By video conference, we have Margaret Webb as an individual; and also by video conference, from BC Healthy Living Alliance, Mary Collins and Scott McDonald.

Because the bells are about to ring here on Parliament Hill, we might have to bring you back a little later to give witness. The bells will be ringing at 11:15 a.m., and we won't resume until after we get back. We'll keep you informed as to how things are going.

Sometimes we have these interruptions. My apologies to you in advance. Thank you for being here.

We will start with Dale Potter for seven minutes. Thanks for being here.

Mr. Dale Potter: Thank you.

I provided a briefing document in both English and French that will elaborate in more detail the concepts I'd like to cover in my brief discussion today.

I was given a number of topics that I was told were of interest to this committee. I chose three to give my point of view on.

If you look at page 3 of the document, there are three questions I attempt to answer here. One is why is health care so slow or behind in adopting information technology approaches that have been adopted in other industries and derive benefits? The second question is a brief overview of what we're doing at the Ottawa Hospital to address that very challenge. Then I make a few comments on my thoughts on how investments may be redirected as we go forward with new challenges that are emerging.

I will give you a brief bit of context. I think there's a story behind this that will set the foundation and make the points of view I'll bring forward more interesting.

Twenty-five to 30 years ago, hospitals were almost 100% people-driven in terms of the activities, and almost 100% paper-driven in terms of information flow. That was also true of most other industries, such as manufacturing and banking. At that stage, things were status quo. That period of the 1970s I would say was the point of divergence in the creation of the concept of health care being behind in terms of information technology.

If you flip to page 4, what I'd like to do is go through a brief history of how hospitals and the health system evolved, because I think it's important that we all have that. It's based on facts. It's not my opinion whatsoever.

In the early, early days, medicine was general practitioners in rural communities, and they would go to a home and deliver care. It was a small business model. That would be the late 1800s. As we got into the 1900s with the phenomena of wars, urbanization, and so on, institutions were created called hospitals, but hospitals were staffed and managed by nurses, and they were meant for people who needed constant care. Primary care was still delivered in the home environment. That persisted through until I would say the 1930s and 1940s.

World War II may be the catalyst, but in any case there were two factors that led to increased complexity. One of them was advancement in medical technologies and approaches. We only have radiologists because we invented a machine called an X-ray that needed interpretation so it created a new medical specialty; dialysis created nephrologists; and gas machines created anesthesiologists. The combination of the medical specialties and the medical technologies, which were both quite expensive and scarce, caused us to consolidate those in a thing we called the hospital. The hospital began to transform in terms of what it did. It actually delivered proactive care leading to health or recovery, and then people would go back to their home.

The other phenomenon that perpetuated was a high degree of referral now between general practitioners or physicians in the community to the hospital for an X-ray, for a laboratory investigation, or some other specialty consultation. The referral between primary care and the hospitals happened in the 1940s and 1950s.

Then what happened through the 1960s and 1970s is that hospitals began to reorganize themselves, because as this advancement in medical technologies and medical specializations and treatment approaches evolved, there became a hierarchy of hospitals, which persists today. There are rural hospitals, community hospitals, acute centres, and then teaching and academic centres. That's roughly the hierarchy we live with today.

In the meantime, we introduced information technology starting in the 1970s, but really through the 1980s and 1990s. We approached it so that each institution had its own information system, and that was quite fine, because the interaction was of low complexity. People could share documents through paper. It worked well.

● (1105)

What's happened to bring us to date is that the complexity of interaction between the hospitals—people's movement and their health information flow—is much, much more complex and much more timely. That is what has brought us to the current state.

In terms of the vendors supporting the systems, they were able to tackle what are called ancillary departments—laboratory, medicine, and medical imaging—because they are highly standardized. Whether it's here or in Toronto, we do our work the same way.

In the medical areas, the treatment areas, there's a high degree of variability in terms of how a particular process is carried out. You can have the same treatment at the Ottawa Hospital on three different occasions and you'll have three different experiences—not outcomes necessarily, but three experiences—because it's a human-driven process, even though we've made it largely electronic.

I hope that sets out a platform that makes sense.

On page six of the briefing document, you'll notice "figure 1". If you'll allow me, I'll use that as a framework to explain a few concepts that I think are important.

If you go from the bottom to the top—this equates to approaches taken in other industries—the basic step you need to do is eliminate variability and variation where you can: standardized processes where it's possible. These are the first and second steps.

Once you've done that, you have a chance to use approaches, such as Lean or Six Sigma, or other approaches, to optimize how you do your work. How the work is done at one end of the hospital is exactly the same as it is done at the other end, at some level. Then you get up into behavioural, organizational, and cultural change challenges; performance measurement and performance management; and then managing processes. The ultimate goal is to proactively manage your resources across the hospital in a predictive way.

We've tended to attack the middle of that model. We've done a lot of work. You've heard a lot of talk about Lean, patient-centred care, physician and staff engagement—the topics on the right-hand side. We haven't paid much attention to the bottom two: eliminating variability in the processes in the hospital. Because of that, we haven't been able to effectively manage our processes or resources in the hospital.

The approach we're taking at the Ottawa Hospital, and I guess my basis of recommendation.... On slide 8 you'll see another figure. The "current state" is an explanation of what basically goes on in the health system, not just in hospitals. You have many care providers at the top level, and you have many disparate systems carrying information about each one of us as patients at the bottom level. The interaction between these is sporadic and not consistent.

