Kelvin Ogilvie accepting the Health Research Foundation's Medal of Honour. "There are silos among the research disciplines," he said of Canada's health care system. "There are silos between clinicians and researchers, social scientists, doctors and nurses. And there are silos between the public and private sectors. Rx&D photo

The Silo Syndrome in Canadian Health Care

Verbatim / Kelvin K. Ogilvie

At a November 20th gala in Montreal, former Acadia University president Kelvin K. Ogilvie was awarded Rx&D's Health Research Foundation Medal of Honour. He is now Chair of the Senate Standing Committee for Social Affairs, Science and Technology. In his acceptance speech, he warned that "the silo syndrome" in Canadian health care is preventing positive outcomes for patients, adding that " in the actual practice of health care in Canada as many as 30 per cent of all health interventions may do harm." His solution: "We must change the whole process of health care delivery and make it patient oriented."

I have been fortunate to have been able to spend an important part of my life directly involved with research that would benefit humanity. This ranged from the invention of a drug to combat lethal viral infections to synthetic developments that enabled the biotechnology revolution and provide the means that others continue to use to make advances in the treatment of gene based disease.

In the broad area of health research there is a great deal of activity in Canada. It represents about a $6 billion investment. The Canadian Institute for Health Research alone invests about $1 billion annually. The investment is more than providing a playground for researchers—it has the potential to lead to social, economic and health benefits for Canadians. And Canadi-

ans seem to feel this is an important area in which to invest their tax dollars, with surveys suggesting that 90 per cent respond that they consider health research either important or very important.

But while we have been very successful in basic research with, for example, major developments in treatment and diagnosis of cancer, particularly breast cancer, we are little better in this area than any other in terms of translating research developments into social and economic benefit. Overall, Canada falls near the bottom in comparison to OECD countries in this critical area. What is even more discouraging is that licensing and creation of spin-offs is actually in decline.

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So we have a couple of major challenges in health research in Canada—how can we ensure that research developments translate into greater economic and social benefits? And how can we enhance our research efforts in terms of better delivery and management of health care? For example, one of the major causes of death in Canada is mistakes within the health care system—incorrect prescriptions or dosage, incompatible treatments, infection, and mistakes in surgery. Great research advances are neutralized if they are used improperly.

I recognize that Canadian research has had great success in protecting Canadians. From CIHR funded basic research we have had Canada take the lead in dealing with the SARS and H1N1 pandemics. And basic research allowed us to respond to the threatened shortage of medical radioisotopes when the Chalk River reactor broke down.

But I want to spend my time on the two challenges I raised a minute ago. It appears to me that Canadian health care and Canadian health research share one major flaw—both suffer from the silo syndrome.

In reviewing the 2004 Health Accord, my Senate Committee, Social Affairs, Science and Technology, heard repeatedly that there is sufficient funding in the health care system in Canada to deliver a first-rate health care system. But we are not doing that. Rather, we have a system fraught with multiple professional silos, often conflicting and at best simply not collaborating. And we have no system for identifying best practices wherever they occur and disseminating them across the system. And, we lack the traditional motivation for innovation—competition. I won't even touch on the issue of "provincial jurisdiction", a guarantor of silos if ever there was one.

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And in the research world it appears that silos prevail in spite of some recent initiatives underway to change the system. There are silos among the research disciplines; there are silos between clinicians and researchers, social scientists and biological scientists, doctors and nurses. And there are silos between the public and private sectors. Our IT initiatives seem to be in a world of their own, separate from the needs of practitioners and every other need except the need to "protect privacy".

I want to suggest that the key to our future in health care is collaboration. In health care delivery alone, the number of deaths and major hospital errors seem to be directly linked to the silos in health care delivery. Not only do the silos exist but those we look to for solving individual patient issues—the practitioners, largely doctors and nurses, are not trained as scientists—they are not good at connecting the dots.

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So my first major point is that we must change the whole process of health care delivery and make it patient oriented—bring a collaborative approach to identifying, treating and managing the patient's issues.

And we must bring a truly collaborative approach to research into both major health issues and health delivery. This is particularly true in major disease areas. My own view is that we need major new directions in how we approach, for example, cancer as a disease and its treatment.

Finally I think the federal government has an unprecedented opportunity to use its offices to bring the parties together to identify and disseminate new best practices in health delivery. And I think Health Canada must move, and move with some dispatch, to eliminate barriers to successful health research and health related industry success in Canada. Nowhere is this more evident than in our fragmented approach to clinical trials in this country.

I don't want to leave you with the impression that I think that all is wrong in these areas in Canada—not at all. We have, historically, and currently, one of the finest collections of researchers per capita in the world. We just need them to work with one another, across disciplines, in synergy to a far greater degree. And we need them embraced in a culture of translating their results into social and economic benefit. We need to demolish the silos and we need our federal bureaucracy to assume a higher level of interaction with all the players with bringing benefit to Canadians as the primary objective.

As we approach one of the most exciting periods in history in translational knowledge application in human health, the age of genetic application and personalized medicine, we need new management approaches to the health care system and we need a major culture change in the world of health research and its application. P

Kelvin K. Ogilvie, Chair of the Senate Committee on Social Affairs, Science and Technology, is a former president of Acadia University. He is the inventor of Ganiclovar, a drug used worldwide to fight infections when the immune system is weakened.

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