

Speaking Notes

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Check Against Delivery

Introduction

Thank you, Mark, and let me also thank everyone at the Economic Club for inviting me to speak with you today.

Now, you may be wondering why someone whose areas of interest have included health policy and practicing medicine would be speaking to the *Economic Club*.

Well, as many of you are aware, health care – not only in Canada, but also throughout the world has a huge impact on the economy.

Health expenditures represent a significant part of Canada's GDP – ranging from 10.5 percent in 2007 to 11.3 percent in 2009.

According to Statistics Canada there are over 2 million people employed in Canada's health care and social system - 630,000 of those are health care professionals – like me and my colleague Anne Snowdon - delivering health services on the front line.

Health care is a big and growing part of part of our economy...

As I will be discussing today, I believe that we need to change our mindset when it comes to how we think about health care.

No longer seeing health spending as a sunk cost, but viewing it as a long-term strategic investment.

An investment that helps build upon existing Canadian competencies, and advantages.

Now, you may also be wondering why – as a pediatric orthopedic surgeon – I have become so passionate about health system *leadership*.

Why I believe so strongly that innovation is needed not only on the clinical side, but also within the health care *system*.

Let me tell you a story, which will give you some context.

When I was a resident learning to be a surgeon, I remember one day starting around 6 am. It was very early in the morning – and being told that the patient scheduled for a knee replacement that my staff and I were to perform that day had to be cancelled.

Why? Not because the surgical team and surgical suite weren't ready to go...

But because there wasn't room for my patient in the hospital once the surgery was over.

(So how many of you, and please raise your hands... have lived or heard of this typical scenario with the “bed crunch” for surgical patients.)

So I had three initial reactions. First, what was I going to tell the patient – about having his surgery cancelled?

Second, what was I going to tell my staff physician, who would be very angry?

And then third, I wondered what could I do – as a resident with no real authority in the system – to solve the problem?

So I got busy. And I wound up making health system management decisions.

I went to see if there were patients who could be moved out of the ICU ... others who could go to a step-down unit ... or others who might be ready to go home.

All so that we could free up adequate capacity for my patient.

On that day, the knee replacement was done. But many of my days as a resident were spent like that.

I cannot tell you how much of my time as a resident was spent on resource management.

Through experiences like this I learned two important things during my residency:

First, I learned about creating efficiencies within the context of the hospital.

And second, I learned that there was a desperate need for the health care *system* to change.

Change – to be more *operationally* efficient to ultimately serve patients better.

Because... if the system is more operationally efficient, we can save money and provide better patient care.

It is that need for greater productivity and innovation within our health care system that I would like to speak with you about today.

Do we have a great health care system in this country? Absolutely we do. But by applying fresh thinking and innovative ideas within the system itself, it could be even better.

Health care spending in Canada, according to the Canadian Institute for Health Information, was estimated to be over \$183 billion dollars in 2009. That's more than the GDP of Ukraine.

We spend more on health care in Canada ... than the entire annual national output of a European nation of more than 46 million people.

Imagine how much better – in terms of patient outcomes and overall productivity – our health system could be if we got serious about fixing the kinds of efficiency problems that I encountered when I was a resident.

That, to me, is an exciting possibility.

And it is why I am so proud to be a part of the Ivey Centre for Health Innovation and Leadership.

Today marks a major milestone: the release of the Ivey Centre's white paper, *Innovation Takes Leadership: Opportunities & Challenges for Canada's Health Care System*.

It was a pleasure for me to work on the development of this white paper with my co-authors, Dr. Anne Snowdon, and Jeremy Shell.

Dr. Snowdon has a PhD in nursing, is a Professor at the Odette School of Business at the University of Windsor, and an Adjunct Faculty member with the Ivey Centre for Health Innovation and Leadership.

Jeremy Shell is a recent graduate of the MBA program of the Odette School of Business.

It was an honour for me to work with both of them – and with everyone who works at the Ivey Centre for Health Innovation and Leadership. We've got a first-class team, and I am very proud of them!

What my colleagues and I learned, is that while there are systemic challenges limiting the adoption of innovation and efficiency, the potential for improvements is enormous.

The good news is that by focusing on the right levers within the context of our public health care system, we can truly make health care a source of sustainable competitive advantage for Canada.

As Canadians, we are all rightfully proud of our health care system.

But there are inconvenient truths about it... that simply cannot be ignored.