We've tried to attach the systems together, and to some degree attach the people together at the top, but it's done in a way that's not sustainable. The approach we're taking at the Ottawa Hospital, through process standardization, is to use the processes as the mechanism or catalyst to bring the information out of whatever systems they reside in and push them up to the people who need to see the information in those systems. The process would dictate what information I would need to see as a physician, what information a nurse needs to see, and so on. That's the basic concept.

How long do I have? Two minutes?

● (1110)

The Chair: You have one more minute.

Mr. Dale Potter: I'll go to the two recommendations on the last page.

The first one is to focus on standardization of process, which is building process models. There are tools that are persistent in other industries that allow sustainability. They monitor that these standardized processes are adhered to and followed in a predictable way. Also on that, let's stop investing in disparate systems, where possible, and invest above that to that process layer, so we can abstract ourselves away from the complexity of the systems.

The second recommendation is to do a federated model. A hospital in Toronto could develop a standardized model for the emergency department. Another hospital could take care of outpatient care. Another hospital could develop models for chronic disease management. If there were appropriate governance, we could share those models and we would have a consistent model provincially or federally, or at whatever level that made sense.

I apologize for taking such a quick flyby on this. The briefing note will give you more detail, so I'll conclude.

The Chair: Thank you so much. And thank you for your briefing note, Dr. Potter. It's very interesting.

Committee, I'm going to ask you something. We vote precisely at 11:45. Bells will ring in about two minutes. With your permission, could we continue on with our next witness until 11:25? Would that give us lots of time to be in our seats?

I need unanimous consent of the committee. Do I have unanimous consent for that?

Dr. Carrie?

Mr. Colin Carrie (Oshawa, CPC): I was just going to say “yes”.

The Chair: Thank you so much.

Now we'll go to the National School of Public Administration.

Marie-Claude.

Professor Marie-Claude Prémont (Full Professor, National School of Public Administration): Thank you. My name is Marie-Claude Prémont.

[*Translation*]

I will speak to you in French; we are in Ottawa, after all.

I am joined by my colleague, Nassera Touati, who specializes in health care system management. I am a legal expert. I teach health and social service law, among other things. Thank you for the opportunity to share my perspective with you.

Our comments today will focus on one aspect of health care management, interprofessional collaboration. With that in mind, we will touch on four areas. First, we will explain what interprofessional collaboration means. Second, we will discuss the measures that Quebec has put in place to foster interprofessional collaboration. Third, we will explore the empirical evidence regarding the measures and their effectiveness. Finally, we will speak to the federal government's role in interprofessional collaboration and make a few recommendations.

So interprofessional collaboration, what is it? As the name suggests, it is the delivery of patient care in cooperation with stakeholders in different fields of practice to ensure the continuous treatment of essentially complex health problems.

The increasing complexity of health needs, particularly as regards chronic illness, is forcing us to rethink how we deliver health care. That is where interprofessional collaboration comes in. It offers a key approach in dealing with these problems.

Clearly, that information does not come from Nassera Touati or Marie-Claude Prémont. Those findings have been presented multiple times by a number of inquiry commissions, expert reports and so forth. The management of chronic illnesses, in particular, poses huge challenges, and interprofessional collaboration can help us address them.

Ms. Touati will speak to the second point, regarding the measures implemented in Quebec.

● (1115)

Mrs. Nassera Touati (Associate Professor, National School of Public Administration): What has Quebec done to encourage interprofessional collaboration? It is important to understand that, as soon as the network was created, we established this principle, in particular, by applying the CLSC primary care model. But, as you may already know, the CLSC model has not been very successful, because of challenges with physician recruitment, among other things.

It didn't take us long to realize that we had to use other avenues. So we began using legislative channels to encourage collaboration. Bill 90 was introduced in 2002 to foster greater flexibility in the organization of work and to allow for some overlap with disciplines so as to ensure a continuous and comprehensive approach to complex problems. Those changes were also applied to mental health and human relations in 2009 with the introduction of Bill 21, which has not yet come into force.

On top of the legislative changes, we also stressed the importance of collaboration in different policies. In particular, the cancer and mental health policies refer to the importance of interprofessional collaboration.

We also tried to incorporate the collaboration principle into the organization of services, especially in primary care. Quebec set up family medicine groups, where physicians and nurses work together. In other areas of care, client programs based on interprofessional collaboration were established. Quebec has also invested a great deal in information technology since 2006 to facilitate interprofessional collaboration.

Is this major focus on collaboration warranted? What do the findings show? Numerous studies discuss collaboration and its benefits, especially the improvements to the continuity, accessibility and use of services. Collaboration has also been shown to better address needs.

That being said, the validity of the findings has drawn a bit of criticism in recent years. Some studies have methodological weaknesses. A publication bias has also been observed, meaning that journals have a tendency to publish only studies showing the positive effects of the approach. Some recent studies have also shown that the quality of care is not tied solely to the level of interdisciplinary interaction. Other variables come into play. What that means, then, is we may need to gain a better understanding of the processes giving rise to the effects. So the research has to be done.

As for the process of interprofessional collaboration, a number of empirical studies show the difficulties of collaboration owing to several factors. One is the fact that professional logic models do not encourage collaboration because they are based on the principle of exclusivity of fields of practice. Furthermore, practitioners are not trained to work in collaboration. Power struggles also hinder collaboration. It is important not to underestimate how difficult it is to change entrenched practices that make perfect sense to those who follow them.

What does the empirical research reveal about the information technologies used to enhance collaboration? Some have been successful, of course. But there is a significant challenge around the technologies and their use owing to a variety of risks. They may be technical risks stemming from response times, for instance, or human risks stemming from the resistance of practitioners. Organizational risks also exist; they have to do with the alignment between technologies and the organization of work, and so forth.