The first of those truths is that there are few – if any – incentives for innovation within Canada's health care system. And as a result, it is not delivering the results that it could.

Here are some of the facts that we learned:

We aren't getting the biggest bang for our buck. Even though Canadians spent over \$183 billion dollars on health care, Canada isn't among the top twelve countries in health care provision.

Canada's scientists and researchers are among the most prolific and capable in the world.

Yet, we aren't translating world-class science and research into better results on the front lines of health care.

Despite the fact that we are among the top five countries on earth when it comes to the development of scientific results our track record on innovation in the health sector is among the lowest among comparator countries.

The Conference Board of Canada ranked Canada 14th out of 17 industrialized nations in innovation capacity.

We have the capability to do better.

We must do better!

The bottom line is that while we spend a lot of money on health care, and we are ranked as one of the leaders in pure science, there is a huge gap between what we spend on health care and the services provided by our system.

For example, we have 6.7 MRI's per million people in Canada, compared to 18.6 in Italy, 14.4 in Switzerland and 25.9 per million in the United States.

In Canada, 37% of primary care physicians use an electronic medical record – a key tool to system efficiency, while in Australia, 95% of primary care physicians use one. In the Netherlands, it's 99%.

We have to ask why this is the case. It's clearly not the availability of the technology.

It's in the application and adoption of these technologies where Canada is falling short.

Another key fact: there is a lack of academic research, study, and action into ways to make Canada's health system more innovative and productive.

Much of the useful theory and modeling that we found, was developed within the context of the U.S. health care system – which is completely different, and has a completely different set of drivers from our own.

The U.S. data are interesting, but they are awkward to apply to our context.

It would be like taking a car from Great Britain designed to drive on the left hand side of the road, and trying to drive it here.

Really hard to apply to our circumstances, and to our system.

The second hard truth, is that managing Canada's health care system is going to get a lot harder before it gets easier.

As many of you are aware, the existing challenges facing our health care system are getting *worse*.

Think about the “perfect storm” created by just some of the pressures affecting our health care system.

An aging population.

Increasing rates of chronic disease.

Growing public demand for timely, accessible health care services.

The threat of new pandemics, like S.A.R.S., and hospital-based infections like MRSA and *c-difficile*.

And – to top it all off – a growing shortage of health human resources to meet the demand.

None of this is new. We've known about many of these challenges for a long time.

And yet, the system just can't seem to get unstuck. So it seemed to me, that it was time for a new approach.

If we want to fundamentally improve Canada's health care system, we need to do things differently.

This is where the Ivey Centre for Health Innovation and Leadership comes in.

The Centre was created in 2009 to be a catalyst for innovation adoption and to develop a new kind of leader for the Canadian health care system.

Specifically, our mission is to promote the adoption of new technological innovations and best practices in Canadian health care. We provide a unique and effective platform for health sector partners to collaborate.

Doing things in new and different way means acting as a catalyst to bring people together – from the traditional players within our health system, and beyond – generate fresh thinking and new ideas.

That means including health care professionals – doctors, nurses, pharmacists, health care organizations; and government policy makers on the one hand ...

But also bringing experts from manufacturing...

The high-tech community...

And other segments of the business community ... on the other.

We want to leverage their knowledge, creativity and ideas – to see how thinking from other sectors of our economy, might be applied to create improvements and innovation in the health care field.

For example, we have partnered with an automotive seat manufacturer that has developed sensor technology that can measure the heart rate and breathing of drivers – to detect driver fatigue through the driver’s seat itself.

If you can measure the vital signs of the driver of a car through their seat, why not use the same technology in hospital beds, and cribs?

Prior to our partnership, this firm had never considered the health care sector as a market.

And their technology – applied to hospital beds – could actually save lives.

Here’s a company in a struggling industry that might now have an entirely new market open to them. That’s exciting innovation!

This is just one example. There are many more.

We are helping to encourage innovation and fresh thinking within the four areas where we see the greatest need, and the greatest opportunities.

Health Finance...

Medical Devices...

Personalized Medicine and Health Information Technology, and
Health Leadership and Management.

We are striving to create a centre of excellence focused on the adoption of health system innovation. A centre that won't just be a leader nationally, but globally.

In our white paper, we provide three key recommendations:

First, grow the leadership capacity for innovation in Canada's health care system through education, skills development and team building across the stakeholder groups, to help change the culture of the health care system overall.

Second, build momentum for innovation across the system through smaller, strategic projects and investments that have potential.