What all those studies show, then, is that information technologies do not necessarily have an impact on practices.

In light of those findings, what would we recommend?

● (1120)

Mrs. Marie-Claude Prémont: The committee knows only too well the importance of determining the extent to which the federal government can effectively intervene in the health system to enable progress. Clearly that is the eternal question and controversy, health being under constitutional jurisdiction. The Supreme Court highlighted the problem with its recent reference regarding assisted reproduction, largely striking down the federal act, as you are aware, further to a challenge by Quebec. The case regarding the Insite clinic in Vancouver also comes to mind. In short, under the division of constitutional powers in the health sector, provinces always have the primary responsibility for the organization of health care. That does not, however, negate the important role of the federal government, which needs to be clearly targeted and well understood.

Applying those principles to interprofessional collaboration and keeping in mind that the effective management of this approach is still in its infancy, we believe the federal government has an important and decisive role to play in three respects.

The first involves education and training. Quebec's experience has shown that, despite introducing a law to foster interprofessional collaboration in 2002, the province has made little progress 10 years later. One reason is that the professionals in the field are not familiar with the principles of interprofessional collaboration. A lot has to be done in terms of training and education. The federal government has been involved in training in the past. It would be worthwhile to revisit and resume that involvement in the form of funding support for training through competitions and targeted programs. That support could be provided with the help of universities, when professionals are being trained.

The second aspect concerns research and knowledge transfer. Similarly, the federal government could play a key role through grants and targeted programs aimed at fostering interprofessional collaboration and related research.

The third and final aspect ties in with what my colleague Dale Potter said about information technology. The Canadian government already has a presence with Infoway, but should look at enhancing it further and targeting the use of information technologies more effectively.

Although, on the face of it, the federal government is not directly involved in the health system, we believe it can play a key role.

[*English*]

The Chair: Thank you so very much.

The bells are ringing now. We'll come back after we vote. The votes are at 11:50, so shortly after noon we will be back.

Ms. Collins and Mr. McDonald, you'll have a chance at that time to give your presentations, and thank you so much in advance for your patience. You got up early, too. Thank you so much. We can't do anything about the votes.

We'll suspend and we'll be back shortly. At that time, you'll have Ms. Davies in the chair to take over.

Thank you.

● (1125)

(Pause)

● (1210)

The Vice-Chair (Ms. Libby Davies (Vancouver East, NDP)): We're ready to begin the meeting.

First of all, I would like to thank the witnesses very much for waiting around while we had the vote, especially our folks from B. C., because we know how early you got up. Thank you very much for waiting around.

We are ready to begin again. We'll begin with Ms. Margaret Webb, who's here as an individual.

Ms. Webb, you have 10 minutes.

Ms. Margaret Webb (Regional Nurse, As an Individual): Thank you so much. I appreciate the opportunity to speak to this group.

I am a regional nurse practising in northern Labrador. I have been practising in Labrador for 35 years. I am a master's-prepared nurse and have a great deal of work experience in northern and isolated communities.

Regional nurses, as you are probably aware, work within an advanced scope of practice very similar to what nurse practitioners work as well. We work in isolated locations where there is no physician. The physician is at the end of a telephone, or, most recently, at the end of video conference telerobotics. I'm here to champion the issue of telerobotics in isolated locations.

In northern Labrador over the last probably 12 years, we have had video conference similar to what we are using today for me to communicate with you. What I note from watching the screen is that there is a great deal of delay between my moving my hand and your seeing me do that. With the robotics system that we are now using, compliments of Dr. Ivar Mendez of Halifax, we are using a system, which we have dubbed “Rosie”, and we have used versions one and two. The delay is not there, and therefore the immediacy of it has helped us a great deal.

I want to step back. A number of years ago, under the generous donation of Dr. Mendez to Labrador-Grenfell Health, my employer, in conjunction with First Nations and Inuit Health, Atlantic Canada, we were recipients of a telerobotics system that was set up in Nain nursing station to assist us with our practice.

As I have previously stated, we are nurses who work on our own. We are six nurses in an isolated location, serving a community of approximately 1,300 Inuit people. The physician comes to visit us every six weeks, maybe. Otherwise he is available to us by telephone and now by telerobotics.

Over the last few years we have learned how to use these systems and how to make them more practice-oriented. We have also learned that our clients are very interested in using these types of systems. We have a champion in our region, Dr. Michael Jong, who you may or may not have heard of, who has been very instrumental in having this move forward with us.

We have presented the benefits of this type of system at various conferences, most recently at the circumpolar health conference in Alaska in August. Previous to that, in the spring of 2011, we presented it at the Canadian Nurses Association conference in Montreal where advanced practice nurses and their administrators were present and heard our presentation. They were also very interested in the uses of this type of mechanical system in locations where the practitioners are limited.

Rosie, which is what we have dubbed the system, is robotic-looking. If you think back to that cartoon *The Jetsons*, where they had a Rosie housekeeper, well, that's what she looks like. There is a screen with a face. The doctor is able to move the robotics system on his own from Goose Bay. We are 256 air miles north of Goose Bay. When we need him, we call him by telephone. He hooks up to the system and brings the system in to our emergency room. He can move the system on his own.

● (1215)

Then he is able to enter the room where he's going to deliver care —on his own—and assess the patient, speak to the patient directly. The patient can speak directly back to him. As I've said, there is no delay in the communications system when the weather is good and the bandwidth is up.