And third, to promote the adoption and development of ideas and innovations.

While we need to base conclusions on evidence, our bias is to action – not endless study.

Overall, our goal is to build, train, and unleash a “knowledge leadership army” within the Canadian health care system.

Let me provide more detail on each of our three key recommendations...

The first is growing our leadership capacity.

We don't mean this in the traditional sense.

The leaders of tomorrow will be game changers. People who not only help to drive change and innovation in health-related organizations, but who also create a culture of innovation and continuous improvement in the places they work.

These are leaders who leave a legacy. Whose focus on constantly seeking better and more efficient ways of doing things, gets into the DNA of their organizations.

What are some of the ways we can create this kind of leadership and cultural change?

By adding innovation and change leadership skills into job descriptions for health system leaders.

By communicating the importance of innovation within organizations.

And by backing up that commitment, by reflecting the importance of innovation in the ways individuals and teams are incented and rewarded.

A leader is only as effective as the impact she has on others. And when it comes to system change within health care, it isn't easy.

In my 16 years of practicing medicine, I have found that the health care industry's overall culture is change adverse.

Turning around any one component of the health care system is like turning around a super-tanker: there is a lot of inertia and energy pushing it in the old direction. Changing that direction requires a coordinated, focused effort that includes the cooperation and buy-in of everyone involved.

Even when you get that kind of buy-in and support, change still isn't easy, even if everyone agrees that it is the right thing to do.

For me as a physician, one of the most frustrating challenges I have witnessed has been the adoption of information and communications technology within health care systems.

To my physician colleagues in this room today: let me tell you. We need to get with the program.

I know that in order to be a leader in this system, I need to adopt to this change.

Think about it. In today's day and age, we can book a flight to Asia on-line, right from the comfort of our home computers. And yet, we need to wait to be called by an administrative assistant, before booking an appointment with a medical specialist.

It's inefficient and expensive from a systems perspective ... and un-customer friendly from the perspective of a patient.

For years, we have entrusted our financial information to information technology. And as a result, we can check on our bank balances, and access cash, all over the world. Yet when it comes to electronic health records, it's more efficient for me here in downtown Toronto to walk a paper chart from Hospital for Sick Children to Mount Sinai then to send it electronically.

So while we have been able to increase productivity by adopting innovation in other aspects of our daily lives, one of the largest – health care delivery – remains stuck in the 1970's.

That needs to change. But achieving the benefits of information and communications technology is about more than changing mainframes and software. It involves changing the way people work.

To truly transform Canada's health care system, we need to transform the culture of health care into one that promotes and rewards innovation. This change will not happen overnight. It may not happen this year. It may not even fully bear fruit over the next decade.

But – in the words of John F. Kennedy – let us begin.

Which brings us to the second key recommendation from our white paper: we need to build momentum.

Our research has shown that a key ingredient in building momentum across the system, involves incubating smaller pilot projects.

We have learned from organizations such as Research in Motion, that have developed some best practices in terms of allocating R&D dollars.

RIM has a great mantra when it comes to their health sector projects: "learn early and fail cheap".

We've adopted this philosophy as our own.

Many of you may have read the book Good to Great, by Jim Collins.

In it, he uses the analogy of the giant flywheel. So everyone imagine the great flywheel, Collins says the process of achieving transformational change is like relentlessly pushing in the same direction on the giant, heavy flywheel. It takes a lot of heavy pushing – especially at the beginning. But bit by bit, turn after turn, the momentum builds to the point of breakthrough, and beyond.

Once we get momentum started, it can take on a life of its own.

That's why momentum is so powerful, and so essential to health system transformation.

There are contexts in which large, province-wide or nation-wide projects make sense. But they can be very cumbersome, and full of risk.

Think of it this way. It would be time consuming and expensive to change the temperature of the ocean ... versus the water in your kitchen sink. It is far better to allocate resources on small projects from which you can learn and build momentum.

At Ivey, we focus on smaller, more manageable projects.

We get big learning at a low cost – and with relatively lower risk. We can gain valuable insight from things that don't work, make changes, and adjust.

And we can also roll out successful projects and initiatives across the entire system – building upon the results of the pilot.

Momentum is critical.

It takes a great deal of effort to achieve.

But once it starts – like that giant flywheel – the culture of innovation and continuous improvement will perpetuate better system planning, and ultimately, better patient care.

The third key concept I want to speak with you about today, is the adoption and development of ideas and innovations.