We have been able to use this in situations where hands-on support has been needed, to talk us through putting in chest tubes, advanced practice procedures. We've also used it in mental health assessments, when clients have been held under the Mental Health Care and Treatment Act. We've used it in education and teaching, for example, advanced cardiac life support systems and megacodes, and with port-a-cath care. We've also used it in nutritional consultations, surgical consults, and cancer client follow-up in between hands-on visits.

The resolution of the screen with this telerobotics system is much better than what you're seeing with this Tandberg-based system we're looking at here. The doctor is able to move forward and view the cardiac monitor and see the heart tracing and how well it's going.

We're sold on this system and how it can be used. We're very interested in the system being used in more northern and isolated locations.

The pros, as we see them, are a decreased cost in travel and time for the client being away from family, a decreased cost in travel for the health care system. We're also interested in the idea that it provides consistent interaction with the same physician when it's possible, rather than the patient interacting with different physicians, be it face to face or whatever.

We're also very pleased with how this can help with recruitment and retention of nursing staff. If you're there alone as a practitioner, or with several other practitioners who are all nurses, and you have the support of a system whereby the doctor can see exactly what you're doing or not doing, you can be assisted in appropriate care of the client.

As well, the system is not weather dependent, which planes are. We move our patients by medevac. All those transportation systems are weather-dependent. That system would certainly help us at the community level.

Finally, our clients who have used this type of system for a number of years are very much at ease with the system and are willing to work with it.

I would certainly be very happy to clarify anything I haven't been clear on or to answer any questions.

● (1220)

The Vice-Chair (Ms. Libby Davies): Thank you very much, Ms. Webb.

Thank you for describing so well how Rosie works. I think we have a good picture in our mind about how it works, and I'm sure we'll come back to you with some questions.

We'll now move to BC Healthy Living Alliance. We have Mary Collins and Scott McDonald, who are in Vancouver.

Between the two of you, you have 10 minutes. Please go ahead.

Mr. Scott McDonald (Chief Executive Officer, BC Lung Association, and Chair, BC Healthy Living Alliance): Thanks very much, Madam Chair. On behalf of BC Healthy Living Alliance, we want to thank you for this opportunity to share our experience and views on innovative health care delivery.

The BC Healthy Living Alliance is an alliance of nine provincial organizations that have been working together since 2003 to address the common risk factors and health inequities that contribute significantly to chronic disease. Our experience in overseeing $25 million of initiatives to address these risk factors and our involvement in policies to reduce health inequities have provided us with a wealth of knowledge. We have previously provided to the committee copies of a number of our reports outlining specific policies that we believe are important to address the challenges of chronic diseases and the impact they have on the health care system.

We know from research, in the United States particularly, that investment in prevention can have a significant impact on containing health care costs. We know that a key component is to link prevention to care and break down the traditional silos between the public health, health promotion, and heath care delivery systems. We have discussed with this committee before the importance of a holistic approach to health. This requires a whole of society, whole of government, and whole of person focus. That means those working in the health field, prevention or care, also need to work more closely with those in other sectors whose work and policies have a dramatic influence on health status, be that education, early childhood development, social services, income support, housing, or the built environment.

Mary.

Ms. Mary Collins (Chair, Chronic Disease Prevention Alliance of Canada, BC Healthy Living Alliance): As you are, we're certainly concerned about the sustainability of our health care system. We all have to think about how we're going to do things differently to slow the increasing costs of the health care system as well as the rising rates of chronic disease. We are also concerned about the quality of care and the patient experience. Critical to this is keeping people healthy longer but also to recognize that for many people, making the healthy choice is not the easy choice. We really have to consider new ways of reaching those who are most at risk.

In the short time available, we want to focus on a couple of developments that we think are really important. I would like to say we certainly support what you've heard from earlier witnesses today about the importance of cross-collaboration between professionals, and also what we've heard about the use of Rosie in robotics. That is an important point.

Madam Chair, I think you will be quite familiar with this, because the examples are in fact from your constituency, and you may have had the chance to meet the folks involved.

The first is the social primary care model. As we think about vulnerable populations and vulnerable communities, the literature on improving health equity, and the evaluation of existing models, we are proposing a targeted approach based on what is known as the RICHER social pediatrics model, which has been under way since 2008 in the Strathcona community of Vancouver. It's one of the lowest-income communities in Vancouver, as the chair well knows.

Research has shown that in both urban and rural communities with high rates of material and social disadvantage, populations are less likely to have accessible and appropriate health care services. The effects of socio-economic status are more prominent, for example, in some types of hospital admissions, which is where the big cost issues are. There's an example of a CIHI study of 15 census metropolitan areas over a three-year period. They found that when compared to others with high incomes, hospitalization rates for people in low incomes were more than double for chronic conditions treatable in the community, diabetes, and chronic obstructive pulmonary disease. A hospital is not the place where people need to go. The children from low-income families also had hospitalization rates for asthma 56% higher than children from high-income families.

So the social primary health care model, or RICHER, example in Vancouver delivers health care to hard-to-reach, disadvantaged communities by building relationships and responding to the social determinants of health. Those are just a few highlights from it, and there's lot of literature that we can refer you to. It uses nurse practitioners in community settings where people go. This way, the person doesn't have to go to the doctor; the nurse practitioners go to them. They are out in the daycare centres, in the schools, in the community centres. They develop relationships in the community, and they act as a point of contact for tertiary and specialist services. They partner with social service agencies and NGOs to work together on social determinants. They have a formal memoranda of understanding, and they address in a very practical and immediate way the conditions that impact housing. If the family, the mother and the children, have not just health care but housing or other issues, they can address that collaboratively. They have a community table that meets weekly to talk about the issues involved in the clientele.

Dr. Judith Lynam at UBC, the lead researcher on this model, has found even in these early days that it has fostered access for families with multiple disadvantages. It's also catching mostly kids who were not getting their health needs, both developmental and mental health, addressed before. It's improving outcomes by empowering parents, particularly of vulnerable children, to become more active participants in care, which is usually associated with the use of nursing services, and reduces the use of emergency departments for primary care.

Overall, Dr. Lynam believes it's having an impact on health care costs by reducing acute, costly exacerbation of chronic illnesses. As we know, there are similar approaches under way in Quebec, for example.

● (1225)

[*Translation*]

The Fondation du Dr Julien—

[*English*]

who was one of the early models for this.

We really think that this is a model that needs to be addressed, and that the federal government could provide support to provinces and territories, with funding for further research, and expand this model in appropriate communities through the provision of research and practice grants.

I want to highlight another example. This comes from another hat that I wear as vice-chair of the Vancouver Police Board, again looking at people who have been working in isolation.

People in the downtown eastside have, as the chair knows, high mental health and physical health problems. They were being dealt with by the police, by health services—uncoordinated. We now have in Vancouver, as in Victoria, what we call “assertive community treatment” groups, which bring together all of the services and go out to these highly vulnerable folks.

In the first year, we've already seen some dramatic changes in terms of admissions to emergency departments as well as in police interactions with those folks. In one case, someone who had been involved in 300 incidents with the police and health issues has gone to zero.

This is so logical and so sensible: people working together in collaborative, community-based teams. We really urge and we would be delighted to have members of the committee come out to Vancouver—I'm sure with your chair—to visit some of these on-the-ground examples of how people are working differently.

Just quickly, our other point is about primary health care.

The Vice-Chair (Ms. Libby Davies): Ms. Collins, I'm sorry to interrupt, but you have two minutes left.

Ms. Mary Collins: Two minutes left. Okay.

On primary health care transformation, Dr. John Millar appeared before this committee earlier in the year on behalf of one of our members, and talked about the things that need to be done. There are some good examples of programs, whether from Norway or elsewhere.

I would particularly bring to your attention what's going on in the Basque region of Spain, where they have a whole new strategy around dealing with chronic diseases at a community level and are really seeing some good results, in which again primary care is linked with prevention and there is a much greater focus on prevention within primary health care teams.

Of course, this also requires that we need interprofessional-trained teams. We need electronic information systems. We're still in the early days...[*Inaudible—Editor*]. We need appropriate payment systems. And we need governance for our health care that enables community involvement.

We're really asking the federal government to support projects in the transformation of primary health care as was done after the 2004 health accord.

I'll just quickly turn it back to Scott for some concluding remarks.

● (1230)

Mr. Scott McDonald: In order for Canada to meet the targets that we've recommended, it's going to be essential for the federal government to play a role in supporting and encouraging all of the other players in the health system to work together to find the best ways possible to help Canadians to be as healthy as possible.

We have been impressed by the work of this committee in your recent reports, as well as by those from the Senate committee. We look forward to the results of your current deliberations and we offer to assist in any way we can in moving forward in innovation and health care delivery in Canada.

Thank you for the opportunity to appear.

The Vice-Chair (Ms. Libby Davies): Thank you both very much, and also for the brief, which we have on record. We'll come back to you, I'm sure, with some questions, so I appreciate your being there in Vancouver.

Next we'll move to Saskatoon. We have Kent Smith-Windsor, who is from the Greater Saskatoon Chamber of Commerce.

Mr. Smith-Windsor, would you like to go ahead?

Mr. Kent Smith-Windsor (Executive Director, Greater Saskatoon Chamber of Commerce): Thank you very much.

When we heard of this opportunity, it was fortuitous, because our chamber had been pretty active in the area of health opportunities as an economic driver for the community in Saskatoon in the late 1990s through to the mid-2000s. The observation we had at the time related to an observation that if we as a community were based in the United States, and our chamber of commerce happened to be in Baltimore, we would be actively considering John Hopkins University as a key economic driver for our region.

We started to talk about how we could use that discipline in terms of creating economic opportunity in our region. For about six years, we were very active in holding a series of conferences and examining how we could foster economic opportunities, particularly in the area of innovation and the application of new technology, always within the context of the Canada Health Act.

So if we draw on some previous history of Saskatoon and draw ourselves back to 1951, when radiation treatment was first applied in a successful manner to treat cancer in Saskatoon, it was a remarkable achievement from very gifted researchers. If you were to call it a mistake...our community did not capture the opportunity that potentially represented in terms of constructing machines, developing training, systems, and support. So we've always used that as a bit of a litmus test for the nature of our work over the years. What's most interesting in terms of the work that we forwarded to your committee in preparation of this meeting is that unfortunately most of that work, which has largely been in a hiatus for some five to seven years, is largely still current.

One of the documents that we didn't forward to you was a document prepared by the most recently retired dean of the Rotman School of Management, Roger Martin. The title of his report, and I would encourage your committee to pull this for your own examination, is *Where are the Exports? The Canadian Health Care Mystery*. His observation at that time, and this was written in 2003, was that Canada was spending approximately $100 billion on health care every year, almost 12% of Canada's GDP, yet exports were less than $5 billion. What we discovered was that we are consumers of others' innovations.

So the work we did at that time was to look at behaviours in other markets, in Europe and in the United States. We had a really good trip to the northern part of Minneapolis in Minnesota, and observed the Mayo Clinic, which is a not-for-profit readily regarded as a global leader in terms of clinical investigation. What developed around that area was a cluster of medical innovation that was quite considerably in excess of anything that we could possibly imagine in any region anywhere in Canada, even though we would not classically regard Minneapolis, or Minnesota, as being a major innovation and research centre.