Banting and Best didn't just discover insulin – they made sure that it made it into the marketplace. Not only for economic gain. But because that was the only way their breakthrough – like any breakthrough – could have the maximum impact in improving people's lives.

So how can we help more ideas make their way from the bench to the bedside?

Or, equally importantly, to translate ideas or systems that work in one part of our economy, and apply them to the health care setting?

As mentioned previously, we are focused on manageable sized projects. These tend to be small in nature and go through a vetting process by our Innovation Council.

The Council is unique. It consists of health care leaders from the public and private sectors, academic realm and non-government organizations. The members are actively engaged in reducing barriers to health care innovation in Canada.

The projects we are looking to support leverage insights and ideas from other sectors.

That can yield meaningful results.

Let's take bar coding, for example.

Bar codes have been around in the retail sector for years. They are instrumental in tracking inventory, and managing supply chain costs.

So why not apply these technologies to our health system – especially when it comes to tracking pharmaceuticals, medical devices and other supplies, and the patients that get them.

Supply chain waste in health care is estimated to be between 15 and 30% - which is the same level of waste that the retail sector took out of its system by automating their supply chains.

For Ontario hospitals alone, it has been projected that \$50 million in annual savings are possible, and many suspect this is a low number.

So using some of the best practices from retailers like Canadian Tire and your local drug store... we could apply them to health care and make fundamental changes to the delivery of health care.

Not only will a project like this create workflow improvements in hospitals, but it would reduce the risk of patients getting the wrong medication or wrong surgery – which will save lives.

Building a Better System:

One of the things that makes me proudest of being Canadian, is our country's health care system. The promise of high-quality and accessible health care is one of the things that makes Canada great – and it is a source of opportunity for our country.

I believe that health care is not a cost, but an investment... an investment that provides Canada with a competitive advantage on the world stage.

But we cannot coast, or rest on our laurels, or let the system run on its own inertia.

It is precisely *because* our health system is such an important part of the fabric of our society, that we cannot take it for granted.

We need to engage in a more vigorous debate about how we embed innovative thinking and continuous improvement into the culture of our health care system.

Canada's science and technology strategy has got it right: it describes the need for Canada to build a Knowledge Advantage, an Entrepreneurial Advantage, and a People Advantage – especially in next-generation economy sectors like health care and related life sciences and technologies.

Working together, we can all deliver on the promise of what our health care system could become.

This is an exciting time in our health care system. But making our great system even greater will take a team effort.

This is about taking great ideas ... to action. Moving beyond studying what needs to be done ... to *doing* what needs to be done.

This is about changing mindsets. Encouraging fresh thinking about how we improve and sustain our health care system – showing the world that the best from Canada is yet to come.

And make no mistake – this is about change. It is about the harnessing the incredible insights that can come from observing *how* we work, and welcoming recommendations from different quarters about how health practitioners can do what they do, but even better.

Because improving health system productivity has so many multiplier effect benefits.

It will allow me and my colleagues to treat more patients, and treat them with higher standards of care.

It allows us to get people healthy again – out into the workforce, and with a higher quality of life.

And it allows us to develop and export out world-class ideas elsewhere – putting ideas into the marketplace, and creating jobs here in Canada.

Many people in this room have been working on these issues for a long, long time. Raising similar concerns, and proposing valuable solutions.

It is my hope that the Ivey Centre for Health Innovation and Leadership will allow all of us to channel and focus our thinking regarding health system improvements and innovations in Canada ... to achieve breakthrough results.

But let me be clear: breakthrough results can come in many different packages. And sometimes, they may take years to materialize.

If we can train just one student, whose vision helps to transform our health care system ... then we will have done our job.

If we can incubate one small project that has a quantum impact across our entire health system – in every province and territory – then we will have done our job.

Or if we can inspire one young scientific entrepreneur to become the Banting or Best of tomorrow's health sector ... then we will have done our job.

Banting and Best took their invention from the bench to the bedside – and saved the lives of millions of diabetics around the world – including my sister Melanie.

Saving and improving people's lives. Ultimately, that's what all this is about.

The famous sociologist Margaret Mead once said: “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed – it is the only thing that ever has.”

I urge each and every one of you to join us at the Ivey Centre for Health Innovation and Leadership.

With your own small groups of committed citizens...

To take action as leaders in Canada's health system.

And to truly have an impact in transforming the future of this country.

Thank you very much!