It was interesting to note that there were people there who were hard-wired to find market opportunities. We've continued to try to stimulate those opportunities in Saskatoon. If we think of the things that we've been able to gather over that time, we're surprised as to the fact that this is happening at a grassroots level, but there's no concerted effort that we can detect at the national level to encourage health care innovation as an economic driver.

So we have resurrected our activity over the last year, and have had two mini-conferences as it related to areas where we have identified significant strengths in Saskatoon. This would be at the clinician level. One is in the area of neurosurgery, particularly as it applies to brain and stroke. Another area that we're going to be doing a session on next week is related to lung health.

● (1235)

We are going to be holding a conference on March 12 and 13, 2013, again to resurrect this concept. If you think of the mandate that we have—and we will forward this to you—it is to educate and promote opportunities for heath care industry development, education, research and commercialization, and our role is to create the best business climate in Canada for Saskatoon and our region without infringing on the Canada Health Act.

The objective is to increase productivity in our health care system by reducing our reliance on imported medical goods and services and by developing new Canadian health care tools, therapies, technologies, products, and services.

Our observation has been that if you keep track in Canada, and most particularly the area that we're aware of in Saskatoon, there have been glimmers of innovation that have had potentially global impact. If you think back to the early example I used relating to radiation treatment, we did not take advantage of this as an economic development strategy, and we happen to believe that we're selling our country short.

If you start to think about the global health care industry—and people try to find predictable drivers into the future—it is very predictable that in the world people will constantly be in search of means by which they can improve the health care conditions for their communities, and therefore will always be looking to the globe for the best solutions available. Yet we as a country have continued to think more in terms of health care as a service and a cost centre rather than an economic opportunity.

That's the one suggestion we put to you as a committee: to consider how we can reframe our discussion around health care to think of it as an economic driver.

Thank you.

The Vice-Chair (Ms. Libby Davies): Thank you very much. We very much appreciate your comments.

We'll now go to our first round of questioning. I think probably we'll have only enough time for one round. It's a seven-minute round and that's for both questions and your responses, if you want to keep that in mind.

We'll begin with Dr. Sellah.

[*Translation*]

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

I want to start by thanking the witnesses joining us today, both in person and via teleconference.

Your participation is greatly appreciated. You are giving us more insight into health care innovation.

My first questions are for Marie-Claude Prémont.

In a paper on payments by patients for health care paid out of public funds, you highlight that 30% of Quebec's patients are without a family doctor. You also say that that proportion is the highest in Canada even though there are 20% more family doctors per capita in Quebec than in other provinces.

What are the underlying causes of the doctor shortage in Quebec? In your presentation, you laid out three areas where the federal government could get involved, one being training. I would also like to know what the broader implications of the doctor shortage are for the health care system in Quebec. Do you know where things stand elsewhere in Canada? In your view, what should be done to solve that problem?

In the same paper, you discuss the fact that Quebec has developed new financing formulas to support family medicine groups and network clinics. What types of financing formulas have been developed in Quebec to support the creation of these multidisciplinary health care teams? What are the pros and cons of the different payment schemes?

My next set of questions is for Kent Smith-Windsor.

Since I joined the Standing Committee on Health, I have been hearing about the Saskatoon experience. I would like a sense of what you do in your province. I know there's been progress and innovation in the health sector. I also know that the Saskatchewan government applies lean principles to health care services.

Would you kindly give the committee some examples of lean principles at work in health care? Is there any tie-in with best practices? In your view, what other strategies, policies or practices could be implemented in conjunction with the lean approach to promote efficiency and value-for-money within the health care system?

Thank you.

● (1240)

[*English*]

The Vice-Chair (Ms. Libby Davies): Thank you.

Just to let the witnesses know, we have a little less than four minutes for all of you to reply, so you'll have to keep your responses short.

We'll begin with Madame Prémont and then Mr. Smith-Windsor.

[*Translation*]

Mrs. Marie-Claude Prémont: So I have two minutes.

You correctly identified the issue around the number of doctors. The problem is felt across the country; everyone points to the doctor shortage, arguing that more doctors would solve all the problems. When you look at the figures, it becomes clear that the issue is more complicated. Indeed, as you pointed out, despite the fact that Quebec has more doctors per capita, residents have less access to family doctors. That means that other variables are at work in a major way.

I would say there are two main variables. The first has to do with how the system is organized, meaning the distribution of doctors throughout the province. Different provinces have introduced policies governing that aspect. Quebec, for one, tried and continues to try to force, to some extent, doctors to provide follow-up care to patients, to treat them on an ongoing basis, especially through the introduction of family medicine groups. The results, however, are not yet compelling. So research is needed.

The other variable has to do with the great compromise Saskatoon made in terms of doctors' compensation. In Canada, we have a model where doctors are paid per act. The model has its benefits, but its drawbacks as well. We can't tell a doctor what to do exactly.

[*English*]

The Vice-Chair (Ms. Libby Davies): I'm very sorry to cut you off, but I want to give Mr. Smith-Windsor an opportunity to respond as well.

You have about a minute and a half.

Mr. Kent Smith-Windsor: Well, concerning rationalization, and this really is where innovation comes from, one of the people who serve on our committee is the CEO of MD Ambulance, in Saskatoon. They conceived, developed, and executed a concept called a “health bus”. This is basically a radically modified, very large mobile home, which travels through the inner city of Saskatoon to deliver health care services directly.

This did not come from the health region. It came from an individual provider who has contracted services with the health region. It was through their constant quest for finding the means to deliver services that they developed this innovation. It has received six national awards. It is being constantly investigated by others as to its potential for implementation.

Another area of activity that we can be particularly proud of is the implementation of Lean management principles within our health care region. We had a very early example of this, which related to lab practices at one of our laboratories. It dramatically improved turnaround time, cost of delivery, accuracy of service, and it freed up space in the health care system. That is now being applied across the province.

● (1245)

The Vice-Chair (Ms. Libby Davies): Mr. Smith, I'm sorry. I am going to have to ask you to end. We're now at a quarter to one, and we still have some other questioners to get in.

My apologies for interrupting you.

Mr. Kent Smith-Windsor: That's just fine.

The Vice-Chair (Ms. Libby Davies): If you have other information that you'd like to send in, please do. You can send it in writing and we'll distribute it to the committee. That would be great.

We'll now go to Dr. Carrie.

Mr. Colin Carrie: Thanks, Madam Chair.

My first question is for Mr. Potter.

You introduced a program at the Ottawa Hospital where every doctor and nurse gets an iPad. Obviously, this is a good innovation. Why do you think it's slow in being taken up by the industry?

Mr. Dale Potter: That's a good question.

The precursor or catalyst for introducing mobile technology was my observation that the introduction of technology had disrupted the natural flow of care. Care was primarily at the bedside or other care delivery sites, which don't necessarily have a PC.

The other thing it did was that it limited the amount of engagement between the patient and the physician. Imagine a discussion at the bedside where a physician is talking about lab results and progress toward better health, and the patient asks how it compares with his condition three months ago. The physician would have to leave the room, do an inquiry, and come back.

So it has radically changed, first, the provider effectiveness. We've branded it back to the bedside. Every physician is required to see every patient every day. We weren't able to impose that before.

The second thing is that it's increased the level of engagement of patients, simply by being able to show an image and say, “Here's where your problem is, Mrs. Smith”, and then engaging in a discussion with all the information at hand.

Mr. Colin Carrie: Excellent.

How is my time?

The Vice-Chair (Ms. Libby Davies): You have five minutes.

Mr. Colin Carrie: Okay. I have another quick question for Ms. Webb.

I loved hearing about Rosie, the telerobotics, and things along those lines. I think we will be looking at simulators here at the committee. I was wondering how the Government of Canada investments in e-health benefited health service delivery in isolated communities like Nain.

Ms. Margaret Webb: Thank you for actually listening to what I had to say. I really appreciate it.

E-health services haven't been used as much as we could have. In northern and isolated communities right now, recruitment and retention of nursing staff is a big issue. When we're able to have people at the community level, a lot of what is happening is emergent hands-on care. The availability of that e-health is there, and is wonderful when you have the time to do it.

For us, Rosie and systems like Rosie will be what will keep staff there with us, working hand in hand. We're finding that the younger generation, who are very interested in electronics and all that it comes with it, are also not necessarily interested in being out in northern and isolated communities.

All of these things are part and parcel of what we need to do our work better—e-health, electronics, robotics—but we have to find methods that will keep staff out there at the community level. We see this as something that will be useful.

Mr. Colin Carrie: Thank you very much.

I think Mrs. Block had some questions.

● (1250)

Mrs. Kelly Block (Saskatoon—Rosetown—Biggar, CPC): Very quickly, I want to give a little bit more time to Mr. Smith-Windsor to continue sharing with us some of the good examples, the positive examples, that he had begun to share with us in response to another question.

Mr. Smith-Windsor, perhaps you wouldn't mind continuing on in that vein.

Mr. Kent Smith-Windsor: I just was completing an example within one of the early beta tests within the Saskatoon health region to apply Lean principles, which was applied to a given lab relating to in-surgery testing, where there were dramatic improvements in performance; significant improvements in turnaround times; significant improvements in accuracy; and more interestingly, a freeing up of 1,000 square feet in the lab space.

This is very incremental in nature, but it's indeed transformational, because it engages front-line staff in identifying things that will save steps and improve customer focus.

One of the individuals who is participating as a volunteer on our committee happens to be serving on the health region. As they have broadened their implementation of Lean principles in Saskatoon over the last 18 months or so, they have been able to reduce components of their surgical wait list from 24 months in 2010 to an objective of three months in 2013. They are on track to achieve that objective. There are eight innovation sites occurring within the health care system in Saskatoon. They have a target relating to implementing Lean principles to their emergency room wait procedures through 2013.

Mrs. Kelly Block: Thank you.

The Vice-Chair (Ms. Libby Davies): There is actually a minute left. I misread the clock. Sorry.

Mrs. Kelly Block: Oh, okay.

I think it's interesting that chambers of commerce are stepping up and having these conversations around how to address innovation in the health care system and how we can foster innovation and also drive the economy. Could you give a quick comment on any examples from Saskatchewan where you are turning your attention towards drivers in the economy and health care?

Mr. Kent Smith-Windsor: Actually, as I had indicated, it's occurring at the grassroots level—everything from Prairie Plant Systems, that's dealing with the medical use of marijuana. It started out as a drug research activity in terms of using minds in northern Manitoba for the application of pure plant genetic training that became applicable, in this case, to marijuana. A local company by the name of Phenomenome Discoveries has been using metabolomics for early tracking of cancer treatment and some potential markers relating to Alzheimer's.

We have a local firm of two people that is using RFID tracking to potentially free Alzheimer's-stricken patients to be able to walk freely within their treatment centre so that the staff team can continue to track where they might be residing or moving through the centre. These are very grassroots people—

The Vice-Chair (Ms. Libby Davies): Mr. Smith, thank you very much for the examples. Again, I'm sorry to have to interrupt. We'll move on to our final question now, but if you do have other examples, please send them to us.

Mr. Hsu, welcome to the committee.

Mr. Ted Hsu (Kingston and the Islands, Lib.): Thank you.

I think innovation and improving productivity are challenges across all the sectors of our economy, but different sectors have different challenges. Health care—just thinking about the hospital back in my riding of Kingston and the Islands—is a little bit special because, first of all, it's publicly run. The bottom line is not in dollars. Back home in Kingston, the hospital is also a research hospital. It's also a teaching hospital. So there are a lot of constraints.

To Mr. Potter, considering these constraints and considering the fact that the adoption of new technologies and innovation in health care has proceeded at a different pace, I would say, compared to certain other sectors of the economy in the private sector, I was wondering if you had compared some of the different challenges between the health care sector and other sectors of the economy.

Are there places where you think the health care sector can do better than it has in comparison with the private sector? Or are there just certain challenges where we have to be patient because it's a different kind of bottom line and a different kind of environment?

● (1255)

Mr. Dale Potter: Thank you for the question.

I'll start answering the question by finishing answering the prior question I had, which was around the reason for slow adoption given all the good benefits we've seen around mobility. It seems in health care there's a high degree of skepticism, a high degree of risk-averse behaviours, which would be appropriate in a health care setting, although for things like increasing access to information and other things, through mobility or other technologies, I don't think we can do worse than we're doing now, when much of our information is on paper.

An approach that has been persistent in health care for some time is we identify a problem and we try to adapt the technology to meet that problem, and then we move on to the next problem. So what we've done is we've created a number of good solutions, but they address micro-problems.

My suggestion in my briefing note is to elevate our view of the problems in health care to a higher level so that we can look at integration across the entire health system, from health promotion through to long-term care and the acute—

The Vice-Chair (Ms. Libby Davies): Mr. Potter, if I could just interrupt for a minute, the bells are ringing again—it's one of those days—so we have another vote. I assume it's a half-hour bell.

Is the committee okay that we just continue until a couple of minutes after one o'clock to hear this final round of questioning?

Is everybody all right with that?

Mr. Mark Strahl (Chilliwack—Fraser Canyon, CPC): Just until one o'clock.

The Vice-Chair (Ms. Libby Davies): Just until one? Okay.

Mr. Dale Potter: To close on that, my suggestion to the committee is to slow or focus investment on specific problems and to look at the problems across the entire system and at how the existing systems might be consolidated and aggregated above the specific systems to meet better integration and data flow needs.

Mr. Ted Hsu: Thanks very much.

Actually, it reminds me of something in my own experience, having worked in a large financial services company where there were 20 different platforms for trading securities. It was because different parts of the company tried to solve their own problems by building their own technological solutions that we ended up with too many platforms. So that resonates with me.

To Ms. Collins and Mr. McDonald, you told us that a holistic approach, looking at the social determinants of health, is very important in the prevention of chronic disease. I think the technological innovation—a large part of it—is good measurement and understanding of the social determinants of health. Do you think the government needs to improve in its measurement of the social determinants of health in Canada?

The Vice-Chair (Ms. Libby Davies): May we have a very brief response, please.

Ms. Mary Collins: Thank you.

I think we all need to be able to do that more effectively. There certainly is some good work being done.

I wanted to come back to the fact that we certainly support all the initiatives that are being done to make the health care delivery system more effective in using technology and innovation, but we have to look at the demand side. That's what we think you really need to focus on and keep people healthy and out of the health care system.

A lot of innovation is happening, but we need mechanisms by which we can share that and assess its effectiveness. Also, of course, we need to have more effective information about what the impact of the social determinants are on people generally and on their health.

The Vice-Chair (Ms. Libby Davies): Okay.

Thank you very much. This will now conclude our meeting. I'd like to thank all the witnesses for coming today and especially for being patient while we rush out to do our voting.

Again, if you have other submissions you'd like to make, please forward them to us and we will continue our work with this study.

The meeting is now adjourned.

Canada Post Corporation / Société canadienne des postes

Postage paid | Port payé
Lettermail | Poste–lettre
1782711
Ottawa

If undelivered, return COVER ONLY to:
Publishing and Depository Services
Public Works and Government Services Canada
Ottawa, Ontario K1A 0S5

En cas de non-livraison,
retourner cette COUVERTURE SEULEMENT à :
Les Éditions et Services de dépôt
Travaux publics et Services gouvernementaux Canada
Ottawa (Ontario) K1A 0S5

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

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

SPEAKER'S PERMISSION

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.

PERMISSION DU PRÉSIDENT

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.

Additional copies may be obtained from: Publishing and Depository Services
Public Works and Government Services Canada
Ottawa, Ontario K1A 0S5
Telephone: 613-941-5995 or 1-800-635-7943
Fax: 613-954-5779 or 1-800-565-7757
publications@tpsgc-pwgsc.gc.ca
http://publications.gc.ca

Also available on the Parliament of Canada Web Site at the following address: http://www.parl.gc.ca

On peut obtenir des copies supplémentaires en écrivant à : Les Éditions et Services de dépôt
Travaux publics et Services gouvernementaux Canada
Ottawa (Ontario) K1A 0S5
Téléphone : 613-941-5995 ou 1-800-635-7943
Télécopieur : 613-954-5779 ou 1-800-565-7757
publications@tpsgc-pwgsc.gc.ca
http://publications.gc.ca

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca