# BUILDING BETTER HEALTH CARE

Policy opportunities for Ontario



**Institute for Competitiveness & Prosperity** 

Institute for

COMPETITIVENESS & PROSPERITY

The Institute for Competitiveness & Prosperity is an independent not-for-profit organization established in 2001 to serve as the research arm of Ontario's Task Force on Competitiveness, Productivity and Economic Progress.

The mandate of the Task Force, announced in the April 2001 Speech from the Throne, is to measure and monitor Ontario's competitiveness, productivity, and economic progress compared to other provinces and US states and to report to the public on a regular basis. In the 2004 Budget, the Government asked the Task Force to incorporate innovation and commercialization issues in its mandate.

Research by the Institute is intended to inform the work of the Task Force and to raise public awareness and stimulate debate on a range of issues related to competitiveness and prosperity. It is the aspiration of the Task Force and the Institute to have a significant influence in increasing Ontario's and Canada's competitiveness, productivity, and capacity for innovation. We believe this will help ensure continued success in creating good jobs, increasing prosperity, and building a higher quality of life. We seek breakthrough findings from our research and propose significant innovations in public policy to stimulate businesses, governments, and educational institutions to take action.

Comments on this report are welcome and should be directed to the Institute for Competitiveness & Prosperity. The Institute is funded by the Government of Ontario through the Ministry of Economic Development, Trade and Employment.

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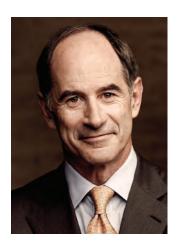
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#### **Foreword & Acknowledgements**



**IAM PLEASED TO PRESENT WORKING PAPER 20** of the Institute for Competitiveness & Prosperity. In this Working Paper, we examine how the performance of the Ontario health care system compares internationally on dimensions of efficiency and equity. We analyze what drives cost in health care in Ontario and offer recommendations for how Ontario can improve health care efficiency and equity to obtain a sustainable financing model. This Working Paper is the first based on our ongoing research on health care, and we hope to make a valuable contribution to the health care discussion.

Investing in publicly funded health care makes economic sense. Good population health builds human capital, drives workforce participation, and enables productivity growth. Yet the public health care model that has brought tremendous benefits to Ontario's prosperity is now putting its future prosperity at risk. Since the early 2000s, public expenditure on health care has continuously outpaced the province's economic growth rate, its ability to raise revenue, and its spending on other social areas of economic importance. Nearly half of every dollar the Ontario government spends goes to health care, while other areas of economic importance, including education and infrastructure are under prioritized.

International comparisons reveal that Ontario could get better value for money from its health care spending. Ontario is among the jurisdictions with the highest total per capita health care spending in the OECD, but countries that spend less on health care achieve comparable or better health outcomes, perform better on quality measures of access to care, wait times, and technical efficiency, and achieve a higher level of equity in health care delivery and financing.

Public policy courage is necessary to break new ground in Ontario's health care system. It is critical that Ontario ensures a health system that has the institutional capacity to respond to innovation, demographic changes, fiscal realities, cost pressures, and new technological opportunities. The United Kingdom, Sweden, New Zealand, and parts of the United States have made impressive progress in tackling health care challenges and have shown that there are sophisticated means available to control costs, encourage more accountability, achieve technical efficiency, and incentivize continuous improvement.

Ontario cannot afford to maintain the health care system status quo. This Working Paper presents a portfolio of policy opportunities that are building blocks for a better health care system. We focus on areas that require attention and outline policy opportunities that are based on identified needs for strengthening primary care, engaging physician leadership, stimulating provider competition, improving technical efficiency, revising care provision and coverage, diversifying the revenue base, and introducing price signals. What sets the Institute's research apart from other research in health care is that we focus on policies that combine cost efficiency with equitable health care. The ultimate goal is affordability; that is, bringing health care spending growth into better alignment with the province's economic capacities and its ability to raise revenue.

## Public policy courage is necessary to break new ground in Ontario's health care system.

The Institute recognizes that there are no quick and easy ways to improve health care, and no jurisdiction in the world has cracked the health care cost conundrum. Hard work is required to raise Ontario's performance in health care, making it both sustainable and capable of continuous improvement into the future. Our goal is to inform long-term policy decision-making and to contribute to the discussion of strategies that can be used to address health care challenges in Ontario.

The Institute gratefully acknowledges the ongoing funding support from the Ontario Ministry of Economic Development, Trade and Employment and the input received from the Ontario Ministry of Health and Long-Term Care on this publication. We look forward to sharing and discussing our work and welcome your comments and suggestions.

Roger L. Martin

Institute for Competitiveness & Prosperity

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# BUILDING BETTER HEALTH CARE: POLICY OPPORTUNITIES FOR ONTARIO

THE GOVERNMENT OF ONTARIO HAS A CRITICAL ROLE TO PLAY in ensuring that its health care system is affordable, efficient, and equitable to support the province's economy and prosperity. Health care is the Ontario government's single largest spending program, and it currently spends 42 cents of every tax dollar on health care. Over the last decade, health care expenditures have been growing at rates above the growth in GDP and the growth in government revenue. Although health care spending has slowed recently, given technological advances, demographic changes, increasing service utilization, and deficient accountability structures, concerns about fiscal sustainability remain.



This Working Paper identifies eight policy proposals to improve the effectiveness of Ontario's health care spending. These proposals are not intended to be a cure-all, but rather a starting point for reform. The basis for these proposals is an analysis of the Ontario health care system's capacities to combine efficiency and equity compared to peer countries' capacities and an analysis of cost drivers in Ontario's health care system.

THE INSTITUTE'S ANALYSIS FINDS that Ontario punches below its weight in terms of value for money in health care. International comparisons reveal that the link between spending on health care and health outcomes is far from a proportional one. Despite being among the highest per capita spenders on health care in the Organisation for Economic Co-operation and Development (OECD), Ontario does not have better health care outcomes or a higher quality health care system; nor does the province achieve the same level of equity in health care delivery and financing as peer countries. Other countries have shown that there are sophisticated means of securing efficient utilization of health care resources within the public health care model. In public health care systems similar to Ontario's, governments have used their influence to ensure broad public coverage for health care services, facilitate technical progress, encourage competition among providers, employ economies of scale in purchasing, and enable system integration of health care professionals. In turn, they have made better progress in containing cost and improving quality.

Ontario demonstrates little institutional capacity to control and manage its health spending. A key reason may be that the government misjudges the root causes of rising health expenditures. Population aging is a contributor to rising health care cost, but its significance may be exaggerated. There is a need to control age-specific cost increases, but attention to costs related to end of life care is essential. Advances in technology, including drugs and medical devices, increased service utilization, and health care workforce compensation are more influential causes behind rising health care spending. But they remain largely unaddressed in current policy initiatives, even when these factors, unlike aging, hold significant potential for policy intervention.

It is important that Ontarians demand evidence for the efficacy of spending increases on health care. But in addition to the question of getting better value for our health care money, the Institute urges Ontarians to consider what they give up in spending more on health care. Health care services represent only one contributor to health status, and are not the most influential contributors. Rather, social and economic factors such as education, income inequality, and job opportunities are the primary drivers, and neglecting these areas is a huge challenge to the province's future prosperity. Ontario will not be able to afford the cost of its public services unless it prioritizes spending on areas that will drive economic growth and, in turn, revenue.

The Institute identifies eight policy opportunities that can drive Ontario's health care system toward greater equity and efficiency and, ultimately, affordability.



## STRENGTHEN PRIMARY CARE

A strong primary care health system is the backbone of a high-performing health care system, but despite reform efforts, Ontario's primary care performance continues to lag international peers. The sheer number of current primary care models in place (more than seven different models) suggests there is uncertainty about the best way forward. Priority should be given to improving accountability by involving medical professionals, including physicians and nurses, in reform efforts, strengthening primary care's ties to local health authorities, measuring performance, focusing on the high needs patients, and managing compliance with contract requirements.



## ENGAGE PHYSICIANS TO BE LEADERS FOR CHANGE AND RENEW THE PAYMENT MODEL

Physician leadership is essential to effectively drive the innovation needed to transform Ontario's health care system. Concurrently, controlling spending on physicians has to be part of the solution to improve system efficiency. Physicians should be full partners in the systems where they work with a reasonable balance between entitlements and responsibilities. Currently, it is uncommon that physicians have opportunities for making system improvements, despite the fact that they arguably know best how to deliver high quality care while managing resources cost-effectively. Ontario therefore needs to dramatically increase the number of medical leaders who understand what needs to be done to improve the performance of the system and can act on this knowledge.



## ACCELERATE THE DEPLOYMENT OF IT IN HEALTH CARE

Ontario is startlingly behind other advanced nations when it comes to technical efficiency and the adoption of information technology (IT). It is widely recognized that broad adaptation of information technology in health care has the potential to generate major benefits in terms of cost savings, increased productivity, and fewer medical errors. Ontario has made commendable progress on implementing electronic medical records throughout the province, but a fully interoperable electronic health system in Ontario is far from realized, and there are vast opportunities in health care IT that are not being reaped. Peer performance data can, for example, be used to identify opportunities for efficiency gains and foster healthy competition among providers. A new strategy for accelerating IT adoption in Ontario is needed so that the province can accumulate and leverage provider benchmark data.



## **IMPLEMENT AN ONTARIO-MADE** PHARMACARE PROGRAM

A major reorientation of pharmaceutical policy in Ontario is needed. Relative to spending on hospitals and physicians, drug spending has seen the highest growth rate over the last three decades in Ontario, and this component of health care spending therefore represents an opportunity for considerable costs savings. Ontario spends significantly more on drugs than peer countries, while simultaneously offering less public coverage for out-of-hospital drugs. International comparisons indicate that implementing a publicly administered, universal pharmacare program would increase the ability to control drug spending and ensure better access to medications.



## SCALE UP POLICY FOCUS ON END OF LIFE CARE

End of life care will be critically important over the course of the next decades of health care in Ontario. Longitudinal health economics studies demonstrate that care provided at the end of life, rather than during aging, is a significant driver of health care costs. Policy attention to this issue is needed. Developing a system-wide end of life care strategy that addresses issues of quality standards, patient preferences, access and cost, and clinical efficiency should be a high priority. British Columbia and Alberta are at the forefront in making advanced care planning a part of routine practice, while Ontario has yet to formulate a system-wide strategy for this issue, despite evidence of its benefits.



## INTRODUCE A SAVINGS PLAN FOR **PREFUNDED DRUGS**

Raising intergenerational equity and moving toward a stable financing structure requires that Ontarians save up for future health care costs, just like they do for retirement. Prefunding is currently used for the Canada Pension Plan, which ensures that tomorrow's seniors prepay some of the predictable cost of retirement while they are still economically active. That same principle could apply to health care, so that the costs of health care are spread more equitably across the population, and are not assumed solely by the younger generation. Prefunding for drugs would place drug provision, a key health program, on more fiscally sustainable footing. Ontario's first priority should be to focus on financing the Ontario Drug Benefit program through prefunding.



## **BUILD THE CASE FOR CO-PAYMENT**

Whereas most other OECD universal public health care systems, including those of France, Germany, Italy, Japan, Australia, and Sweden require patient co-payments for hospital and physician services, Canada maintains a universal care model without price signals. A price mechanism, such as patient co-payment, if carefully designed and well implemented, could bring benefits in terms of both cost efficiency and equity. Ontario has started an important process by introducing a higher share of co-payment in its Ontario Drug Benefit Program. A next step should be to explore possibilities of developing an income-tested co-payment system for the provision of home and community care.



## ABOLISH THE TAX SUBSIDY FOR EMPLOYER-PROVIDED HEALTH INSURANCE BENEFITS

The federal and Ontario governments subsidize employer-provided health insurance benefits by exempting them from personal income tax. This subsidy is regressive, since it disproportionately benefits employed and higher-income individuals, and it is inefficient, because it has negative spill-over effects on publicly funded health care. Ontario could set a new standard for Canada by ending the tax subsidy on employer-sponsored health insurance and use this revenue to provide enhanced public drug coverage or increase investments in community and home care.

**IF CAREFULLY DESIGNED** and strategically implemented, these opportunities will help Ontario make significant headway in realizing a higher level of efficiency and equity in health care. Clearly, all opportunities have their own set of advantages and disadvantages, and they also pose considerable political challenges. Yet, an unreformed system presents a bleak prospect. If major changes are not made now, rising health care expenditures could potentially lead to further crowding out of other areas of economic importance within the provincial budget, larger deficit financing, rationing of health care, or higher tax burdens on the working age population. To get to a health care system that is affordable yet provides high quality in an equitable fashion, Ontario needs to understand where the money is spent in health care - and where it could be saved. The three largest spending items are hospitals, drugs, and physicians, and Ontario's capacity to control spending in each of these areas is critical.

This Working Paper shows that there is tremendous potential for Ontario's public health care model, and the province could be doing a lot more to make its health care system work smarter. The health outcomes of Ontarians and the effective allocation of health care resources are central to a productive workforce and a prosperous economy. Now is the time to think innovatively about new priorities for Ontario health care system - to the benefit of patients, citizens, the health care system, and Ontario's prosperity.



# A STRONG HEALTH CARE SYSTEM RAISES PROSPERITY AND COMPETITIVENESS

#### TOTAL HEALTH CARE SPENDING IN ONTARIO IS EXPECTED TO REACH AN ALL-TIME HIGH OF

\$80 billion in 2013, of which \$51 billion was spent by the Ontario government. Ontario's health care sector, roughly comparable in size to its manufacturing sector, accounts for a significant and growing share of provincial gross domestic product (GDP): 11.5 percent in 2013, up from 7.5 percent in 1982. Health care is the biggest item in Ontario's government's budget, and 42 cents of every dollar that Queen's Park spends goes toward health care, up from 34 cents in 1982. Despite these exceptional resources, Ontario does not achieve high value for health care dollars compared with international peers.

#### INTERNATIONAL COMPARISONS

demonstrate that Ontario could get better value for money from its health care spending. Ontario is among the jurisdictions with the highest total per capita health care spending in the OECD, but countries that spend less on health care achieve comparable or better health care outcomes, perform better on quality measures of access to care, wait times, technical efficiency, and coordination of care, and achieve a higher level of equity in health care delivery and financing. Parts of the United States, the United Kingdom, Sweden, and New Zealand have made impressive progress in tackling health care challenges, while Ontario has been slow to introduce much needed reforms, even as problems of economic efficiency and social fairness have called for a course correction.

Universal health care is not only fair social policy; it is also effective economic policy. A sound health care system raises prosperity and is a key driver of long-term economic growth. By ensuring good population health through the treatment and prevention of illness, the health care sector increases the number of people able to work and be productive members of society. Canada's decision to establish a publicly funded health care system in the early 1960s was a leading policy innovation, and at that time Canada was at the forefront in recognizing that universal health care is smart policy for future social and economic prosperity.

Since then, however, Canadian health care policy has fallen from innovation to stagnation. Unlike a number of peer countries, Canada, including Ontario, has resisted introducing major reforms to its health care model. The Medicare model of the 1960s has largely stalled, even as demographics, technology, and medical knowledge have changed, and meaningful alternatives to health

care delivery and financing have emerged. By contrast, international peers have been much more open to experimenting with and implementing reforms to improve their health care systems. Because of this policy standstill, the very health care model that brought tremendous benefits to Ontario's prosperity is now putting the province's future prosperity at stake.

## What the Working Paper focuses on and why

This Working Paper pinpoints eight policy opportunities that can modernize Ontario's health care system, moving it toward greater equity and efficiency – and ultimately affordability. These policy proposals are based on answering two research questions:

- How does the performance of the Ontario health care system compare internationally on the dimensions of efficiency and equity?
- What drives costs in health care in Ontario?

The Institute purposefully employs economic thinking to address the complex public policy questions that health care raises. Welfare economics articulates two main goals that policy makers should aim to achieve, when allocating public resources: efficiency and equity. In health care, efficiency refers to spending health care dollars optimally by reducing the costs of achieving a given outcome while controlling for quality. 1 Equity means ensuring that high quality care is available to all, and that the quality of care provided does not differ by personal characteristics, such as income.<sup>2</sup> (See *Public versus private* health care is debated.)

Recent reform proposals for Ontario and Canadian health care have focused predominantly on raising either efficiency or equity, both of which are crucial policy objectives.<sup>3</sup> Advancing both efficiency and equity are, however, complementary goals to achieving greater affordability. There is growing recognition of the importance of equity to overall economic prosperity, and health care is a powerful redistributive tool in the policy arsenal.<sup>4</sup> At the same time, respecting fiscal conditions and pursuing efficiency remain pivotal to achieve affordability.

There is no quick and easy way to fix health care. The realities of health care are too complex for that. No jurisdiction in the world has a superior health care system or has cracked the health care cost conundrum, and this Working Paper does not present a quick-fix solution. International comparisons do reveal that Ontario could do much better. Ontario's rising rate of spending on health care has simply not been met by improvements in health care outcomes, and the province ranks low on equitable access to care. Opportunities for improvement abound.

<sup>1</sup> As defined by Colleen M. Flood, Mark Stabile, and Carolyn Hughes Tuohy, "Introduction: Seeking the Grail: Financing for Quality, Accessibility, and Sustainability in the Health Care System," in C.M. Flood, M. Stabile, C.H. Tuohy (Eds.), Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Queen's University, 2008, p.1.1.

<sup>2</sup> As defined by the Institute for Medicine, Crossing the Quality Chasm: A New Health System for the 21st Century, Washington: The National Academies Press, 2001.

<sup>3</sup> TD Bank Financial Group, Charting a path to sustainable health care in Ontario: 10 proposals to restrain cost growth without compromising quality of care, TD Economics Special Reports, May 2010; Steven Lewis & Terrence Sullivan, "How to bend the cost curve in health care," Institute for Research on Public Policy Insight No. 1, May 2013; Health Council of Canada, Better health, Better care, Better value for all: Refocusing health care reform in Canada, September 2013.

<sup>4</sup> Canadian Institute for Health Information, Lifetime Distributional Effects of Publicly Financed Health Care in Canada, May 2013.

## **HOW MUCH** DOES **ONTARIO** SPEND ON HEALTH CARE?

BILLION

Total health spending in Ontario (combined public and private spending) is estimated to be \$80 billion in 2013.

PERCENT OF GDP

Total health spending is forecasted to reach 11.5 percent of GDP in Ontario in 2013, up from 7.5 percent in 1982.

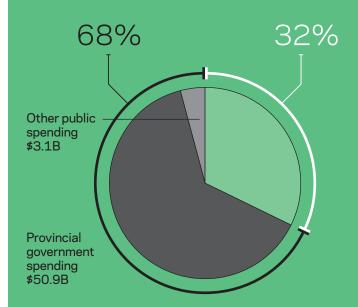
**BILLION** 

The Ontario government is estimated to spend \$51 billion on health care (in 2013) or 42 percent of its budget on health care (in 2013-14).

## **WHO PAYS FOR ONTARIO'S HEALTH CARE SERVICES?**

Total public spending \$54 BILLION

Total private spending \$26 BILLION



The government pays for most health care costs (68 percent). The remaining portion (32 percent) is paid privately, mainly through out-of-pocket spending and private insurance.

Note: Other public spending includes expenditures by municipal governments, social security funds, and the federal government. Numbers are projected values for 2013.

Source: Institute for Competitiveness & Prosperity analysis based on data from the Canadian Institute for Health Information

# WHERE DO ONTARIO'S HEALTH CARE DOLLARS GO?



153

Hospitals account for 29 percent of total health care spending. In 2013, spending on hospitals is estimated to reach \$23 billion. Real per capita spending on hospitals grew 53 percent in the last three decades (1982-2013), or 1.3 percent per year



1312

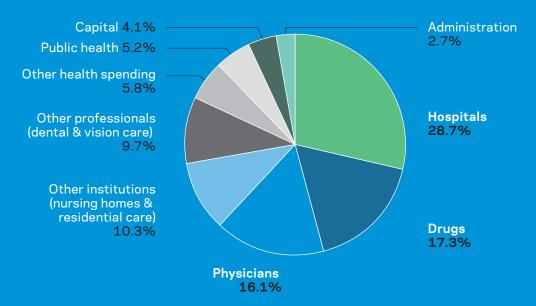
Drugs represent 17 percent of total health care spending. In 2013, spending on drugs is forecasted to reach \$14 billion. Real per capita spending growth on drugs was 312 percent in the last three decades (1982-2013), or 4.5 percent per year



1116

Physicians account for 16 percent of total health care spending or an estimated \$13 billion in 2013. Real per capita spending growth on physicians was 116 percent in the last three decades (1982-2013), 2.4 percent per year.

## Total Ontario health expenditure equals \$80 billion



Note: Numbers are forecasted values for 2013. Total health care expenditure is combined public and private spending. Source: Institute for Competitiveness & Prosperity analysis based on data from the Canadian Institute for Health Information.

## **HOW DOES ONTARIO HEALTH CARE SPENDING COMPARE** INTERNATIONALLY?





\$10,490

PER CAPITA SPENDING







PER CAPITA SPENDING



86% PUBLIC SHARE



PER CAPITA SPENDING





PER CAPITA SPENDING







PUBLIC SHARE





PUBLIC SHARE



PER CAPITA SPENDING





\$4,710



**68**%













## Public versus private health care is debated

Canada has a health care system in which access to care is determined by need and not on ability to pay.

TIS BASED ON THE PRINCIPLE that the more equally and widely the burden of illness is distributed, the better off the population as a whole is likely to be. This model has proven its merits. Canada, including Ontario, generally ranks well on care quality and aggregate measures of health outcomes, even if there are opportunities for improvement. Yet Ontario has a costly health care system with total per capita spending 33 percent above the OECD average and, compared to international peers that spend less, Ontario does not achieve higher value for health care dollars.

In determining how to ensure fiscal sustainability and the maximum return of health care dollars, the argument will often be about private versus public health care, and which model brings the most benefits. In reality, there is no such thing as a purely private or purely public model, and the discussion often ignores the fact that Canada already has a significant level of private financing and private delivery, which is higher than that of other countries in the OECD. In the most advanced economies of the OECD, including France, Germany, the Netherlands, New Zealand, Sweden, and the United Kingdom, the split between public and private financing of health care is 80/20; in Canada and Ontario. health care financing is slightly more private with a split of 70/30 and 68/32, respectively. In delivery of health care, Canada also employs private delivery: most publicly-financed health care services are not government delivered. Rather, they are provided by hospitals or regional health authorities organized on a non-profit basis, by non-profit clinics outside the hospital setting under contracts with public payers, and by physicians and other health care professionals who are organized as private practitioners.

Instead of ideological arguments about public versus private, policy makers should rather concern themselves with the key question: How can Ontario ensure high value for money in health care?

Certainly, in terms of health care *financing*, one of the easiest ways to contain costs in the public health care system would be to shift them to the private sector, giving the private sector the ability to charge users directly. However, if the burden of cost and rising health care spending is transferred to individuals, Ontario still has not solved how it will contain total health care cost. The problem corresponds to a basic principle of health care: when only the symptoms are treated and not the underlying conditions, then the patient, in this case the system, will not get any better. Instead of looking for ways to *shift* the costs, this Working Paper contends that the focus of Ontario's health reforms needs to be on getting better and more effective health care goods and services.

The Institute challenges the notion that universal health care means "free" health care, and that price signals cannot work in a public health care model. It examines policy options that could change the current public/private financing mix, including increasing public revenue to ensure it is sufficient to meet public expenditures (by prefunding health care costs and by abolishing the tax subsidy to employer-provided health benefits) and introducing a patient co-payment scheme within the public system. The goal of introducing these diverse types of price signals is to create greater awareness of health care costs and higher accountability, and less so to constrain demand. Ultimately, the goal should be to have a health care system that is not a drain on the economy – but one that contributes to Ontario's economic and social well-being.



## HOW MUCH DOES **HEALTH CARE IN ONTARIO COST?**

## ONTARIO, COMPARED WITH THE REST OF CANADA, HAS BEEN THE

most progressive province in making health care system improvements, and its 2012 Action Plan for Health Care outlines important policy initiatives to ensure "Right Care, at the Right Time, and at the Right Place." Yet Ontario still has to find the "Right Cost" to health care and to achieve greater efficiency and equity in both health care financing and delivery.

## **ON HEALTH CARE QUALITY** and

delivery, Ontario has taken commendable steps over the last decade. In 2005, the province introduced Family Health Teams, an inter-professional care model in which physicians work with a team of health professionals, including nurses, dietitians, and social workers. In 2010, with the passing of the Excellent Care for All Act, the province adopted a systematic approach to quality assurance. This legislation includes requirements for patients and staff satisfaction surveys, and compensation linked to achievement and improvement plans. Ontario's Action Plan for Health Care, released January 2012, outlines important policy initiatives focusing on the hospital funding model, investments in home and community care, and an increased focus on the coordination of care for high-needs patients.<sup>5</sup> Yet fundamental challenges remain for Ontario's health system. While the health care policies of the current government are generally moving in the right direction, changes are marginal, progress is slow, and there is misjudgement of the real cost drivers in the health care system.

## Health care claims the largest share of the Ontario budget

In 2013-14, health care accounted for 42 percent of every tax dollar spent in Ontario, up from 34 percent in 1982 (Exhibit 1). Since the beginning of the 2000s, health care expenditures in Ontario have increased much faster than the rate of economic growth and provincial revenues. From 1999 to 2009, government health expenditures grew, in real terms, at an average annual rate of 4.9 percent faster than the average growth rate of total government revenues at 2.7 percent and of provincial gross domestic product at 1.9 percent (Exhibit 2).

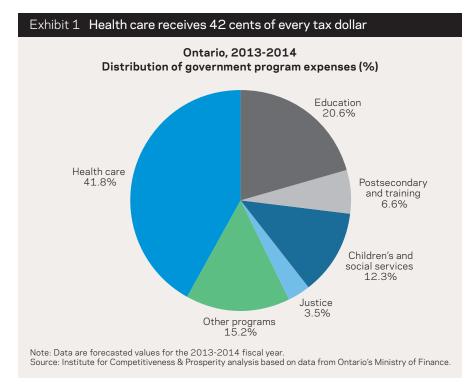
#### Health care spending growth has slowed, but previous trends are likely to resume

Recently, growth in health care spending has slowed. Government health care spending per capita and total health spending per capita in Ontario are forecasted to contract by an annual average of 0.5 and 0.6 percent from 2010 to 2013 (in real

terms), respectively, which is markedly lower than the average annual growth rate of 3.5 and 3.4 percent, respectively, from 1999-2009 (Exhibit 3).

Analysts are divided on the main cause for this slowdown and debate whether it is a sign of government cost containment reforms taking effect, major prescription drugs coming off patents, the result of the recent recession, or a combination thereof. The decrease in health care spending has led some commentators to be optimistic about the future of Ontario's health care system, suggesting it is a sign of the "cost curve finally being bent." Yet, while this spending decrease is a positive development, it is uncertain whether this is a result of genuine cost savings or if needed expenses have simply been delayed.

There are a number of reasons why Ontario should prepare for the cost curve to go up again. First, health care spending has had its ebbs and flows over the past three decades, with a period of lower spending usually being followed by a period of higher spending.<sup>7</sup> Health care expenditures also flat-lined in the mid-1990s, following government decisions to cut spending. Afterward, however, spending increased at a higher rate than before, in part to make up for the lack of investment. Second, when analyzing the underlying factors for health care expenditure growth, it is evident that there are reasons for concern in Ontario. Cost drivers, such as increases in service utilization, the



Ontario Ministry of Finance, "Creating Jobs and Growing the Economy 2013: Ontario Economic Outlook and Fiscal Review," Background Papers, 2013, p. 71.

Matthew Mendelsohn & Will Falk, "Opinion: How Canada's health care reformers quietly bent the cost curve." Healthy Debate, 6 November 2013, http://healthydebate.ca/opinions/defyingexpectations-how-health-care-reformers-quietlybent-canadas-cost-curve

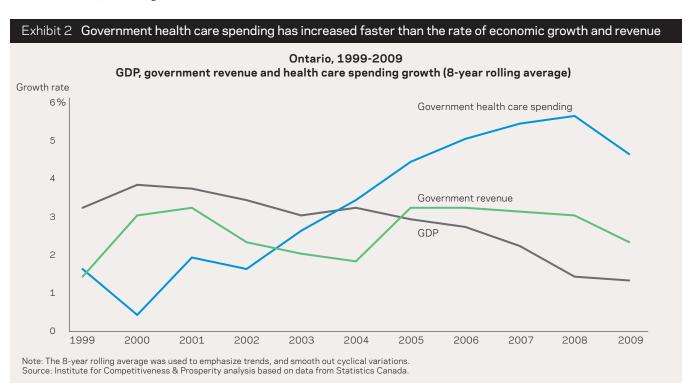
Canadian Institute for Health Information, National Health Expenditure Trends, 1975 to 2013, 2013.

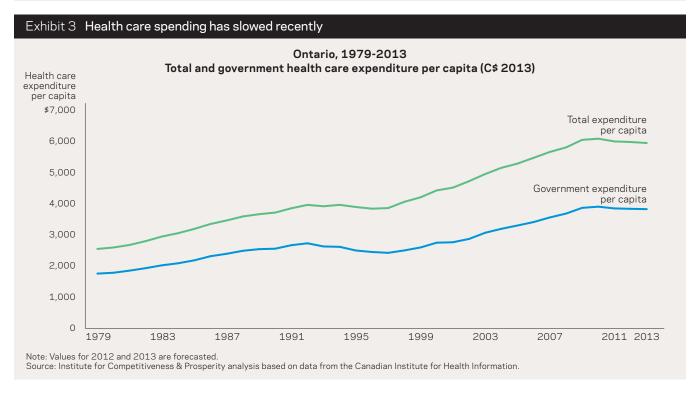
adoption of more expensive medical technologies, and increases in health sector compensation, are unlikely to decrease in strength, and current policy responses to address these drivers remain inadequate. Third, growth in health spending has slowed noticeably in almost all OECD countries since 2008, including the United

States, following the latest recession and the need for fiscal consolidation.8

In general, health care spending is strongly linked to economic fluctuations; with more economic growth and income, more is spent on health care and vice versa. This may suggest that the recent slowdown is attributable to cyclical factors rather than a lasting effect. The long-run cost growth problem is unlikely to have been solved, and until we better

8 OECD, Health at a Glance 2013: OECD Indicators, 2013.





understand the reasons for this slow-down, we should expect previous trends to resume.

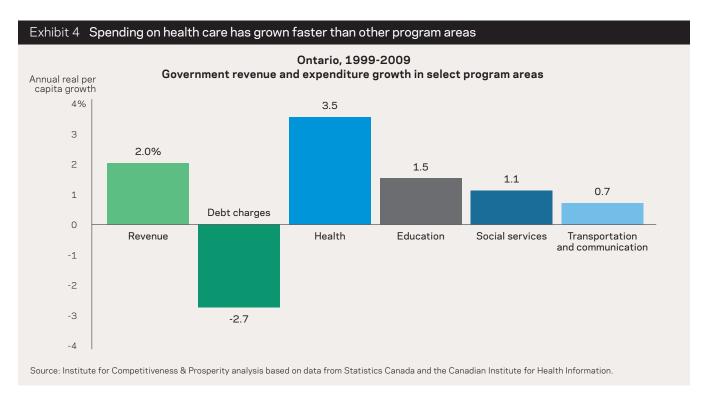
# The debate about health care funding is also a debate about making trade-offs in society

Devoting increasingly more public resources to health care raises concerns about the crowding out of other critical areas of spending, such as education and infrastructure. In Ontario, the increase in health care spending from 1999 to 2009 contrasted with stagnation in other areas of social spending. Government per capita spending on health care grew at an annual average of 3.5 percent from 1999 to 2009 (after accounting for general inflation and population growth), close to double the rate of revenue growth for the Ontario government. Meanwhile, per capita spending in other major program areas, including education, social services, transportation, and communication, grew between 0.7 and 1.5 percent over that same period (Exhibit 4).

By increasing public spending on health care, the province has less capacity to fund other key responsibilities adequately, such as education. The Romanow Commission on the Future of Health Care in Canada held that spending more on public health care relative to other public expenditures is a collective choice and that, as long as the public is willing to make this trade-off, this choice in itself is not a problem. Indeed, a recent survey found that Canadians identified health care as the top priority for government, ranking health care provision as more important than creating jobs, investing in the education system, and balancing government budgets.<sup>10</sup>

The degree of dominance of health care in provincial spending over other areas may not, however, be fully recognized by the public. Nor is it perhaps fully understood that health care services represent only one contributor to health status and, in fact, are not the most influential contributor. A growing body of literature suggests that health care services per se are not a major determinant of

<sup>10</sup> Institute for Research on Public Policy, "Health care top priority for Canadians: survey," News Release, 25 July 2012.



Roy J. Romanow, Building on Values: The Future of Health Care in Canada – Final Report, Commission on the Future of Health Care in Canada, 2002.

population health; rather, social and economic factors, such as education and income equality, are the primary drivers. 11 (See A small proportion of the population accounts for most of Ontario's health care costs.)

The Institute urges the Ontario government to educate Ontarians about the trade-offs that come with an ever-expanding health care system. Neglecting vital areas, such as education and infrastructure, is a huge challenge to the province's ability to become a more prosperous society. As emphasized in Working Paper 16, Ontario will not be able to afford the cost of its public services unless it prioritizes spending on areas that will drive economic growth and, in turn, revenue. 12 Public awareness of this trade-off is pivotal, and the crowding out effect of health care on other priority areas should be part of the public debate. The debate about health care system funding is therefore also a debate about where society makes trade-offs.

Since the beginning of the 2000s, government expenditure on health care has continuously outpaced the province's economic growth rate, its ability to raise revenue, and its spending on other social areas of economic importance. Neglecting vital areas, such as education and infrastructure, is a huge challenge to the province's ability to become a more prosperous society. Policy makers need to recognize that health care services per se are not a major determinant of population health. Rather, social and economic factors, such as education and income equality, are the primary drivers, and adequate policy attention to these areas is critical.

<sup>11</sup> Canadian Medical Association, Health care in Canada: What Makes Us Sick? Town Hall Report. July 2013; Stephen M. Shortell, "Bridging the Divide Between Health and Health Care." The Journal of the American Medical Association, 2013, Vol. 309, No.11, pp. 1121-2.

<sup>12</sup> Institute for Competitiveness & Prosperity, Working Paper 16, Making Sense of Public Dollars, May 2013.

# A small proportion of the population accounts for most of Ontario's health care costs

Managing the high-cost users of healthcare, however, goes far beyond the health care system itself.

N ONTARIO, 1 PERCENT OF THE POPULATION accounts for one-third (34 percent) of the government's health care costs, while 5 percent of the population accounts for two-thirds (66 percent) of health care costs.<sup>a</sup> Concentration of a large proportion of health care spending on a small group of patients is not unique to Ontario. Research from Manitoba, British Columbia, and the United States confirms that in every health care system, health care resources are skewed toward a small share of the population.<sup>b</sup>

Understanding the characteristics of these high-cost users and finding ways to address their health care needs more effectively represent a major opportunity to lower health care costs. High users of health care are typically patients at the end of their lives, individuals with chronic diseases or multiple chronic diseases, and infants with high health care needs. The 60 and over age group accounts for the largest proportion of high-cost health care users. c High-cost users are also more likely to come from disadvantaged groups in the population and thus more likely to be poor, unemployed, and socially isolated. d The Ontario government has increased its focus on the patients with the highest health care needs. In 2012, the Ministry of Health and Long-Term Care announced a promising initiative called Health Links that targets high-cost users. A Health Link is a collaborative group of providers, including speciality care, primary care, and community care providers, that coordinates a unified plan of care for an individual.e

## To improve health, confront the social determinants of health

The reality is that population health is affected by a broad range of factors, including income, education, housing, and social integration. These factors, labelled the upstream determinants of health, are much more powerful predictors of health outcomes than for example lifestyle choices (diet and physical activity) and health care delivery itself, and are widely recognized as lying at the root of poor health outcomes in Canada and globally. A recent article proposes that non-clinical issues such as housing and income should be included in the Health Links program, but asking clinicians to address these non-clinical issues may not be feasible. The US-based Camden Coalition of Health Care Providers that specializes in the "hot spotters" of health care, could be a

useful model for further development of Health Links.<sup>h</sup>
Achieving better health outcomes and higher cost efficiency will require a government-wide approach, and closer partnerships between the health care delivery system, and the social service sector is required. At a strategic level, a new approach could be to integrate health care policy expertise into other areas of policy making, such as tax, employment, housing, and educational policy. British Columbia's intersectoral initiatives, including Act Now BC and Healthy Families BC, provide valuable lessons for Ontario in this regard.

Addressing the social determinants of health through, for example, redistributive taxation and investment in education is critical to improve population health. Hence, policy makers need to take a government-wide approach, rather than to count on the health care sector to address the social determinants of health, which for the most part lie outside the health care system.

- a Walter P. Wodchis, Peter Austin, Alice Newman, Ashley Corallo, et al., "The Concentration of Health Care Spending: Little Ado (Yet) About Much (Money)," Presentation at the Canadian Association for Health Services and Policy Research Conference, May 30, 2012.
- b Raisa Berlin Deber & Kenneth Cheak Kwan Lam, "Handling the High Spenders: Implications of the Distribution of Health Expenditures for Financing Health Care," Paper presented at the 2009 American Political Science Association Annual Meeting, September 3, 2009; Robert Reid, Robert Evans, Morris Barer, Samuel Sheps, et al., "Conspicuous Consumption: Characterizing High Users of Physician Services in One Canadian Province," Journal of Health Services Research & Policy, 2008, Vol. 8, No. 4, pp. 215-24; Mark W. Stanton, "The High Concentration of US Health Care Expenditures," Agency for Healthcare Research and Quality, Research In Action No. 19, 2006.
- c Walter P. Wodchis, Peter Austin, Alice Newman, Ashley Corallo, et al., "The Concentration of Health Care Spending: Little Ado (Yet) About Much (Money)," Presentation at the Canadian Association for Health Services and Policy Research Conference, May 30, 2012.
- d Robert Reid, Robert Evans, Morris Barer, Samuel Sheps, et al., "Conspicuous Consumption: Characterizing High Users of Physician Services in One Canadian Province," Journal of Health Services Research & Policy, 2008, Vol. 8, No. 4, pp. 215-24.
- e Ontario Ministry of Health and Long-Term Care, "About Health Links," Backgrounder, 6 December 2012.
- f Kelly E. Kenney and Spencer Moore, "Canadian Adolescent Perceptions and Knowledge About the Social Determinants of Health: An Observational Study of Kingston, Ontario Youth," BMC Public Health, 2013, Vol. 13, pp. 1-7.
- g Christopher Stone, Laura Rosella, and Vivik Goel, "High users of health care: Are we asking the right questions?" Healthy Debate, 25 September 2013.
- h Atul Gawande, "The hot spotters: Can we lower medical costs by giving the neediest patients better care?" The New Yorker, 24 January 2011.



# HOW DOES ONTARIO HEALTH CARE COMPARE INTERNATIONALLY ON EFFICIENCY AND **EQUITY?**

## **INTERNATIONAL COMPARISONS REVEAL THAT ONTARIO COULD** get

better value for money from its health care spending. Countries that spend less on health care, in comparison with Ontario, achieve comparable or better health outcomes, perform better on quality measures of access to care, wait times, technical efficiency, and coordination of care, and achieve a higher level of equity in health care access and financing.

**THE INSTITUTE EVALUATES** the relative performance of the Ontario health care system compared to that in peer countries by focusing on performance indicators related to efficiency and equity; specifically, on four selected measures:

- Cost efficiency: total per capita spending on health care and drugs versus health care outcomes and quality
- Technical efficiency: use of information technology (IT) in health care
- Equity in access: financial barriers for individuals to access health care
- Equity in financing: distribution of health care financing burden across the population

The comparator countries include Australia, France, Germany, the Netherlands, New Zealand, Sweden, the United Kingdom, and the United States, all countries whose health care systems Canada's is most often compared to.<sup>13</sup> Like Ontario, these peer countries have developed economies, comparable levels of resources devoted to health care, and comparable data collection methods. However, no two health systems are identical, and variations exist because of differences in health system funding and organization, population composition, political factors, and differences at national and subnational levels.

The Institute recognizes that comparing sub-national data for Ontario and national data is not a perfect method. However, because of the high degree of decentralization in Canadian health care. Ontario effectively exercises the primary responsibility for most policy decisions in the health care sector. As such, Ontario's health care system bears close resemblance to that of a national entity. Despite the limitations of cross-country comparisons, international comparative analysis is an insightful tool that can provide a broad context for benchmarking and peer learning for Ontario.

## Large efficiency gains are possible

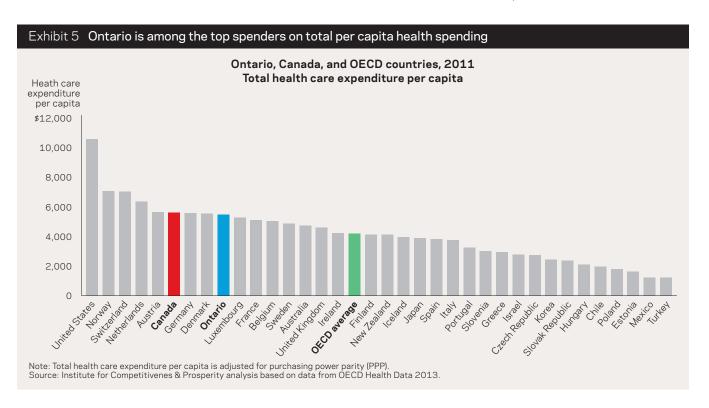
Efficiency refers to spending health care dollars optimally by reducing the costs of achieving a given outcome while controlling for quality. International comparisons reveal that Ontario could be delivering better health care value at a lower cost if it became as efficient as the best-performing countries in the OECD.

## Ontario could get better value for money from its health care spending

Canada and Ontario are among the top spenders on total per capita health care spending in the OECD, with spending 36 and 33 percent above the OECD average, respectively, ranking sixth and ninth out of thirty-four countries (Exhibit 5).

In general, Canada's performance on key health indicators is average among OECD countries, but it varies greatly depending on choice of health

<sup>13</sup> Canadian Institute for Health Information, "International Comparisons: A Focus on Quality of Care," 2014.



care indicator. Canada performs well on indicators such as cancer and stroke mortality, and smoking rates, but fares poorly on diabetes and obesity rates, and quality measures such as patient safety, access to care, and wait times. 14 (See Chronic Diseases are costly.)

According to the latest report of the Health Council of Canada, "Canada's overall performance lags behind that of many other high-income countries."15 Although Canadians and Ontarians overall have confidence in the system and perceive their health status as good, on measures of access to care, wait times, and prevalence of chronic disease, Canada and Ontario perform poorly compared to peer countries (Exhibit 6).

When measuring life expectancy, countries that spend less on health care, relative to Ontario and Canada, also achieve comparable or better outcomes. Although life expectancy is only one indicator of health care value, and does not include the prevalence of disease or quality of health

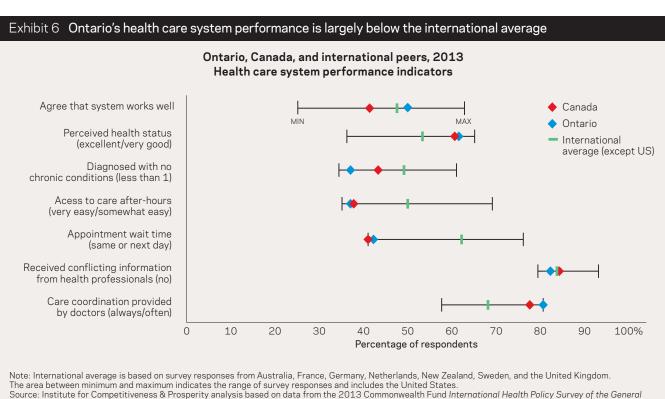
care services, it has been found to be highly correlated with other indicators of health status, including better quality of life.16

Several countries that spend less per capita also have a less favourable age structure than Ontario does. In countries like the United Kingdom, Sweden, and France, seniors make up from 16 to 23 percent of the population; in Canada and Ontario, seniors account for approximately 14 percent of the population. Ontario had a slightly younger age composition than Canada as a whole in 2011; 14.2 versus 14.7 percent of the population was over the age of 65 (Exhibit 7).

### Ontario shows less ability to control pharmaceutical spending than peers

Pharmaceuticals make up a growing and important part of health care spending in Ontario. In 2013, drugs were estimated to account for 17.3 percent of every health care dollar spent, up from 8.4 percent in 1975, in combined public and private spending.<sup>17</sup>

- 14 Canadian Institute for Health Information, Benchmarking Canada's Health System: International Comparisons, November 2013.
- 15 Health Council of Canada, Where you live matters: Canadian views on health care quality, Results from the 2013 Commonwealth Fund International Health Policy Survey of the General Public, January 2014, p.5.
- 16 Isabelle Journard, Christophe André, Chantal Nicg, and Olivier Chatal, "Health Status Determinants: Lifestyle, Environment, Health Care Resources and Efficiency," OECD Economic Department Working Papers No. 627, August 2008
- 17 Canadian Institute for Health Information National Health Expenditure Trends, 1975 to 2013, 2013,



Public and the Health Council of Canada.

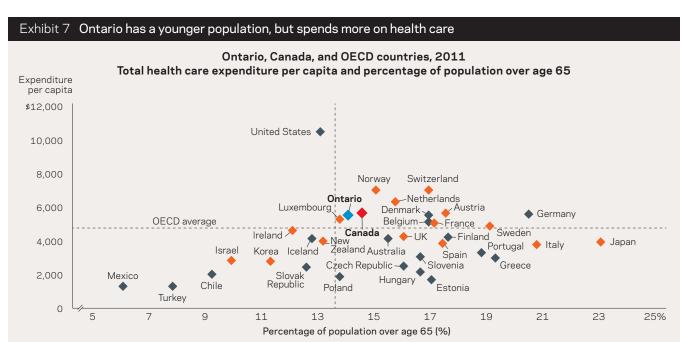
Ontario stands out among international peers as the jurisdiction with the second highest level of per capita pharmaceutical spending in 2011, behind only the United States.

Compared to average per capita spending of peer countries (excluding the United States), Ontario spent 35 percent more on drugs per capita

in 2011. Strikingly, the countries that register lower cost and lower growth in drug spending than Ontario have a higher public share of drug spending, and they all have some form of universal public drug coverage (Exhibit 8). Analysts contend that a key reason for high drug prices in Canada is that drug procurement falls

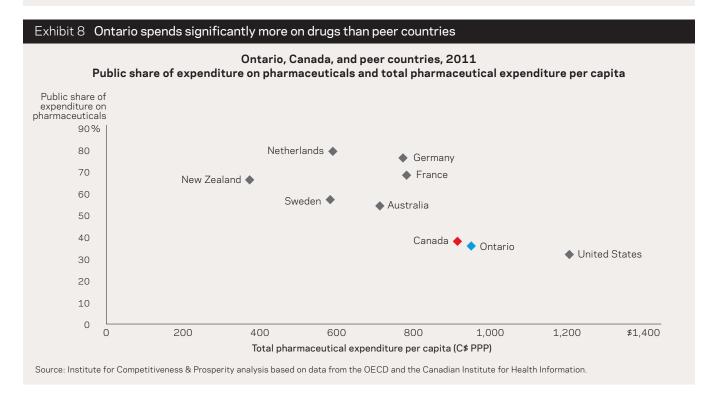
under the domain of both provincial health care departments and private insurance providers. 18 As a result,

18 Steven G. Morgan, Jamie R. Daw, and Michael R. Law, Rethinking Pharmacare in Canada, CD Howe Institute Commentary No. 384, 2013; Marc-André Gagnon & Guillaume Hébert, The Economic Case for Universal Pharmacare: Costs and benefits of publicly funded drug coverage for all Canadians, Canadian Centre for Policy Alternatives, 2010.



Note: Total health care expenditure per capita is adjusted for purchasing power parity (PPP). Data points marked in orange represent countries with life expectancy comparable to or above (> 81.1 years) that of Ontario (81.5 years).

Source: Institute for Competitivenes & Prosperity analysis based on data from the OECD, and the Canadian Institute for Health Information.

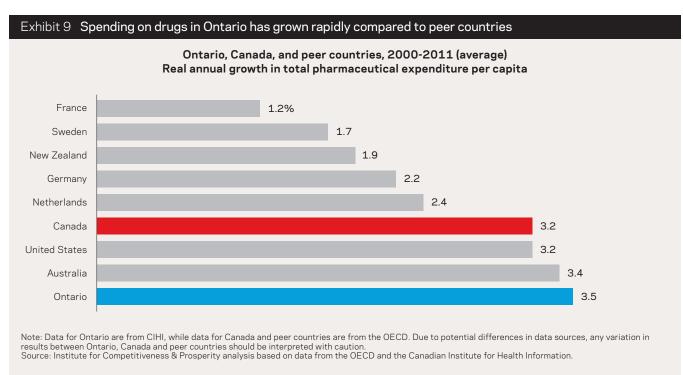


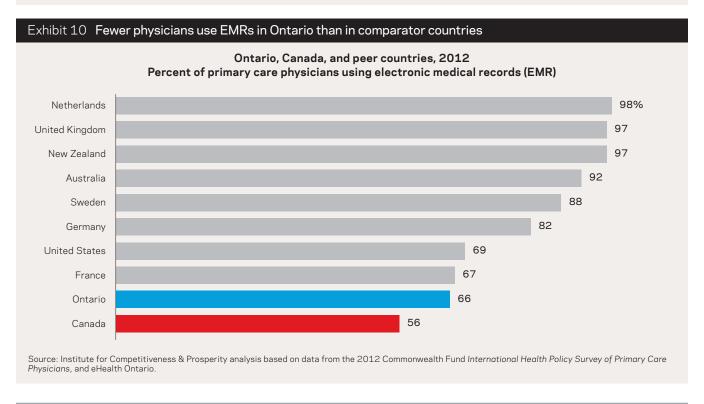
there is little opportunity for reaping the benefits of economies of scale from buying in larger quantities.

The problem is not only that spending is excessively high in Ontario; additionally, drug expenditures have been growing more rapidly in Ontario than in other countries. Although

caution needs to be taken in interpreting the results because of potential differences in data sources, data from the Canadian Institute for Health Information (CIHI) show that Ontario experienced an increase in per capita drug spending at an annual average rate of 3.5 percent in real terms from 2000 to 2011, while OECD data show

that per capita drug spending in comparator countries (including Canada) on average increased at an annual average rate of 2.5 percent during that same time period (Exhibit 9).





## Chronic diseases are costly

Management and prevention of chronic disease are receiving considerable policy attention in Ontario, but challenges remain.

HE PREVALENCE OF CHRONIC DISEASE is increasing, and fast. More than half (63 percent) of Ontarians are affected by a chronic condition, such as diabetes, high blood pressure, or a mental health condition. The prevalence of chronic conditions is significantly higher in Ontario and Canada compared to other high-income countries. Less than half of the population in the United Kingdom, the Netherlands, and Australia report at least one chronic condition, compared to Canada and Ontario, where an average of 57 percent and 63 percent of the population, respectively, report at least one chronic condition.<sup>a</sup> Therefore, chronic disease prevention and management are high priorities for the Ontario government. Ontario's Action Plan for Health Care 2012 and a number of disease specific strategies set out a range of initiatives to prevent chronic disease, including reducing childhood obesity, improving physical activity and healthy eating, improving mental health, and building government-wide capacity to deal with chronic disease.

#### Diabetes is a common chronic disease

One of the most common chronic diseases is diabetes. In Ontario alone, it is estimated that the number of people with diabetes will reach 1.9 million by 2020 (about one in every eight Ontarians), up from 546,000 in 2000, a 287 percent increase in the prevalence of diabetes. On average, medical expenses for diabetics are twice that of non-diabetics. The cost of diabetes to Ontario's health care system is estimated to grow from \$4.9 billion in 2010 to \$7 billion by 2020. b Since 2008, Ontario has invested close to \$900 million in its Ontario Diabetes Strategy to enhance prevention and management of diabetes. The 2012 Auditor General report remarked that only a small share of this funding was allocated to prevention. The strategy was also criticized for a lack of consistent outcome evaluation, and availability of primary care supports.<sup>c</sup>

#### Mental health illnesses are prevalent

As one in five Canadians lives with a mental health illness, the impact of mental illness on quality of life, health care utilization, and the economy is significant – in many cases even more so than with other medical conditions. A recent study released by the Mental Health Commission of Canada reveals that the economic cost of mental illness to Canada, in terms of health care utilization, social services, income support, and lost

productivity, is at least \$50 billion a year. In comparison with other medical conditions, the burden of mental illness and addictions in Ontario, measured as years of life lost as a result of premature mortality and years of reduced functioning, is more than 1.5 times that of all cancers and more than seven times that of all infectious diseases. At a national level, while one in five Canadians lives with a mental illness each year, one in fifteen people in Canada lives with type 2 diabetes.

In 2011, Ontario launched its \$257 million, ten-year mental health strategy, the first of its kind: Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health Strategy to support and expand mental health programs across the province. The Ontario chapter of the Canadian Mental Health Association notes that sustained and increased investment in the area is an urgent priority. Provincial spending on community mental health services and supportive housing accounted for only 1.3 percent of health spending in the fiscal year 2011-12.º A 2012 study analyzing the burden of mental illness and addiction says that, while effective treatment exists for mental illness and addiction, only few receive them. A further problem is that Ontario is currently experiencing a shortage of psychiatrists; by 2030, it will be short more than 300 psychiatrists.

There are other jurisdictions both within Canada and abroad that perform systematically better in preventing chronic disease, and it is important for Ontario to review its current priority settings and adopt relevant best policy practices. Ensuring a sound primary care system is in place, directing more attention to prevention, and implementing a meaningful performance measurement system, are critical, and should be key elements in an ongoing improvement plan.

- Health Council of Canada, Where you live matters: Canadian views on health care quality, Results from the 2013 Commonwealth Fund International Health Policy Survey of the General Public, January 2014.
- b Office of the Auditor General of Ontario, 2012 Annual Report, 2012.
- c Ann Silversides, Christopher Doig, and Terrence Sullivan, "Canadian diabetes strategies under fire as diabetes rates continue to rise," Healthy Debate, May 2013.
- d Mental Health Commission of Canada, Making the Case for Investing in Mental Health in Canada, 2013.
- e Canadian Mental Health Association Ontario, "2014 Pre-Budget Submission," 2014.
- f Dan Singh, Hussain Lalani, Boris Kralj, Ed Newman, et al., Ontario Population Needs-Based Physician Simulation Model, October 2010.

#### Ontario lags other jurisdictions in technical efficiency

Properly implemented and widely adopted information technology (IT) is a key factor in raising health care efficiency, and it also brings benefits in terms of increased safety and improved quality. 19 While Canada has made important progress on IT adoption in the last few years – the percentage of primary care physicians using electronic medical records (EMRs) increased from 37 percent in 2009 to 56 percent in 2012 – it still ranks at the bottom among comparable countries in the use of electronic technologies. Based on information provided by eHealth Ontario, Ontario, in comparison with Canada, ranks better, with 66 percent of primary care physicians using EMRs (in the fiscal year 2012-13). In contrast, EMRs are used by 92 to 98 percent of physicians in a number of nations, including the Netherlands, Norway, New Zealand, and the United Kingdom (Exhibit 10).

The use of benchmark data is critical for improving clinical performance. Benchmark data can, for instance,

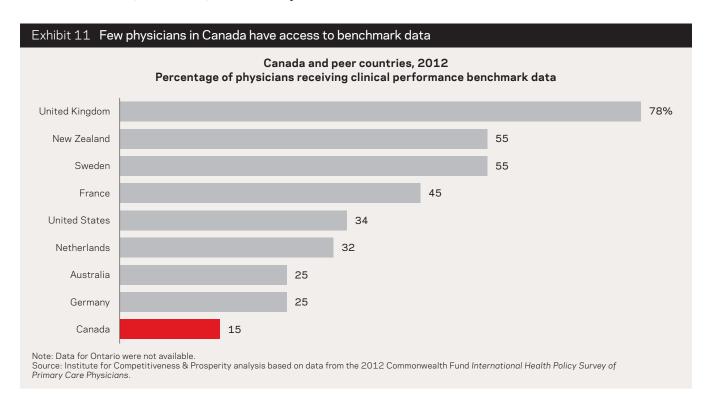
enable physicians to share best practices and motivate them to seek resources or peer support to improve. While clinical benchmark data now are widely employed in peer countries, only 15 percent of Canadian doctors receive data comparing their clinical performance to that in other practices (Exhibit 11).

#### Systemic inequity issues remain

Equity entails that high quality care is available to all and that the quality of care provided does not differ by personal characteristics, such as income.<sup>20</sup> Equal access to care is a foundational principle of Canada's universal health insurance system. Enshrined in the Canada Health Act, 1984, is the objective of universality, which ensures that there are no barriers to accessing health care, financial or otherwise. These health services are, however, restricted to medically necessary hospital and physician services. Out-of-hospital drugs, longterm care, dental care, and a number of other services delivered outside of the hospital are not included in the

public basket. For this reason, Canadian Medicare coverage has been labelled "narrow, but deep."21 As a result of narrow public coverage, the public share of health care spending in Ontario is also low, relative to that in comparable countries (excluding the United States). The public sector accounted for 68 percent of all health care spending in Ontario in 2011 (versus 70 percent in Canada), significantly lower than that in peer countries, where the public sector on average accounts for 79 percent of all health care spending (excluding the United States) (Exhibit 12).

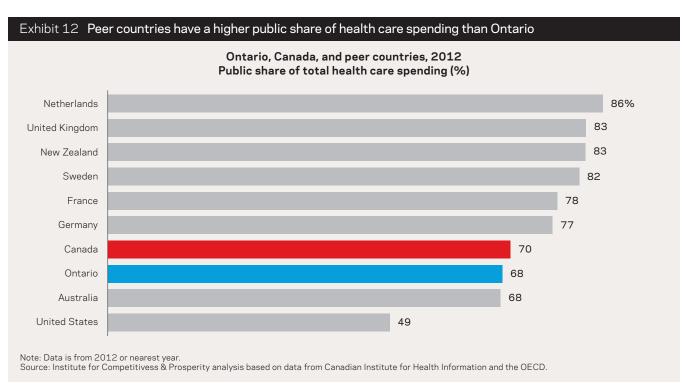
- 19 Richard Hillestad, James Bigelow, Anthony Bower, Frederico Girosi, et al., "Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, And Costs," Health Affairs, 2005, Vol. 24, No. 5, pp. 1103-17
- 20 As defined by the Institute for Medicine, Crossing the Quality Chasm: A New Health System for the 21st century, Washington: The National Academies Press, 2001.
- 21 Gregory P. Marchildon, Health Systems in Transition: Canada, 2nd Ed., Toronto: University of Toronto Press, 2013, p. 122.

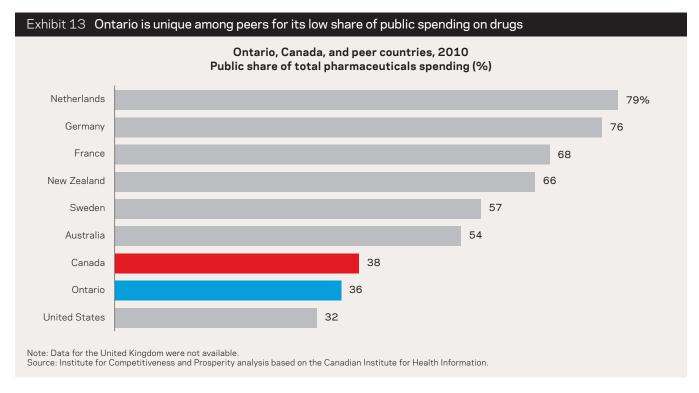


## The narrow scope of public insurance creates inequitable access to drugs

Ontario is an international outlier by not including out-of-hospital prescription drugs in its universally publicly financed system. Whereas most other universal public systems provide comprehensive drug coverage, outpatient drugs are not publicly covered in Canada. As a result, the share of public spending on pharmaceuticals in Ontario is considerably lower than that in peer countries (Exhibit 13).

While many individuals have private coverage to make up for this gap, almost one in four were without





drug insurance in Ontario in 2010 (Exhibit 14). This gap raises significant equity concerns in terms of access to drug treatment. A recent study found that nearly one in ten Ontarians (9.1 percent) cannot afford to take their prescription drugs as directed and will either leave their renewals unfilled or try to make prescriptions last longer than directed by a physician. The problem of non-adherence is particularly prevalent among individuals who do not have private drug insurance and have low incomes. The study notes that people unable to afford treatment may let their conditions worsen to a point where they require acute care services, in the emergency department, for example, which come at high public cost. The study concludes that reducing cost-related non-adherence would likely lead to better health outcomes and would decrease spending in other areas, such as admissions to hospital for acute care.<sup>22</sup>

Universality of drug coverage appears effective in removing access barriers to care. A 2013 Commonwealth Fund survey found that among eleven countries, the rate of cost-related non-compliance with drug therapy was highest in the United States (where 21 percent of adults report not filling a prescription or skipping doses because of cost), followed by Germany (9 percent), Canada, Australia, France, and the Netherlands (all 8 percent). In New Zealand, Sweden, and the United Kingdom, all of which provide some form of universal prescription drug coverage, rates of non-compliance were significantly lower (2 to 6 percent).23

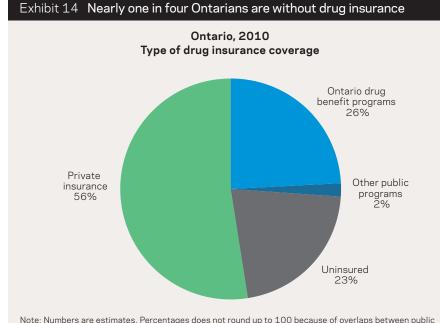
#### Current health care financing model creates a problem of intergenerational inequity

The current health care financing model poses great challenges in terms of intergenerational inequity. Within the current "pay-as-you-go model," the value of tax revenue raised is used to cover health care expenditures of that same year. Because of slower growth of the working-age population combined with an increase in the proportion of seniors, an increasingly higher proportion of government revenues is extracted from the younger and smaller working population

than from the larger retiree population to pay for health care services. As a result, the working generation is financially obliged to fund the health care cost for the generation that precedes it, carrying a disproportionately high financial burden.

In comparison with OECD countries, Canada has a relative steep age-benefit profile; that is, it spends more on the elderly than on other age groups. A 2005 study published by the National Bureau of Economic Research found that in Austria. Germany, Spain, and Sweden public health care expenditures per person for those aged 75 and over were twice the level of expenditure per person of the 50 to 64 age group. The other extreme was in the United States, where the elderly received public health care benefits that averaged eight to twelve times more than those received by people ages 50 to 64. In Canada, situated in between these two extremes, public health care spending on those aged 75 and over was four to eight times higher than spending on the 50 to 64 age group.<sup>24</sup>

In the United States, the reason for this particular age-health expenditure profile is that the government does not provide health care to the entire population; rather, it covers the majority of health care costs of the very poor and those over 65 through Medicaid and Medicare programs. In Canada, a possible contributor to the relative steeper age-benefit profile



Note: Numbers are estimates. Percentages does not round up to 100 because of overlaps between public and private programs.
Source: Institute for Competitiveness & Prosperity analysis based on data from the Ontario Ministry of

Health and Long-Term Care.

<sup>22</sup> Michael R. Law, Lucy Cheng, Irfan A. Dhalla, Deborah Heard, et al., "The Effect of Cost on Adherence to Prescription Medications in Canada," Canadian Medical Association Journal, 2012, Vol. 184, No. 3, pp. 297-302.

<sup>23</sup> Cathy Schoen, Robin Osborn, David Squires, and Michelle M. Doty, "Access, Affordability, And Insurance Complexity Are Often Worse In The United States Compared To Ten Other Countries," Health Affairs, 2013, Vol. 32, No.12, pp. 2205-15

<sup>24</sup> Christian Hagist & Laurence J. Kotlikoff, "Who's Going broke? Comparing Health Care Costs in Ten OECD Countries," National Bureau of Economic Research Working Paper No. 11833, 2005.

is that Canada, unlike the European countries, does not have universal coverage for prescription drugs. Rather, public subsidies for prescription drugs are mainly targeted toward seniors as well as recipients of social assistance. Canada's largest publicly funded prescription drug program, the Ontario Drug Benefit Program, provides coverage for approximately 3.5 million Ontarians, and of these beneficiaries, 67 percent are seniors.

Ontario could be delivering better health care value at a lower cost if it became as efficient as the best-performing countries in the OECD. Despite being among the highest spenders on health care in the OECD, Ontario's overall performance in health outcomes and quality lags that of other OECD countries. In terms of technical efficiency, Ontario trails peers in health care IT adoption, and IT is currently not used to improve clinical performance through benchmark data. On dimensions of equity, whereas most other universal public systems provide comprehensive drug coverage, out-patient drugs are not publicly covered in Ontario, except for seniors and those receiving social assistance, leaving one in four without drug insurance in Ontario. In comparison with peer countries, Canada has a relative steep age-benefit profile, and a reason for this may be that public subsidies for prescription drugs are mainly targeted toward seniors.

<sup>25</sup> Health Canada, "Provincial and Territorial Public Drug Benefit Programs," last modified October 1, 2004, accessed January 4, 2014, http://www. hc-sc.gc.ca/hcs-sss/pharma/acces/ptprog-eng. php.

<sup>26</sup> Ontario Ministry of Health, "2010/11 Report Card for the Ontario Drug Benefit Program," Presentation, 2012, slide 10.



## WHAT DRIVES **HEALTH CARE COSTS IN ONTARIO?**

#### ONTARIO NEEDS TO UNDERSTAND WHERE MONEY IS SPENT IN

health care, and also where it could be saved. The three largest spending items are hospitals, drugs, and physicians, and Ontario's capacity to control spending in each of these areas is critical for a more fiscally sustainable system.

#### TO DEVELOP EFFECTIVE POLICIES

for improving Ontario's health care system, a comprehensive understanding of the key drivers of increased spending is needed. This chapter analyzes what causes health care expenditures to rise and addresses how Ontario is responding to these cost drivers.

From 2000 to 2011, government health care expenditure rose at an annual average rate of 6.7 percent. To analyze and calculate the underlying factors influencing health care costs, the Institute applied a method used by the Canadian Institute for Health Information (CIHI). As noted by CIHI, it is important to keep in mind that health care expenditure growth is the outcome of complex interactions of the various cost drivers and that disentangling those interactions is not a straightforward process. It is therefore important to use caution when interpreting these results.

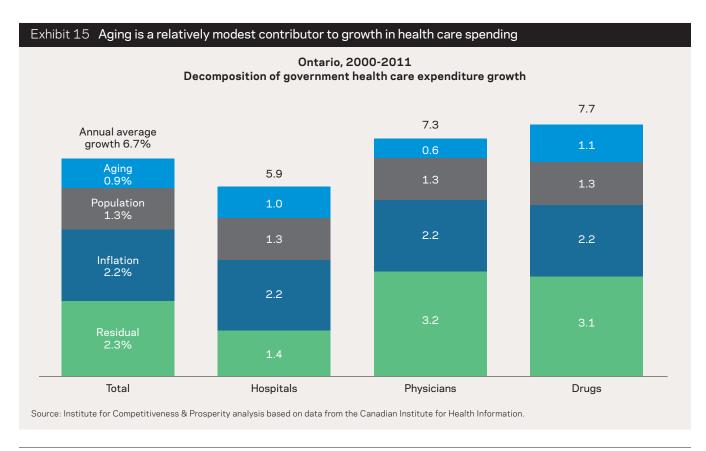
Expenditure growth is influenced by four major factors: general inflation in the economy, population growth, population aging, and a residual category. The residual category includes health care sector inflation above the rate of general inflation, and cost drivers such as increases in service utilization, labour costs, and increases in costs arising from medical technology (Exhibit 15).<sup>27</sup>

Only 2.2 percent of growth in government health care spending can be attributed to pure demographic developments; that is, aging and population growth. By contrast, government health care expenditure grew by a residual of 2.3 percent per year, while the general inflation category accounted for 2.2 percent. The effect of aging varies slightly across spending categories. While aging contributed to an annual average rate of growth of only 0.6 percent to physician spending, it contributed 1.1 percent per year on average to growth in spending on drugs.

## Population aging is a cost driver, but a relatively modest one

At first glance, it seems intuitive that an increase in the proportion of seniors would be associated with higher health care costs. Seniors are typically frequent users of health care services, and system spending is higher on seniors than on any other segment of the population. The Canadian Institute for Health Information estimates that in 2012,

27 The following methodology was used to calculate the effect of cost drivers. Because no ideal measure of inflation for the health care sector exists, economy-wide inflation in Ontario was used for the purpose of this analysis. General inflation in Ontario averaged 2.2 percent per year from 2000 to 2011, using data from Statistics Canada. Population growth in Ontario is calculated from CIHI population data. The aging effect was calculated by holding population growth constant and multiplying the 2000 population age structure (by sex and separated into five-year brackets) by the 2011 government health expenditure per capita for each of the corresponding age group and sex. This figure was then compared to the actual population age structure in 2011 multiplied by the 2011 government health expenditures per capita. An annual compound growth rate for the eleven-year period was then computed.



Canadians older than age 65 consumed 45 percent of provincial and territorial government health care dollars, although they made up only 14 percent of the population.<sup>28</sup> Understanding the relationship between age and health care expenditures is, however, not as straightforward as it appears.

When comparing two annual profiles, in this case, government health care spending in 2000 and in 2011, it is evident that Ontario spends more today on anyone at any age than it did eleven years ago. In fact, the rate of health care spending growth per capita for seniors was actually equal the rate for non-seniors over the last decade (71 percent). Interestingly, the largest increases were seen for infants under one year and children in the 10 to 14 age group, where per capita spending increased 77 and 79 percent, respectively.

One reason Ontario has not seen higher increases in health care spending for seniors may be the effects of the "healthy aging" hypothesis. According to this hypothesis, human aging is being postponed, and the increase in life expectancy is accompanied by an equivalent gain in the number of years spent in good health.<sup>29</sup> Several studies have found that today's seniors are healthier than ever before, and that the health status of the youngest seniors (ages 65 to 74) appears to be similar to that of adults aged 45 to 64.30

The increase in costs for patient care across all age groups has led a number of experts to conclude that the actual reason for increases in health spending is less of an issue of aging. Rather, it is the result of changes in the way all patients are treated in the system, resulting from increased spending on drugs, health care professionals, and technological advancements, including new diagnostics and treatment methods.31

Recent years have witnessed tremendous investments in senior care. The \$1.1 billion Aging at Home strategy was recently followed up with the government's \$200 million Action Plan for Seniors in 2013 that has the objective to make Ontario "the best place to grow up and grow old."32 While there is a need to adapt Ontario's health care system to the needs of the aging population, aging's impact on health care "has been overblown in popular discourse,"as noted in the report of the Commission on the Reform of Ontario's Public Services.33

Research by the Institute and others indicate that aging is a modest cost driver, accounting for about 1 percent annual growth.34 The Institute estimates that 0.9 percent of the growth in public sector health care spending in Ontario over the last decade can be attributed to aging, and relative to other drivers of health care expenditures, the magnitude of the aging effect is modest. Looking ahead, this trend is expected to continue. The Office of the Parliamentary Budget Officer projects that from 2012 to 2050, aging will contribute 0.8 percentage points on an average year-toyear basis to growth in health care spending in Canada.<sup>35</sup> Ontario may also look to other nations to anticipate the economic impact of population aging. The United Kingdom, France, and Sweden are more aged societies with seniors accounting for 16-19 percent, compared to Ontario, where 14 percent of the population is over the age of 65. Yet these countries have lower total health care spending per capita than Ontario.

Reasonable policy attention to aging's contribution to increases in health expenditures is, however, needed, because a 1 percent increase yearover-year cumulatively adds up. There are too many chronic care patients, many of them seniors, in acute care settings, because community supports are not in place. Ontario's reliance

on Alternate Level of Care (ALC), in which non-acute care patients wait in hospitals beds for admission elsewhere, demonstrates the need for strong community care supports. Ontario's health care system has to adapt to address the needs of Ontario's aging population. Dr. Samir Sinha, appointed in 2012 by the Ontario Minister of Health and Long-Term Care to lead the development of a Seniors Strategy, has made relevant recommendations to this end, and his advice to strengthen primary care access for seniors and increase investment in community care has begun to be implemented.<sup>36</sup>

- 28 Canadian Institute for Health Information, National Health Expenditure Trends, 1975 to 2013, 2013
- 29 Christine de la Maisonneuve & Joaquim Oliveira Martins, "Public Spending on Health and Long-Term Care: A New Set of Projections," OECD Economic Policy Papers Series No. 6, 2013.
- 30 Pamela L. Ramage-Morin, Margot Shields, and Laurent Martel, "Health promoting factors and good health among Canadians in mid-to late life," Statistics Canada Health Reports, 2010, Vol. 21, No. 3, p.14; Canadian Institute for Health Information, Health Care Cost Drivers: The Facts, 2011.
- 31 Canadian Institute for Health Information, Health Care Cost Drivers: The Facts, 2011.
- 32 The Ontario Seniors' Secretariat, Independence, Activity and Good Health: Ontario's Action Plan for Seniors, 2013.
- 33 Commission on the Reform of Ontario's Public Services, Public Services for Ontarians: A Path to Sustainability and Excellence, 2012, p. 145.
- 34 Steven Morgan & Colleen Cunningham, "Population Aging and the Determinants of Health Care Expenditures: The Case of Hospital, Medical and Pharmaceutical Care in British Columbia 1996 to 2006," Healthcare Policy, 2011, Vol. 7, No. 1, pp. 68-79; Canadian Institute for Health Information, National Health Expenditure Trends, 1975 to 2013, 2013; Christine de la Maisonneuve & Joaquim Oliveira Martins, "Public Spending on Health and Long-Term Care: A New Set of Projections," OECD Economic Policy Papers Series No. 6, 2013; Alfons Palangkaraya & Jongsay Yong, "Population Aging and its Implications on Aggregate Health Care Demand: Empirical Evidence from 22 OECD Countries." International Journal of Health Care Finance and Economics, 2009, Vol. 9, No. 4, pp. 391-402: Canadian Foundation for Healthcare Improvement, "Myth: The Aging Population is to Blame for Uncontrollable Healthcare Costs," February 2011.
- 35 Mostafa Askari, Randall Bartlett, Scott Cameron, and Helen Lao, "Fiscal Sustainability Report 2013," Office of the Parliamentary Budget Officer, 2013, p. 17.
- Samir K. Sinha, Living Longer, Living Well, Ontario's Seniors Strategy, 2012

### The cost of end of life care is high

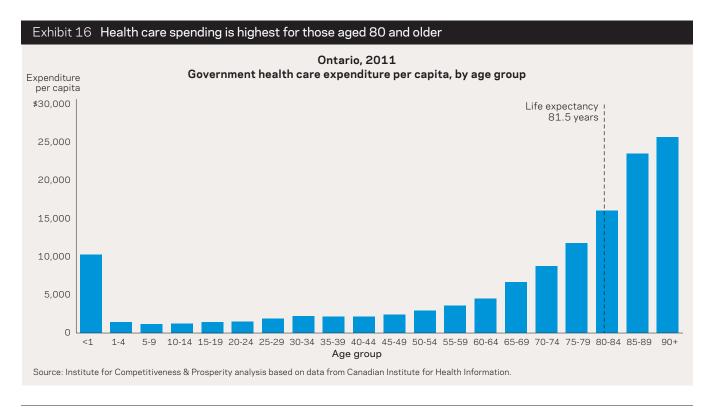
Evidence is emerging that health care costs tend to be associated with end of life, and that proximity to death overshadows the effect of age on health care costs. One-third to onehalf of a typical person's health care expenditures happens in the final year of life.<sup>37</sup> In the United States, the 6 percent of Medicare recipients who die in a given year account for 28 percent of Medicare expenditures, and similar findings have been reported in other studies.<sup>38</sup> A study, using empirical evidence from twenty-two OECD countries found that once proximity to death is accounted for, population aging was negatively correlated with health expenditures.39 A 2011 study estimated that the total Ontario Ministry of Health funded cost of end of life care for cancer patients was approximately \$544 million in 2002-03, with an average per patient cost of about \$25,000.40

End of life care is critically important to the next decades of health care in

Ontario. While the number of seniors is projected to double, increasing from 1.8 million in 2009 to 3.7 million by 2030, those aged 90+ is projected to grow even faster at 147 percent. 41 Understanding the heterogeneity among senior age groups is important, because government health spending varies significantly in terms of age. On average, health care spending per person is highest for those 80 years of age and older, and spending takes a significant jump for people age 85 and older. Government health care expenditures amount to \$26,000 on average for a 90-year old, while spending on an individual aged between 70 and 79 amounts to approximately \$10,000 on average (Exhibit 16). Older seniors account for more health care spending largely as a consequence of two factors: the cost of health care in the last few months of life and the minority of the population with complex chronic illnesses that require intensive care.42 Obviously, the likelihood of dying increases with age, and the closer an individual is to the life expectancy (81.5 years in Ontario), the greater the health care costs.

Population aging is a contributor to rising health care cost, but its significance may be exaggerated. Rather, the high cost of end of life care seems largely underestimated, and an intensified focus on end of life care is needed. In the Commission on the Reform of Ontario's Public Services,

- 37 Seamus Hogan & Allan Pollock, "Why Does Health Care Utilization Increase with Age: The Cost of Living or the Cost of Dying?" Paper presented to the Canadian Economics Association Annual Meeting, June 2001; Michael Murphy, "Proximity to death and health care costs," in A. McGuire & J. Costa-Font (Eds.), The LSE Companion to Health Policy Emerald, Northampton: Edward Elgar Publishing Inc., 2012., pp. 221-32.
- 38 Meena Seshamani & Alastair M. Gray, "A Longitudinal Study of the Effects of Age and Time to Death on Hospital Costs," Journal of Health Economics, 2004, Vol. 23, No. 2, pp. 217-35.
- 39 Alfons Palangkaraya & Jongsay Yong, "Population Aging and its Implications on Aggregate Health Care Demand: Empirical Evidence from 22 OECD Countries," International Journal of Health Care Finance and Economics, 2009, Vol. 9, No. 4, pp. 391-402.
- 40 Hugh Walker, Mark Anderson, Farah Farahati, Doris Howell, et al., "Resource Use and Cost of End-of-Life/Palliative Care: Ontario Adult Cancer Patients During 2002 and 2003," Journal of Palliative Care, 2011, Vol. 27, No. 2, pp. 79-88.
- 41 Ontario Ministry of Finance, "Ontario's Long-Term Report on the Economy," 2010.
- 42 Canadian Institute for Health Information, Health Care Cost Drivers: The Facts, 2011.



Drummond emphasized the need for reviewing the "extraordinary interventions at end of life," and for directing attention to pre-agreements on end of life care.43

### The enrichment factor is a significant cost driver

After accounting for changes in the age structure, population growth, and the general inflation rate of the economy, the average annual growth rate of real health spending from 2000 to 2011, leaves a residual category of variables that results in a 2.3 percent annual growth in cost. The economic literature refers to this unmeasured growth as the "other" category, or the "enrichment factor." The enrichment factor includes inflation unique to the health care sector, driven mainly by labour cost increases, technology changes (including new surgical techniques, new drugs, and new medical devices), and increases in utilization, or the quantity of health services used per person. This category is, however, least understood and the most difficult to distil into individual factors, but in contrast to demographic developments, which can be little influenced by health care policy, the residual category holds significant potential for policy intervention.

### Technology and increased utilization account for significant costs

Health economists contend that the introduction and diffusion of new technology, including drugs, tests, and treatment are the primary cause of cost increases in health care over the long term. 44 (See *Technological* advances and costs: The promise and pitfalls of genomics medicine.) In many instances, new medical technologies lead to swifter treatment, higher productivity, and better health care outcomes. While surgeons in the past had to open the chest to perform heart valve replacement, this can

now be done with a fully collapsible replacement valve through a catheter. 45 There is, however, also increasing recognition that new technologies or new drugs do not necessarily translate into improved health care outcomes, although they will almost always cost significantly more. Newer diabetes drugs, for instance, cost more than those that have been available for years, but evidence is lacking about any substantial difference in their benefits.46

### Diagnostic imaging raises costs.

One reason for the increase in the aggregate cost of care is an expansion in demand caused by the increase in supply of technology (known as the "treatment expansion" effect). The increase in utilization of magnetic reasoning imaging (MRI) scanners and computed tomography (CT) scanners in Ontario illustrates this technology-induced increase in demand. The number of CT scanners and MRI scanners almost doubled over nine years, from 2003 to 2012. Accordingly, in 2012, Ontarians received more than 0.8 million MRI exams and 1.6 million CT exams, representing a 125 and 55 percentage increase, respectively, compared to 2003.<sup>47</sup> The rapid increase in imaging exams performed in Canada cannot, however, be explained by the aging of the population or by a change in indications for testing.<sup>48</sup> International literature asserts that as many as 30 percent of CT scans and other imaging procedures are inappropriate. There is little comparable Canadian evidence on this issue, and more research is needed so that the rate of inappropriate imaging can be determined and acted on if Canada falls into the same patterns as other countries.<sup>49</sup>

Spending on drugs has grown *quickly.* Drugs have been the fastest growing component of health care cost in recent decades in Ontario. From 1982 to 2013, inflation-adjusted total spending per capita on pharma-

- 43 Commission on the Reform of Ontario's Public Services, Public Services for Ontarians: A Path to Sustainability and Excellence, 2012, pp. 168 & 190
- 44 Sherry Glied, "Health Care Costs: On the Rise Again," Journal of Economic Perspectives, 2003, Vol. 17, No. 2, pp. 125-48.
- 45 American Heart Association, "Transcatheter Aortic Valve Replacement (TAVR or TAVI)," last modified February 18, 2013, accessed February 15, 2014, https://www. heart.org/HEARTORG/Conditions/More/ HeartValveProblemsandDisease/Transcatheter-Aortic-Valve-Replacement-TAVR-or-TAVI\_ UCM\_450827\_Article.jsp.
- 46 G. Caleb Alexander, Niraj L. Sehgal, Rachael M. Moloney, and Randall S. Stafford, "National Trends in Treatment of Type 2 Diabetes Mellitus, 1994-2007," Archives of Internal Medicine, 2008, Vol. 168, No. 19, pp. 2088-94.
- 47 Canadian Institute for Health Information, Medical Imaging Technology Database, 2012.
- 48 Health Council of Canada, "Decisions, Decisions: Family Doctors as Gatekeepers to Prescription Drugs and Diagnostic Imaging in Canada, September 2010.
- 49 James Fraser & Martin Reed, "Guest Editorial: Appropriateness of Imaging in Canada," Canadian Association of Radiologist Journal, 2013, Vol. 64. No. 2, pp. 82-4.

ceuticals increased by a total of 312 percent, while spending on physician services rose 116 percent and spending on hospitals went up by 53 percent (Exhibit 17).

A number of factors drives increased spending on prescription drugs, including demographics, actual cost of drugs, and treatment decisions made by physicians and hospitals. According to CIHI, the primary reason for the increase in drug spending in Canada between 1998 and 2007 was that Canadians, of all ages, purchased more prescription drugs than ever before. Volume of use accounted for 6.2 percent of the average annual growth rate of 10.1 percent; while population growth and population aging contributed 2 percent combined to the growth in prescription drug use. CIHI explains the increase in volume by changes in treatment guidelines, increased disease prevalence, and the uptake of new drugs.<sup>50</sup>

## Physicians have experienced faster wage growth than other occupations

Spending on physicians services has

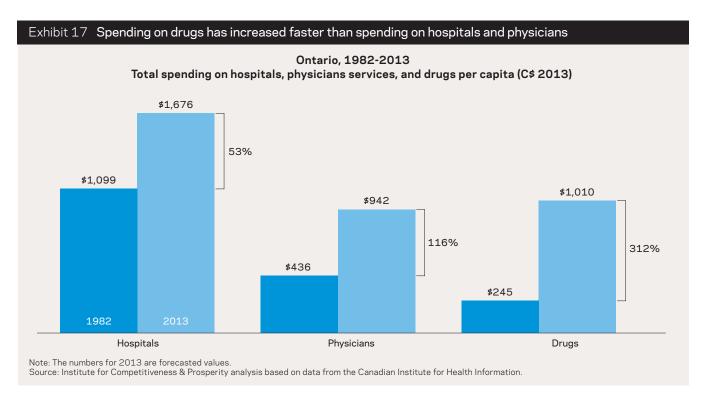
been the second-fastest growing component of health care costs in recent decades in Ontario. The rise in spending on physician services is a combined result of an increase in growth in services performed, and changes to the way and the amount physicians are paid. A recent study done by the Ontario-based Institute for Clinical Evaluative Sciences (ICES) examined payments to Ontario physicians in the period between 1992-93 and 2009-10 and found that about 37 percent of the increase in payment growth could be attributed to increases in physician supply, and the remaining 63 percent to an increase in the average payment per physician.<sup>51</sup> Similarly, CIHI ascribed more than half of the growth of physician spending from 1998 to 2008 to increases in physician fee schedules.52

Institute analysis shows that while physicians experienced a 51 percent increase in their wages from 2002 to 2012, other health care professionals and all occupations experienced wage increases of 29 percent in that same time period (Exhibit 18). On a yearly basis, physician remuneration

(per physician) grew at a real compound growth rate of 4.2 percent over the last decade in Ontario, faster than that of other health care professionals (2.5 percent) and all occupations (2.6 percent).

Compared to the rest of Canada, Ontario's doctors are the best paid in the country. An Ontario physician in 2011-12 received on average a gross clinical payment of approximately \$375,500, while a physician in British Columbia was paid \$274,500 in that same year, a payment difference of about \$100,000 or a 37 percent premium. Relative to the rest of Canada, Ontario physicians, on average, received approximately \$85,000 more on a yearly

<sup>52</sup> Canadian Institute for Health Information, Health Care Cost Drivers: The Facts, 2011.



<sup>50</sup> Canadian Institute for Health Information, Drivers of Prescription Drug Spending in Canada, 2011.

<sup>51</sup> David A. Henry, Susan E. Schultz, Richard H. Glazier, R. Sacha Bhatia, et al., Payments to Ontario Physicians from Ministry of Health and Long-Term Care Source 1992/93 to 2009/10, ICES Investigative Report, Institute for Clinical Evaluative Sciences, 2012.

basis in 2011-2012, or a 30 percent premium. 53 Not surprisingly, Ontario spends considerably more on physicians relative to the rest of Canada (estimated \$930 per capita versus \$880 for Canada as a whole in 2013). It is important to note that this pay differential is not a recent development; it began in 1975.54

According to the OECD's most recent health care publication, Canadian doctors, in particular specialist physicians, are some of the best paid in the OECD. The remuneration of Canadian specialists relative to the average wage is the third-highest, after Belgium and the Netherlands, among twenty-three peer countries, with Canadian specialists being paid 4.7 times the average wage in Canada. Canadian general practitioners (GPs) have the second highest ratio, tied with Ireland and the Netherlands. with GPs being paid three times the average wage.<sup>55</sup>

The OECD's comparative remuneration analysis should, however, be interpreted with caution, because it refers to average gross income, and

excludes practice expenses for selfemployed physicians and benefit arrangements. While most physicians in the OECD are salaried, Canadian physicians are self-employed, and they therefore incur overhead costs, such as rent, supplies, and insurance, and also have different benefit arrangements. A study using selfreported data from the 2010 National Physician's Survey found that overhead cost for Ontario physicians on average is 29 percent of their income with overhead varying to a large degree by specialty, from 42.5 percent in ophthalmology to 12.5 percent in emergency medicine.<sup>56</sup> In addition, benefit arrangements for physicians across the OECD differ substantially. While most physicians in the OECD enjoy pension benefits, Canadian physicians are responsible for funding their own retirement. At the same time, however, self-employed physicians in Canada enjoy tax benefits through incorporation, which allows for lower taxes, income splitting, and deferral of tax payments. Because of these variations in practice expenses and benefits arrangements, it is difficult to draw any firm conclusions

- 53 Canadian Institute for Health Information, National Physician Database, 2013.
- 54 The Canadian Institute for Health Information calculates "average gross clinical payment per physicians" as the sum of all gross payments (fee-for-service and alternative payments) made to physicians divided by the total reported number of physicians, less the number of imaging and laboratory specialists. Canadian Institute for Health Information, National Physician Database, 2011-2012, 2013
- 55 OECD, Health at a Glance 2013: OECD Indicators, 2013, p. 75.
- Jeremy Petch, Irfan A. Dhalla, David A. Henry, Susan E. Schultz, et al., "Public Payment to Physicians in Ontario Adjusted for Overhead Costs," Healthcare Policy, 2012, Vol. 8, No. 2, pp. 30-6.



Note: Numbers are calculated on a per person basis to adjust for labour force growth and are adjusted for inflation. Because of different data sources, results should be interpreted with caution.

Source: Institute for Competitiveness & Prosperity analysis based on data from the Canadian Institute for Health Information, Institute for Clinical Evaluative Sciences, and Statistics Canada

from the OECD analysis, and a real comparison would require further analysis. However, there is evidence that Ontario physicians receive payments in excess of those in other Canadian provinces, and addressing the rise in physician spending has to be part of the solution to improve efficiency of the health care system.

Population aging is a contributor to rising health care cost, but a relatively modest one. Rather, the high cost of end of life care seems largely underestimated, and an intensified focus on end of life care is needed. The most influential causes behind rising health care spending are advances in and diffusion of medical technology, including pharmaceutical drugs (the fastest growing category of health care expenditures), increased utilization, and labour costs in the health care sector, specifically the compensation of physicians. Policy attention should be directed at these nondemographic cost drivers, which, unlike aging, are amenable to policy intervention.

### The promise and pitfalls of genomic medicine

Genomic medicine is one of the most promising new avenues of medical research and is hailed as the next frontier in modern health care.

**ENETIC TESTS AND WHOLE GENOMIC SEQUENCING** technologies can improve diagnosis of diseases, allow for earlier detection of genetic predisposition to disease, and inform drug dosing and treatment, in particular for cancer patients. Inevitably, genomic medicine will come to play an increasingly important role in health care - a role that, if properly managed, could bring large public health benefits.

Whole-genome sequencing (WGS), a scientific breakthrough only seven years old, is on its way to becoming mainstream in clinical practice. Traditionally, genetic tests evaluated one or more genes at a time, usually in isolation. New genomic sequencing technologies can assess an individual's entire genetic sequence, generating huge volumes of data (over three million data points). Although there are examples of real benefits, the rapid technological advances in genomic medicine also present a host of scientific, ethical, and economic questions.

With new technology comes increased demand. In Ontario, the majority of genetic testing covered by the Ontario Health Insurance Plan (OHIP) is done at laboratories outside the province (about 85 percent), mainly in the United States. In 2012-13, out-of-province genetic testing cost the Ontario government close to \$20 million, up from \$6 million in 2007-08, an increase of 240 percent over six years.<sup>a</sup> As part of a genetics strategy, the Ontario Ministry of Health and Long-Term Care has set as a goal to repatriate five of the major genetic tests done outside the province, to increase the capacity of provincial laboratories and reduce the cost of sending tests out of country.b

A major issue with advancement in genomic medicine is cost. While the cost of WGS has dropped dramatically and may be close to reaching a \$1,000 price tag per test, cheaper genetic testing could end up costing the Ontario health care system tremendous amount of money. The \$1,000 price tag does not include the actual cost of the machine (which has a starting price of \$1 million USD depending on the model), expenses associated with

analyzing the WGS data, relaying the information to physicians and patients, or the "cascade-effect," defined as a chain of events started by a test that results in further tests or treatment.c Because genomic knowledge is still expanding, one of the biggest risks is the misinterpretation of data or the over-interpretation of data, which could lead to additional diagnostics, testing, and management and, without proper guidelines, significant costs without increased benefits for the patient could follow.d

Moreover, genomic medicine presents a number of clinical and ethical challenges. Much of the human genome is currently not interpretable, and many findings have no clinical utility and will make no difference to the quality of life for a given patient. If no treatment exists for a particular identified genetic condition, for example, or if information relates to diseases that might present later in life, such information may be of little use, and the impact for the patient may only be increased anxiety.e

Policy makers in Ontario need to pay close attention to genomic medicine and the various effects it has on the health system costs. Establishing the necessary policy framework for genetic medicine in Ontario is critical. The rapid advancements in genomic medicine are seemingly taking place within a system that currently is too slow and too disorganized to absorb them.

- Based on data provided by the Ontario Ministry of Health and Long-Term Care.
- Ontario Medical Association, Project to Establish a Quality Management Program for Repatriated Genetic Testing, Report of the Quality Management Program - Laboratory Services Expert Panel, March 2010
- Susan Young, "Does Illumina have the first \$1,000 genome?" MIT Technology Review, 14 January 2014; Carolina Marzuillo, Corrado De Vito, Elvira D'Andrea, Annalisa Rosso, et al. "Predictive Genetic Testing for Complex Diseases: A Public Health Perspective," QJM: An International Journal of Medicine, 2014, Vol. 107, No. 2, pp. 93-7
- Jordan P. Lerner-Ellis, "The Clinical Implementation of Whole Genome Sequencing: A Conversation With Seven Scientific Experts," Journal of Inherited Metabolic Disease, 2012, Vol. 35, No. 4, pp. 689-93.

The present and future integration of genomic medicine into clinical and public health practice in Ontario will require developing a specific policy framework based on systematic, evidence-based technology assessment and economic evaluations. Centralizing responsibility to oversee and coordinate genetic medicine in Ontario will be key. Currently, responsibility for this area of health care is divided across the federal and provincial governments, regional health authorities, and a network of genetic testing laboratories, and the decision making processes are described as being largely local and ad hoc. A comprehensive plan to ensure adequate genomic education of physicians and other health care professionals and to the public (namely because of the increasing use of direct-to-consumer genetic testing) is also needed. Further, policy makers have a clear interest in evaluating all aspects of genetic testing services, including their benefits and limitations through rigorous research studies.

The United Kingdom recently announced its national endeavour to sequence the personal DNA code of 100,000 patients in the National Health Service (NHS), making the country, according to the UK government, the first ever to introduce genome technology into its mainstream health care system. Genomic England, a company set up by the UK Department of Health, will implement the project, which has received £100 million in earmarked funding to train British genetic scientists and the wider health care community in genome technology and to build the system infrastructure needed.

Ontario needs an effective policy framework to manage new genetic technologies. As genomic science expands and becomes more integrated into clinical practice, it is an urgent priority for Ontario to ensure the right infrastructure is in place so that use and related costs of this new technology are justified by associated improvements in health outcomes.

f Genetics England, "About the 100K Genome Project," accessed March 21, 2014, http://www.genomicsengland.co.uk/100k-genome-project/.



## WHERE DOES **ONTARIO GO** FROM HERE?

THE INSTITUTE OFFERS EIGHT POLICY OPTIONS that address the challenges of efficiency, equity, and affordability. Some of the proposals have implications for the long term, while others bring benefits in the short term. Ontario needs to act now to address the significant challenges that its health care system faces, but it also needs to develop policies that take into account the ongoing and future success of its health care system.

**EVEN IF SOME POLICY OPTIONS** are not feasible in the current political setting, that does not mean that they are not worth considering. Policy makers should develop an inventory of potential policy opportunities and be prepared to act in windows of opportunity to introduce and execute those policies.

To tackle the affordability issue of health care effectively, the Institute identifies policy options that could contribute to the transformation of Ontario's health care system into one that is more equitable and efficient. However, even if Ontario is extraordinarily successful in implementing these policies, it still faces difficult choices on how the province will finance the rising cost of health care. A combination of reforms focusing on heightened efficiency and equity and a consideration for raising new revenues will be necessary if Ontario wants to sustain its current health care system.

|           | OPPORTUNITY  | OBJECTIVES<br>ADVANCED                | IMPORTANT CONSIDERATIONS   |
|-----------|--|---------------------------------------|--|
|           | Strengthen primary care  | Efficiency<br>Equity<br>Affordability | Strong primary care is the backbone of a high-performing health care system, but despite reform efforts, Ontario's primary care performance continues to lag international peers.                |
| S<br>S    | Engage physicians to be<br>leaders for change and renew<br>the payment model | Efficiency<br>Affordability           | Physician leadership is crucial to improve system efficiency and affordability. The US model of Accountable Care Organization provides lessons fo Ontario in incentivizing physician leadership. |
| <b>₩</b>  | Accelerate the deployment of IT in health care                               | Efficiency<br>Affordability           | Vast opportunities in health care IT are not being reaped. Peer performance data, which are now widely employed by other jurisdictions, can be used to foster competition based on performance.  |
|           | Implement an Ontario-made pharmacare program                                 | Efficiency<br>Equity<br>Affordability | A major reorientation of pharmaceutical policy in<br>Ontario is needed to improve spending control and<br>equity of access.  |
| X         | Scale up policy focus on end of life care                                    | Efficiency<br>Equity<br>Affordability | Care provided at the end of life, rather than aging related care, is a significant driver of health care cost. An effective end of life care strategy for Ontario is needed.                     |
| 00        | Introduce a savings plan for prefunded drugs                                 | Efficiency<br>Equity<br>Affordability | Raising intergenerational equity and moving toward<br>a stable financing structure require that Ontarians<br>save up for future health costs, like they do for<br>retirement.                    |
| 3         | Build the case for co-payment  | Efficiency<br>Equity<br>Affordability | A price mechanism such as patient co-payment, if carefully designed and well implemented, could bring benefits in terms of both cost efficiency and equity.                                      |
| <b>T4</b> | Abolish tax subsidy to employer-provided health insurance benefits           | Efficiency<br>Equity<br>Affordability | Tax-exclusion for employer-sponsored, health insurance plans is expensive, inefficient, and regressive. Rectifying the situation is a rare win-wir situation.                                    |



### Strengthen primary care

A strong primary care system is the backbone of a high-performing health care system, and jurisdictions with good primary care have lower overall health care costs and higher system performance.<sup>57</sup> The Commission on the Reform of Ontario's Public Services recommended that the Ontario government make "[primary care] a focal point in a new, integrated health model," and Ontario policy makers are increasingly recognizing the fundamental importance of a strong primary care system.<sup>58</sup>

Ontario has implemented substantial reforms in primary care over the past decade, but primary care infrastructure and performance continue to lag international peers. Continued policy attention to this area is crucial to achieve a health care system that can effectively manage the increasing prevalence of chronic disease and can divert patients not requiring acute care away from hospital care to more clinically appropriate community care. Ontario's health care system was built mainly for acute care, but it needs to adapt for the delivery of chronic care. This transformation relies on a sound primary health care system, and the defining characteristics of primary care – continuity, coordination and comprehensiveness – are essential for effective prevention and management of chronic disease.

### Ontario lags peer countries in primary care

Ontario's primary care performance lags that of international peers on many measures, including wait times, access to after-hours care, delivery of chronic care, use of IT and the provision of team-based care. 59 An inaccessible primary care system has

the potential to increase health care costs that could have been avoided: for example, an individual who cannot find after-hours care with their regular doctor may choose to go the emergency room (ER), even if he or she does not need this intensity of care. The issue of avoidable ER visits is worse in Ontario than in ten other OECD countries. Close to half of Ontarians (48 percent) report that they recently went to an emergency department for a health problem that their regular doctors could have treated if he or she had been available, similar to the Canadian average of 47 percent, but the highest among the countries surveyed. In the best performing countries, including France, New Zealand, and Australia, significantly fewer people (25 to 27 percent) report to have used ER services because of unavailability of regular care provider.60

In managing chronic disease and reducing use of costly acute care services, in-home care provided by primary care health professionals has been found to be a more efficient and better quality care model than the hospital care model. A 2013 Ontario study showed that in-home care has beneficial effects on patient's health outcomes and reduces the number of unplanned hospitalizations and emergency department visits. 61 Despite these benefits, Ontario primary care physicians are the least likely to make home visits among international peers. While 65 percent of primary care physicians in Ontario report making home visits, they are routine practice for physicians in France, the United Kingdom and the Netherlands, where 96 to 100 percent of physicians make home visits.62

### Ontario's newer model of primary care does not do a better job

Since 2000, Ontario has undertaken a number of reforms to improve access to primary care and strengthen primary care infrastructure. Key policy initiatives accompanied with substantive investments include new physician payment and organization models, expansion of the inter-professional primary care teams (which include physicians and other health professionals such as nurses, nurse practitioners, social workers and dietitians), and patient enrollment with a primary care provider.63

Although a time lag in realizing the benefits of policy initiatives is to be expected, there is evidence that Ontario's primary care model continues to suffer from major shortcomings. A 2012 report released by the Institute of Clinical Sciences (ICES) found that patients enrolled in newer models of primary care (Family Health Groups, Family Health Organizations and Family Health Teams), which now cover the majority of the Ontario population, are more costly than the older Community Health Centre (CHC) model of primary care, but no measures of access (such as emergency department visits, same day, or next day access) have improved.

Although Community Health Centres serve a population that is socio-economically less advantaged (has lower incomes, more severe mental illness and chronic health conditions, and

<sup>57</sup> Barbara Starfield, Leiyu Shi, and James Macinko, "Contribution of Primary Care to Health Systems and Health," Milbank Quarterly, 2005, No. 83, Vol. 3, pp. 457-502.

<sup>58</sup> Commission on the Reform of Ontario's Public Services, Public Services for Ontarians: A Path to Sustainability and Excellence, 2012, p. 24.

<sup>59</sup> Health Council of Canada, "How do Canadian primary care physicians rate the health system?" 2013.

<sup>60</sup> Health Council of Canada, "Where you live matters: Canadian views on health care quality," 2014.

<sup>61</sup> Health Quality Ontario, "In-Home Care for Optimizing Chronic Disease Management in the Community: An Evidence-Based Analysis," Ontario Health Technology Assessment Series, 2013, Vol. 13, No. 5, pp. 1-65.

<sup>62</sup> Health Council of Canada, "How do Canadian primary care physicians rate the health system?" 2013.

<sup>63</sup> Brian Hutchinson & Richard Glazier: "Ontario's Primary Care Reforms Have Transformed the Local Care Landscape, But A Plan is Needed For Ongoing Improvement," Health Affairs, 2013, No. 4, pp. 695-703.

higher morbidity), CHCs had emergency department visit rates lower than expected. Meanwhile, the newer primary care models, which serve higher income populations with lower patterns of chronic disease and morbidity, and have received major new government investments, had higher than expected ER visits.

### Primary care needs to move forward

An effective model for primary care in Ontario is critical for shifting the care model from acute to chronic care, and clearly articulated policy priorities are needed to support this transformation. The sheer number of current primary models in place (seven different models in total) suggests there is uncertainty about the best way forward. Recent policy papers identify a number of priorities for Ontario's primary care system, and the discussion below is based on these recommendations. 64

Involve medical professionals in primary care reform. Broad-based primary health care reform is possible only with the support and involvement of physicians, nurses, and other health care professionals. They have unique insights into potential areas for reform and recognize what needs to be done to improve primary care and just as importantly what perhaps no longer make sense to do. It is critical that health care professionals are accountable not just for services provided to patients but also for service delivery, coordination of care, and resource allocation.

Transfer jurisdiction of primary health care to LHINs. As the first point of contact for patients, primary care plays an important role in helping patients navigate the health system and coordinate care through the health care continuum, including acute care, rehabilitation, long-term care, and home care. Currently, primary care operates in isolation

from hospitals and other community services, creating problems of accountability, coordination, and the placement of care responsibility. A main reason for this may be that under the Local Health System Integration Act, 2006, primary care is excluded as a funding responsibility of Local Health Integration Networks (LHINs) which provide funding services to hospitals, long-term care homes, and other community supports. Family Health Teams, other group practices, and independent practitioners are outside an accountability relationship with LHINs.<sup>65</sup> Bringing primary care providers under LHINs is central to realize better co-ordination of care and resource allocation. In the case of Ontario's persisting problem of Alternate Level of Care (ALC), it remains important that primary care's early intervention capabilities are used so subsequent hospital admissions can be reduced.

Measure performance and strengthen accountability. Ongoing primary care performance measurement is critical to identify strengths and areas for improvement, yet little research has been done to understand value for money in Ontario's primary care models. Evidence about the effectiveness of Ontario's many models of care is needed to guide current and future investments. It is, for instance, difficult to determine the contribution of nurses practitioners and other non-physician providers to primary care, including Ontario's newer model of Nurse-Practitioner-Led Clinics. because systematic data about their activities are not collected. Establishing a mechanism for an on-going review of primary care and regular public reporting could be ways to enhance accountability.

**Focus on the high needs patients.** Capitation systems are considered more conducive to multidisciplinary

health care delivery than the fee-for

service model, which gives physicians few financial incentives to work as part of team of health care providers. Multidisciplinary health care teams that address both clinical and non-clinical issues, including socioeconomic determinants of health, are particularly relevant for more disadvantaged patients. They are currently underrepresented in capitationbased practices, which in general serve more advantaged Ontarians with a lower illness profile and higher incomes.66 Adjusting the capitation payment so that better financial incentives are in place to enrol higher needs patients is an issue that needs to be addressed.

Manage compliance with contract **requirements.** All primary care providers in Ontario are required to deliver care outside of regular hours, but given the high number of people who have difficulty finding afterhours care in Ontario, contract fulfilment seems lax. The 2011 Auditor General Report found that 41 to 71 percent of the primary care models were providing after hours services as required.<sup>67</sup> Effective management of contracts and ensuring compliance should therefore be a priority for the Ontario Ministry of Health and Long-Term Care.

<sup>64</sup> Brian Hutchinson & Richard Glazier, "Ontario's Primary Care Reforms Have Transformed The Local Care Landscape, But A Plan is Needed For Ongoing Improvement," Health Affairs, 2013, No. 4, pp. 695-703; Brian Hutchinson, "Reforming Canadian Primary Care – Don't Stop Half-Way," Healthcare Policy, 2013, Vol. 9, No. 1, pp. 12-15, Commission on the Reform of Ontario's Public Services, Public Services for Ontarians: A Path to Sustainability and Excellence, 2012.

<sup>65</sup> Ontario's Local Health Integration Networks, "Submission to the Standing Committee on Social Policy," 2014.

<sup>66</sup> Institute for Clinical Evaluative Sciences,
"Comparison of Primary Care Models in Ontario
by Demographics, Case Mix and Emergency
Department Use, 2008/09 to 2009/10," 2012.

<sup>67</sup> Office of the Auditor General of Ontario, 2011 Annual Report, 2011.



### Engage physicians to be leaders for change and renew the payment model

Physician participation in the public health care system was negotiated in 1962, and the terms of this agreement, the contractual autonomy of physicians from the provincial government, and the dominant fee-forservice payment system have lasted until today. This contractual relationship is due for review. Physicians receive 25 percent of provincial government spending, and ensuring that this money is optimally spent should be of high government priority. Physicians should receive compensation that is commensurate with their training and responsibilities. There are, however, issues to address for the government in finding a reasonable balance between compensation and system obligations.

To get great results, the government needs to reward great results. The government needs to increase its focus on creating better opportunities for physicians to drive system improvement and take responsibility for running the health care system as a whole. That means focusing on financial incentives that reward physicians who deliver high quality care, find cost savings, resolve system issues, and find innovative ways of making health care better. It also means appealing to what really matters for physicians: autonomy, the ability to direct one's own practice; excellence, the desire to improve continuously; and purpose, the opportunity to serve a greater public good.

Controlling spending on physicians has to be part of the solution to improve the efficiency of the system. Ontario physicians have seen significantly faster wage growth than other health occupations and all occupations in the province, and their remuneration is also substantially higher than the Canadian physician average. The incentives of the current physician payment model are flawed. The Ontario government essentially pays physicians for medical services on the basis of open-ended, fee for service arrangement. This approach has benefits in terms of reducing wait times and ensuring high volumes. However, a major disadvantage is that it is very difficult to manage expenditures – it is essentially a blank cheque written out to providers with few accountability measures in place.

### The central power structure of the system is the physicians

The government has an important job to do in reforming the physician payment model, but health care reform goes far beyond their compensation. While spending on physicians is often treated in isolation from spending on other health categories such as drugs and hospitals, it is important to recognize that physicians indirectly influence spending in these areas. Physicians write prescriptions that have a direct impact on the volume and type of drugs used. Physicians are also responsible for determining the number of patients who require care in hospital, diagnostic tests, and treatment. Physicians' high degree of autonomy, however, creates challenges in terms of system accountability. Currently, individual physicians are answerable mainly to the profession itself, and there are few reasons why they should be involved in cost and system accountability.

In the long term, reform of the physician payment model could be a powerful game changer. The key objective should be to create a model that offers better incentives for physicians to deliver clinical and cost efficient care while taking ownership of system improvements. Physicians

should be full partners in the system in which they work with a reasonable balance between compensation and obligation. Professor Carolyn Tuohy of the University of Toronto contends that physicians are "at the heart of the decision-making system at all levels."68 Paradoxically, the most powerful figures in Ontario's health care system have few clear responsibilities or obligations for running of that system as a whole. The real challenge for policy makers to reach greater system performance, according to Tuohy, is to identify entrepreneurial allies and to create opportunities for those allies within the public system to take on a leadership role.69

### Most physicians in Ontario are paid through fee-for-service

Ontario physicians derive the majority of their income by billing OHIP, Ontario's provincial insurance plan. for the services they perform. Unlike other health care professions such as nurses and many physicians in the OECD, who are salaried and receive their compensation directly from the hospital or a government entity, physicians in Ontario are independent, self-employed contractors.

Most physicians in Ontario are paid through the fee-for-service (FFS) model; 84 percent of specialist physicians and 47 percent of family physicians receive the majority of their income through FFS. In recent years, Ontario has made important progress in moving toward the alternative capitation model, which is an annual fee paid to physician practices based on the number of patients enrolled.<sup>70</sup>

<sup>68</sup> Carolyn Hughes Tuohy, Accidental Logics: The Dynamics of Change in the Health Care Arena in the United States, Britain and Canada, Toronto: Oxford University Press, 1999, p. 56

<sup>69</sup> Carolyn Hughes Tuohy, "Health Care Policy After Universality," in K. Banting and J. Myles (Eds.) Inequality and the Fading of Redistributive Politics, Toronto: UBC Press, 2013, p. 305.

<sup>70</sup> Canadian Institute for Health Information, National Physician Database, 2011-2012, 2013, Table A.3.

The FFS model is often subject to critique, because it primarily rewards volume with only minor attention given to quality of care and patient outcomes. An adverse effect of FFS is that physicians have a strong financial incentive to induce demand and increase supply of services, such as office visits, procedures, and hospital admissions, possibly to levels higher than required. This is likely to increase total spending on health care, and increase the risk of over-treatment and unnecessary interventions.<sup>71</sup>

The disadvantages associated with the FFS model have led a number of commentators to propose alternative payment models. A recent paper published by the CD Howe Institute proposes that hospital physicians be paid directly from hospital budgets, as opposed to the current practice of paying them separately through OHIP.<sup>72</sup> Another policy paper calls for an end to the FFS payment model and for a much higher degree of partnership between the physician and the system.<sup>73</sup> In the report of the Commission on the Reform of Ontario's Public Services, the Commission recommends that physicians be compensated through a blended model of capitation and FFS, with the recommended balance being a 70 percent capitation and 30 percent FFS split.

Politically, it could be close to impossible to impose salaried employee contracts on physicians, who are likely to favour their autonomous status as self-employed practitioners. Ending fee-for-service without having proper alternatives in place could also have significant adverse effects on the number of services provided and the number of patients the physicians will see. Alternative funding arrangements currently in place, including the capitation model, have their own challenges. The Auditor General's 2011 report found that most physicians participating in alternative funding models were paid at least

25 percent more than their counterparts in the fee-for-service system. One reason for this difference could be that the capitation fee is paid out to physicians regardless of patient visits to the practice. In 2009-10, of the 8.6 million patients enrolled in a primary care clinic, 22 percent did not visit their physician's office, yet the physicians in these clinics received \$123 million for having these patients enrolled in their practices.<sup>74</sup>

## Obama's Affordable Care Act offers lessons for engaging physician leadership

Policy makers in Ontario could learn from a number of provisions in President Obama's Patient Protection and Affordable Care Act that change incentives for physicians and create opportunities for increased medical leadership. An important initiative of this legislation is the Accountable Care Organization (ACO).

An ACO is a partnership between a health insurance plan and a group of health care providers, such as physicians, nurses, social workers, hospitals, or long-term care facilities, who are paid a sum of money for providing full spectrum care to a patient population group. For an ACO to be accredited, the group must document that it has the necessary competencies and resources to meet four objectives: the delivery of coordinated, patient-centred care; the improvement of clinical quality; enhanced patient experience; and the reduction of costs.<sup>75</sup>

A key feature of the ACO model is that instead of reimbursing each provider for each service provided to each patient (the fee-for-service model), providers are paid to care for a group of patients. If the organization can lower the cost of care for their patients while complying with thirty-three quality indicators, they receive a share of the savings they helped create. These quality performance standards fall into four different

domains – patient satisfaction, care coordination, preventive care, and care for at-risk populations – all of which the ACO must track and report. Alternatively, if the ACO is unable to reduce costs, group members' incomes will be adversely affected, and they may have to pay a penalty if the ACO does not meet performance or savings benchmarks.<sup>76</sup>

In some ways, ACOs resemble health maintenance organizations (HMOs), another type of managed health care model, which proliferated in the United States during the 1980s and currently provides health insurance and care to more than 73 million Americans.<sup>77</sup> There are, however, a number of critical differences between ACOs and HMOs. Most notably, patient participation in ACOs is strictly voluntary; there are no lock-in provisions as in the HMO model, and ACO patients who are not satisfied with their care are free to seek care elsewhere. ACOs also differ by giving providers a direct financial stake in saving money rather than relying exclusively on fee-for-service medicine, a dominant feature of the HMO model. In addition, unlike HMOs, the ACO must comply with quality measures to ensure high quality care.78

- 71 Mukesh Chawla, Adam Windak, Peter Berman, and Marzena Kulis, Paying the Physician: Review of Different Methods, Data for Decision Project, Harvard School of Public Health, January 1997.
- 72 Ake Blomqvist & Colin Busby, "Paying Hospital-Based Doctors: Fee for Whose Service?" CD Howe Institute Commentary No. 392, October 2013.
- 73 Steven Lewis & Terrence Sullivan, "How to Bend the Cost Curve in Health Care," Institute for Research on Public Policy Insight No. 1, May 2013, p. 10.
- 74 Office of the Auditor General of Ontario, 2013 Annual Report, 2013 p. 333.
- 75 Centers for Medicare & Medicaid Services,
  "Accountable Care Organizations (ACOs): General
  Information," accessed February 18, 2014,
  http://innovation.cms.gov/initiatives/aco/.
- 76 Jenny Gold, "ACO is the hottest three-letter word in health care," Kaiser Health News, 23 August 2013.
- 77 The Henry J. Kaiser Family Foundation, State Health Facts Total HMO Enrollment, July 2012.
- 78 Centers for Medicare & Medicaid Services, "Accountable Care Organizations (ACOs): General Information," accessed February 18, 2014, http://innovation.cms.gov/initiatives/aco/.

Above all, the most significant advantage of the ACO model is that it is structured to devolve the majority of the decision-making to health care professionals. Because physicians hold both fiscal and quality responsibilities, they have clear incentives to seek out measures to improve practice by, for example, better managing patient transitions, improving prevention and follow-up care, and employing enabling technology, such as electronic medical health records.

In Canada's health care system, it is uncommon that front-line workers, such as physicians and nurses, are given responsibility for initiating changes and making system improvements, despite the fact that they arguably know best how to deliver high quality care while managing resources cost-effectively. Providers in direct contact with patients can make better choices than centralized bureaucracies, and Canada's health care system currently underutilizes these capabilities. Physicians should be given the opportunities to be leaders for change. For Ontario to raise efficiency and affordability in health care, it must create a much stronger sense of system ownership among physicians. It must dramatically increase the number of medical leaders who understand what needs to be done to improve the performance of the system and can act on this knowledge.

After just two years, the ACO model of health care now serves 10 percent (30 million people) of the US health care market. There is strong enthusiasm among economists and policy makers for ACOs, although little is known yet about the model's effectiveness.<sup>79</sup> According to recent studies, the ACO model has improved quality and patient satisfaction while decreasing cost, especially when caring for the sickest patients. A study by the Dartmouth Institute for Health Policy and Clinical Practice found that growth

in spending among certain patient groups slowed by \$532 annually per patient, or 5 percent, after physicians became affiliated with an early pilot program of the ACO model.<sup>80</sup> The US Department of Health & Human Services reports that in their first twelve months, about half (54 out of 114) of the ACOs that started program operations in 2012 had lower expenditures than projected. The fifty-four ACOs that saved money generated net savings of \$126 million, while Medicare will see \$128 million in savings.81

The ACO model is still very early in its implementation, and it remains to be seen if these positive trends continue. The applicability and transferability of the model to an Ontario context warrant further study, because of the vast differences between American and Canadian health care. Nevertheless, it is a model worthy of attention for Ontario, as the province further deliberates how greater alignment of physician goals with system goals can be ensured.



### Accelerate the deployment of IT in health care

A new strategy for improving the technical efficiency of Ontario health care is needed. It is widely recognized that broad adoption of information technology (IT) in health care has the potential to generate major benefits in terms of cost savings, increased productivity, and fewer medical errors. The RAND corporation in 2003 found that IT systems had the potential to save the US health care system up to \$88 billion USD over fifteen years, if health care could generate productivity gains similar to those attributed to IT in other industries. Yet, despite

substantial rationale for governments to speed the diffusion of IT in health care, the health care sector in Canada is one of the last sectors to remain largely impervious to major IT advancements.

International and national comparative studies demonstrate that Canada and Ontario trail many jurisdictions in the adoption of IT infrastructure in health care. Too many medical records are still in paper format, which makes it difficult to coordinate care among different providers, routinely measure quality, or reduce medical errors such as adverse drug events. A recent review showed that computerized physician order entry and medication administration can reduce the number of prescribing errors.82 Automated drug alerts can, for example, provide information on potential drug interactions or dosing errors. When compared to peer countries, fewer Canadian physicians use electronic systems to alert or prompt physicians about potential drug dosing errors or potentially harmful medication interactions. Whereas 30 percent of Canadian primary

- 79 Annie Lowrey, "A Health Provider Strives to Keep Hospitals Bed Empty," The New York Times, 23 April 2013; Chery L. Damberg, Melony E. Sorbero, Susan L. Lovejoy, Grant Martsolf, et al., "Measuring Success in Heath Care Value-Based Purchasing Program: Findings from an Environmental Scan, Literature Review, and Expert Panel Discussions," RAND Corporation, 2014.
- 80 John Toussaint, Arnold Milstein, and Stephen Shortell, "Viewpoint: How the Pioneer ACO Model Needs to Change: Lessons From Its Best-Performing ACO," The Journal of the American Medical Association, 2013, Vol. 310, No. 13, pp. 1341-2; Carrie H. Colla, David E. Wennberg, Ellen Meara, Jonathan S. Skinner, et al., "Spending Difference Associated With the Medicare Physician Group Practice Demonstration," The Journal of the American Medical Association. 2012, Vol. 308, No. 10, pp. 1015-23.
- 81 US Department of Health & Human Services, "Medicare's delivery system reform initiatives achieve significant savings and quality improvements - off to a strong start," News Release, 30 January 2014.
- 82 Emily Beth Devine, Ryan N. Hansen, Jennifer L. Wilson-Norton, N.M. Lawless, et al., "The Impact of Computerized Provider Order Entry on Medication Errors in a Multispecialty Group Practice," Journal of the American Medical Informatics Association, 2010, Vol. 17, No. 1, pp. 78-84.

care physicians report using such a system, 93 percent, 89 percent, and 88 percent of their counterparts in the Netherlands, New Zealand, and Australia, respectively, did so.<sup>83</sup>

Digital health care in Ontario in the past has been synonymous with poor performance and scandal. Improvements are, however, being made. eHealth Ontario, an independent agency of the Ontario Ministry of Health and Long-Term Care created in 2008, reports that two out of three Ontarians now have an electronic medical record, and seven out of ten physicians use an EMR in their practice in 2013.84

A fully interoperable electronic health system in Ontario is, however, far from realized, and there are vast opportunities in health care IT that are not being reaped. One example is the use of peer performance data, which are now widely employed by other jurisdictions to drive improvement.

### Use IT to foster competition based on performance

A major objective for a renewed Ontario IT health strategy should be to collect data with the purpose of fostering positive competition based on performance. A challenge often raised with a public health care system like Canada's is that there is little, if any, competition and therefore few incentives to improve system performance. Under private market conditions, competition drives continuous improvements in quality and costs. Companies that excel in delivering what is most valued by consumers will prosper and grow, while less capable rivals will either restructure or exit the market. In health care, relying on competitive forces to drive up value has proven very difficult. In the United States, competition often takes place at the wrong level among insurance providers, hospitals, and providers – rather than where it matters the most, in the prevention, diagnosis, and treatment, and of health conditions.<sup>85</sup>

Being public or non-profit does not, however, mean that competition has to be ruled out, and evidence shows that competition can be healthy - if it is based on performance. The United Kingdom and Sweden, both countries with single-payer, public health care systems, are at the forefront in encouraging competition in public health care delivery through the use of data. Some US non-profit health care organisations, such as Kaiser Permanente and Intermountain Health Care, use their advanced IT infrastructures to foster competition among providers, based on performance.

Peer performance data within a care setting can help stimulate healthy competition that could drive change. Physicians respond to evidence, and if benchmark data show that their practice varies from the norm, they will be incentivized to improve. At Kaiser Permanente and Intermountain Health Care, physicians receive data on their own performance to measure against the performance averages of peer, regional, and system level results. Peer feedback and unblinded performance data have been the most powerful driver of performance improvement during the last decade. A main reason is that benchmark data enable physicians to share best practices and motivate them to seek the resources and support to improve.86 According to James Brent, Director at Intermountain Health care, these benchmark reports encourage "healthy competition that pushes people ahead."87

Few physicians in Canada have access to peer performance data, despite ample evidence that the use of data is key to generate incentives for improved performance. A 2012 Commonwealth Fund study found that only 15 percent of primary care physicians in Canada receive data

that routinely compare their practice's clinical performance to that of other practices. By contrast, 78 percent of doctors in the United Kingdom receive comparative data, and 55 percent in both New Zealand and Sweden routinely receive data comparing clinical performance.<sup>88</sup>

In the United Kingdom, the British National Health Service (NHS) uses comparative data to pinpoint opportunities for efficiency gains. An example is the public "star rating" program, used by the UK government from 2001 to 2005 to grade the performance of acute care hospitals. Hospitals were ranked on a scale of zero to three stars based on their ability to meet a number of centrally determined objectives, the most important of which was wait times. Hospitals with higher scores were publicly celebrated for being high performing and given increased administrative freedoms, while poorer performing hospitals were publicly "shamed" and their chief executives were at risk of losing their jobs. Although the regime was criticized for being "misleading" and "demoralizing" for hospitals that performed poorly, a study published

- 86 Douglas McCarthy, Kimberly Mueller, and Jennifer Wrenn, Kaiser Permanente: Bridging the Quality Divide with Integrated Practice, Group Accountability, and Health Information Technology, Commonwealth Fund Case Study, June 2009.
- 87 Maura Davies, "Intermountain Healthcare, Salt Lake City, Utah, US," in G. Ross Baker, A. MacIntosh-Murray, C. Porcellato, L. Dionne, et al. (Eds.), High Performing Healthcare Systems: Delivering Quality by Design, Toronto: Longwoods Publishing, 2008, pp.151-78.
- 88 The Commonwealth Fund, 2012 Commonwealth Fund International Survey of Primary Care Doctors, 2012.

<sup>83</sup> The Commonwealth Fund, 2012 Commonwealth Fund International Survey of Primary Care Doctors, 2012.

<sup>84 &</sup>quot;Progress Report," eHealth Ontario, last modified November 2013, accessed March 21, 2014. http://www.ehealthontario.on.ca/en/progress-report.

<sup>85</sup> Michael E. Porter & Elizabeth Olmsted Teisberg, Redefining Health Care: Creating Value-Based Competition on Results, Boston: Harvard Business School Press, 2006.

in 2013 found that the introduction of star ratings had a positive impact on wait times in England.89

More recently, the British government has created the Open Data Institute, a non-profit company that gives external researchers access to a wealth of government data. Using this information, a group of researchers found that the NHS could be spending a lot less on drugs. For example, by examining prescriptions written by primary care physicians for an expensive cholesterol-lowering drug, the researchers found variations among doctors that could not be explained on clinical grounds. The study proved valuable to the NHS in that the collected data identified opportunities for physicians to improve their prescribing behaviour.90

In Sweden, competition is fostered among health care institutions through comparative performance measurement. Sweden publishes an annual public benchmark report comparing the performance of the country's twenty-one county councils, the government bodies that organize and deliver health care. The report, "Quality and Efficiency in Swedish Health care," serves as an important tool to compare county performance on a range of indicators (162 in total in 2013), including clinical outcomes, wait times, patient satisfaction and cost-effectiveness. According to the Swedish Association of Local Authorities and Regions, the report has helped to stimulate a healthy degree of competition among providers and to generate important incentives for improving performance.91

These examples illustrate that advanced IT infrastructures can foster competition among providers, based on performance. A new strategy for accelerating IT adoption in Ontario is needed so that the province can accumulate and leverage provider benchmark data.



### Implement an Ontario-made pharmacare program

A major reorientation of pharmaceutical policy in Ontario could improve spending control and equity of access. Among OECD countries, Ontario is unique for both its narrow public coverage of prescription drugs and its high level of spending on drugs. While most countries with universal health care systems, including the United Kingdom, Germany, Australia, New Zealand, Sweden, and the Netherlands, provide universal or extensive public coverage for prescription drugs, in Ontario the majority of drug cost is financed by private insurance or by out-of-pocket payments. This fragmented pharmaceutical financing model, a mix of out-ofpocket expenses, public, and private plans, bears a close resemblance to the system in the United States. Not surprisingly, Ontario and the United States have similar outcomes: not only is there decreased access to drugs in both countries, but they also have a higher level of pharmaceutical spending than other OECD countries.

### The patchwork of private and public drug plans is inequitable, inefficient, and costly

Compared with spending on hospitals and physicians, drug spending has seen the highest growth rate over the last three decades in Ontario, and this component of health care spending therefore represents an opportunity for considerable costs savings. Additionally, Ontario's model for prescription drug financing has major shortcomings with respect to both efficiency and equity.

#### Financing model is inefficient.

Compared to a single-payer system, Ontario's current drug financing

system, with its combination of out-ofpocket expenses, public, and private plans, is inefficient. A single, public purchaser of pharmaceuticals can use policy tools that are largely unavailable within Ontario's multi-payer system.

First, a single-payer system is a way for the government to attain monopsony bargaining power when negotiating prices with pharmaceutical companies. At a national level, Ontario made an important step in this direction by taking the lead on forming the Pan-Canadian Pricing Alliance in 2010, an initiative that conducts joint provincial-territorial negotiations for brand name drugs in Canada to achieve lower drug costs. To date the Alliance has completed joint negotiations for thirty-two drug products, but when considering the thousands of different prescription drugs used in Canada, it is clear that there is still vast work ahead.92 At a provincial level, Ontario also demonstrated its buying and law-making powers when it introduced the Transparent Drug System for Patients Act in 2006, followed up by further generic price reductions in 2010. Specifically, the Act reduced the amount the government was willing to pay pharmacies for generic drugs from 63 percent to 50 percent of the price of the original drug. Pharmacies, however, responded to this legislation by shifting the cost to private drug plans. A 2012 study found that the legislation increased out-of-pocket drug spending by 18 percent for private

<sup>89</sup> Gwyn Bevan & Deborah Wilson, "Does 'Naming and Shaming' Work for Schools and Hospitals? Lessons from Natural Experiments Following Devolution in England and Wales," Public Money & Management, 2013, Vol. 33, No. 4, pp. 245-52

<sup>&</sup>quot;Open data and health care - Beggar Thy Neighbour," The Economist, 8 December 2012

<sup>91</sup> Swedish Association of Local Authorities and Regions and Swedish National Board of Health and Welfare, Quality and Efficiency in Swedish Health Care: Regional Comparisons, 2010,

<sup>92</sup> Council of the Federation, "Pan-Canadian Pricing Alliance: Completed Negotiations," February

patients in Ontario. <sup>93</sup> Further, the price differences for generics between public and private plans rose from 5 percent to 43 percent after the legislation was enacted. <sup>94</sup>

Second, a single public payer can include rigorous drug assessment plans that ensure the quality and costeffectiveness of prescription drugs. Currently, new drugs applying for funding under Ontario's public plans must pass through the Common Drug Review, a national drug assessment process, and the Committee to Evaluate Drugs, an independent expert committee that evaluates the clinical value and cost effectiveness of drug products. 95 Formularies of private plans are, on the contrary, unrestrictive. All new drugs are included in private plans' formularies, even if these drugs do not bring added therapeutic benefits compared with cheaper, existing medications.<sup>96</sup>

#### Access to drugs is inequitable.

Although Ontario offers public insurance coverage for prescription drugs to certain population groups, including seniors, welfare recipients, and individuals with certain diseases, a large number of Ontarians incur considerable direct costs by way of out-ofpocket expenses or private insurance. In 2010, almost a quarter of Ontarians (23 percent) were without any insurance for pharmaceutical expenses, while the majority (56 percent) relied on private insurance.<sup>97</sup> One of the primary reasons people do not take their prescription drugs as directed is a lack of financial means. A 2013 survey documented that nearly one in ten Ontarians (9.1 percent) cannot afford to take their prescription drugs as directed and will either leave their renewals unfilled or try to make prescriptions last longer than directed by a physician. This problem of nonadherence is particularly prevalent among individuals who do not have private drug insurance and have low incomes.98

### A universal pharmacare system will require provincial leadership

The current pharmaceutical insurance system in Ontario and Canada makes little economic sense. The involvement of multiple payers weakens purchasing power and increases wasteful spending because of a lack of drug assessments in private plans. The present system fails in terms of social equity, because a sizeable portion of the population does not have any insurance, potentially leading to increased costs elsewhere within the health care system. Comparative international evidence suggests that more government involvement is effective in controlling drug costs while maintaining equitable access to medicines.

Implementing a universal public insurance system for prescription drugs similar to that of comparable OECD countries is not, however, a simple matter. Expansion of public pharmacare in Ontario would require an increase in direct government spending, with the important caveat that this increased spending may reduce the overall health system cost as a result of better medication adherence. The provincial government will nonetheless need to consider new sources of revenue to help cover the costs of a pharmacare program. Removing the private health insurance subsidy would be an important start. Another financing mechanism is earmarked taxes for pharmacare, modelled on the Canadian Pension Plan. It is important to remember that in the long run, a universal system of prescription drugs, if carefully designed and well implemented, has the potential to generate health care system savings. If Ontario could reduce its per capita spending on drugs to the level of Germany, the country with the next highest per capita level of spending among comparators, the province could save more than \$1 billion per year. 99

National pharmacare has been recommended before - by the Royal Commission on Health Services in 1964, by the National Forum on Health in 1990s, and repeatedly by numerous individuals in the health policy field. It has yet to attract the attention of the federal government. A federally led pharmacare program is ideal in terms of administrative efficiency, purchasing power, and harmonized access to drugs across provinces. However, with the 2011 announcement of the revised Canada Health Transfer, the federal government has effectively abstained from taking a strategic role in Canadian health care.

It seems, therefore, more realistic to move toward a single-payer pharmacare system at the provincial level; and to build the required political support, incremental public pharmacare expansion may be the best path forward. Ensuring affordable access to drugs to treat the most common health conditions, including diabetes, asthma, cardiovascular diseases, and depression, could be an impor-

- 93 Hai V. Nguyen, "Saving Public Money at Private Expense? Impact of Ontario's Generic Drug Pricing Reform on Out-of-Pocket Drug Expenditure," Paper for the 11th Annual Canadian Health Economists' Study Group meeting, June 6-7, 2012.
- 94 Ann Silverside, "News: Ontario's Law Curbing the Cost of Generic Drugs Spark Changes," Canadian Medical Association Journal, 2009, Vol. 181, No. 3-4, pp. E43-5.
- 95 Ontario Ministry of Health and Long-Term Care, "The Committee to Evaluate Drugs (CED) – Ontario Public Drug Programs – Health Care Professionals \_ MOHLTC," last modified April 17, 2013, accessed January 8, 2014, http:// www.health.gov.on.ca/en/pro/programs/drugs/ how\_drugs\_approv/funding\_ced.aspx.
- 96 Marc-André Gagnon & Guillaume Hébert, The Economic Case for Universal Pharmacare: Costs and benefits of publicly funded drug coverage for all Canadians, Canadian Centre for Policy Alternatives, 2010, p. 19.
- 97 Ontario Ministry of Health, "2010/11 Report Card for the Ontario Drug Benefit Program," Presentation, 2012, slide 7.
- 98 Michael R. Law, Lucy Cheng, Irfan A. Dhalla, Deborah Heard, et al., "The Effect of Cost on Adherence to Prescription Medications in Canada," Canadian Medical Association Journal, 2012, Vol. 184, No. 3, pp. 297-302.
- 99 If Canada brought its per capita spending on drugs in line with Germany, Canada could save \$4 billion per year according to Steven G. Morgan, Jamie R. Daw, and Michael R. Law, "Rethinking Pharmacare in Canada," CD Howe Institute Commentary No. 384, 2013.

tant beginning to the program. Over time, the savings such a program introduces could permit its expansion to include other drugs. Ontario has the opportunity to set a new standard for phamacare and to increase health care equity and efficiency in the process. Making changes to the current provincial pharmacare model may not be unrealistic – especially as a greater number of Ontarians realize that they are paying a lot more for, while getting a lot less from, their prescription drugs than their international peers.



### Scale up policy focus on end of life care

End of life care is critically important to the next decades of health care in Ontario. Longitudinal health economics studies demonstrate that care provided at the end of life, rather than during aging, is one of the main drivers of health care costs. By 2031, all baby boomers in Ontario will be 65 and older, and the number of deaths will start to increase more rapidly. 100 Most Canadians die in old age, and most deaths (80 percent) in Canada are neither sudden nor unexpected.<sup>101</sup>

### The cost of end of life care is a legitimate factor to consider

The cost of providing end of life care consumes a disproportionate share of health care resources. End of life care is expensive, because it often includes aggressive diagnostic care, technology-assisted monitoring, and treatment in intensive care units. 102 A 2011 study estimated that the Ontario Ministry of Health spent approximately \$544 million in 2002-2003 for end of life care for cancer patients. 103 Despite the high cost of care at the

end of life, real prospects of extending overall survival or influencing quality of life are often limited.

A review of the extraordinary intervention at the end of life is needed. The goal of such a review should not be lower cost for interventions that are medically appropriate, but rather it should be to ensure that the medical care is compatible with an individual's care preferences; avoid care that is medically futile; and ensure that there is accurate and strong evidence underpinning medical interventions taken at the end of life.

### The number of palliative care patients who die in hospitals can be reduced

Currently, 60 percent of all Ontario deaths occur in hospitals. 104 Yet acute care settings, such as hospitals and emergency departments, are generally not designed to provide specialized care for terminally ill patients; rather, they are primarily focused on short-term, curative care. Palliative care, which focuses mainly on the relief of suffering and maintaining quality of life, but does not preclude active treatment, is recommended for cancer patients at the end of life. 105 Adults with cancer make up a large proportion of end-of-life patients; about one in four Canadians dies of cancer, and this number is expected to grow as the population ages. 106

The vast majority (80 percent) of cancer patients who died in acute care hospitals in Ontario in 2013 were documented as being palliative cases during their last admission. According to CIHI, being admitted to the hospital for the purpose of palliative care is an indicator of patients whose place of death could have been in a different care setting, such as the home, where evidence indicates most palliative care patients prefer to die. 107

### Gaps exist in the current palliative care model

Several reports and interviews with health care professionals indicate deficiencies in Ontario's provision of end of life care. 108 Three areas warrant particular attention.

First, the current end of life care model is cost inefficient and does not meet patient preferences. Research indicates that most elderly and terminally ill patients prefer palliative care delivered in a home or community setting rather than in an acute care facility. 109 Yet most receive their care and die in hospital, at unnecessarily high cost to the public purse. End of life care for patients who died at home averaged approximately \$16,000 in 2002-2003, while cost per patient for those who died in chronic care hospi-

- 100 Ontario Ministry of Finance, Ontario Population Projections Update: 2012-2036, Spring 2013.
- 101 Karen Born & Andreas Laupacis, "A 'death denying society': Why aren't more Ontarians using palliative care?" Healthy Debate, 25 May
- 102 Canadian Institute for Health Information, Health Care Cost Drivers: The Facts, 2011.
- 103 Hugh Walker, Mark Anderson, Farah Farahati, Doris Howell, et al., "Resource Use and Costs of End-of-Life/Palliative Care: Ontario adult cancer patients during 2002 and 2003," Journal of Palliative Care, 2011, Vol. 27, No. 2, pp. 79-88.
- 104 Statistics Canada, Deaths, 2009, Table 2-2.
- 105 Local Health Integration Networks, Quality Hospice Palliative Care Coalition of Ontario and Government of Ontario, Advancing High Ouality, High Value Palliative Care in Ontario: A Declaration of Partnership and Commitment to Action, December 2011.
- 106 Canadian Cancer Society's Advisory Committee on Cancer Statistics, Canadian Cancer Statistics 2013, 2013.
- 107 Canadian Institute for Health Information, Endof-Life Hospital Care for Cancer Patients, 2013, p. 14.
- 108 Local Health Integration Networks, Quality Hospice Palliative Care Coalition of Ontario, and Government of Ontario, Advancing High Quality, High Value Palliative Care in Ontario: A Declaration of Partnership and Commitment to Action, December 2011; Samir K. Sinha, Living Longer, Living Well, Ontario's Seniors Strategy, 2012
- 109 Samir K. Sinha, Living Longer, Living Well, Ontario's Seniors Strategy, 2012; Daren K. Hevland, Doris Barwich, Deb Pichora, Peter Dodek, et al., "Failure to Engage Hospitalized Elderly Patients and Their Families in Advance Care Planning," The Journal of American Medicine Association Internal Medicine, 2013: Vol. 173, No. 9, pp. 778-87.

tal facilities was \$36,000 in that same year, a difference of about \$20,000 per patient.<sup>110</sup>

Second, access to palliative care delivered outside a hospital setting is inequitable. Care delivered at home is excluded from the insured services listed in the Canada Health Act. Ontario offers publicly funded homebased palliative care services, but because of the CHA exclusion, they are limited in coverage and supply. Individuals with terminal diseases who choose to die at home may, therefore, incur a higher cost, both in terms of monetary and family resources, relative to those who receive end of life care in the hospital, which is free of charge. Inadequate access to appropriate services outside the hospital is likely to be the main contributing factor in the current high rate of acute care service use in the end of life phase. Geographically, great variations exist across urban and rural communities in terms of access to end of life home care. Individuals living in more urbanized regions can benefit from OHIP-covered specialist palliative home care programs delivered out of major hospitals in Ontario, but those who live outside urban centres have less access to in-home palliative care, although the exact need has not been documented.<sup>111</sup>

Third, palliative care outside of hospital setting is fragmented. Palliative home care in Ontario remains for the most part a patchwork of independent players in which neither the payer (the government) nor the providers (community care access centres) and health care professionals, including primary care physicians) are directly accountable for health care outcomes or for resource consumption. The current model is based on an assessment of a community care access centres (CCAC) case manager, who coordinates a host of home care services, including nursing and personal support worker services. Community workers' expertise levels are of variable quality, and access to after-care hours is difficult. The family physician's involvement occurs independently of community care, and as a result, accountability issues arise because no single care provider assumes primary responsibility for community-based palliative care. 112

### System wide end of life care strategy is needed

Caring for Ontario's aging population is a high priority for the Ontario government, yet little policy attention is directed at the more contentious issue of end of life care. In 2011, the Ontario Ministry of Health and Long-Term Care undertook a review of palliative care provision in the province, which subsequently led to the creation of the Declaration of Partnership and Commitment to Action that sets out a shared vision for palliative care. Across the province, different palliative care programs are emerging, but no system-wide strategy has been outlined, and concerns about quality standards, reach, and cost efficiency remain outstanding.

An effective strategy for end of life care in Ontario should include the following priorities:

Increase home-based palliative care services. Ample evidence documents the efficacy of providing end of life care in the home, both in terms of cost-efficiency, such as the reduced use of relatively costly acute care services, and quality, including better alignment with patient preferences.<sup>113</sup>

Focus on early identification of palliative care patients. Traditionally, palliative care is delivered late in the course of disease. However, studies show that the timely introduction of palliative care has the potential to mitigate unnecessary patient and societal cost. A 2010 Ontario study documented that early referral

to end of life home care services and access to adequate palliative service were significantly associated with reduced acute care usage. 114 A US study from 2010 found that early palliative care led to significant improvements in quality of life and to a reduction in aggressive end of life care for patients with advanced lung cancer, the leading cause of cancer death both in Canada and worldwide. Moreover, this study found that less aggressive end of life care did not adversely affect survival; rather, patients receiving early palliative care, as compared with those receiving standard care alone, lived approximately two months longer. 115 Physicians play a critical role in ensuring timely referral to palliative care, and enhanced physician education on the benefits of early palliative care may be needed.

Designate palliative care as the domain of primary care, but ensure adequate support. Home and community based palliative care

- 110 Hugh Walker, Mark Anderson, Farah Farahati, Doris Howell, et al., "Resource Use and Costs of End-of-Life/Palliative Care: Ontario adult cancer patients during 2002 and 2003," Journal of Palliative Care, 2011, Vol. 27, No. 2, pp. 79-88.
- 111 Hsien Seow, "Innovative Expert-Consult Teams: Do They Help Keep Patients At Home?" Presentation at the Hospice Palliative Care Ontario Annual Conference, April 30, 2013.
- 112 Based on interviews and Hsien Seow, "Innovative Expert-Consult Teams: Do They Help Keep Patients At Home?" Presentation at the Hospice Palliative Care Ontario Annual Conference, April 30, 2013.
- 113 Hsien Seow, Lisa Barbara, Doris Howell, and Sydney M. Dy, "Did Ontario's End-of-Life Care Strategy Reduce Acute Care Service Use?" Healthcare Quarterly, 2010, Vol. 13, No. 1, pp. 93-100; Samir K. Sinha, Living Longer, Living Well, Ontario's Seniors Strategy, 2012.
- 114 Hsien Seow, Lisa Barbara, Doris Howell, and Sydney M. Dy, "Using More End-of-Life Homecare Services is Associated With Using Fewer Acute Care Services: A Population-Based Cohort Study," Medical Care, 2010, Vol. 48, No. 2, pp. 118-24.
- 115 Jennifer S. Temel, Joseph A. Greer, Alona Muzikansky, Emily R. Gallagher, et al., "Early Palliative Care for Patients With Metastatic Non-Small-Cell Lung Cancer," The New England Journal of Medicine, 2010, Vol. 363, No. 8, pp. 733-42

should be designated as the domain of primary care physicians. 116 Currently, a CCAC case manager will coordinate home care, but the case manager is not responsible for emergency department visits or hospital admissions, and problems of accountability may therefore arise. The primary care physician, responsible for the continuum of care for the patient, is in a better position to track and manage the patient's care, so that gaps in care that lead to hospitalization do not occur. The primary care physician can also better serve various geographical regions in urban and rural communities where specialist palliative care programs do not exist. However, the capacities of primary care physicians to deliver quality palliative home care are currently inadequate. Palliative care is not taught as a core competency in medical schools so most family physicians have little or no formal training in palliative care. Although the 2012 Physician Services Agreement included a change in fee codes to encourage primary care physicians to provide more house calls, physicians in small practices may lack the resources to make home care visits. Addressing these issues is, therefore, critically important.<sup>117</sup>

Deepen the understanding of pal*liative care.* The concept of palliative care is evolving. In many instances, palliative care is still only considered when all hope of cure has been lost. The World Health Organization's definition of palliative care, however, emphasizes that palliative care is "applicable early in the course of illness and in conjunction with other therapies that are intended to prolong life."118 Palliative care's goal is to manage symptoms and improve quality of life, and thus it does not preclude therapeutic treatments. To better integrate palliative care into standard medical practice, the American Society of Clinical Oncology issued a provincial clinical opinion in 2012 recommending that patients

with metastatic non-small cell lung cancer should be offered concurrent palliative care and standard cancer care at initial diagnosis. 119 According to physicians interviewed for this report, Ontario physicians could play a larger role in actively discussing the breadth of options with patients and increasing awareness of palliative care (alone or in combination with routine care) versus aggressive treatment, and community care versus hospital care. Having the clinical direction to do so, however, is the first step.

Measure quality indicators regularly to ensure accountability and **progress.** The province's fourteen Local Health Integration Networks (LHINs) are currently each responsible for implementing strategies to address end of life care needs. This decentralized approach, however, poses problems of ensuring quality standards. According to health care professionals, there is little sharing of best practice across LHINS, and few cross-comparison measurements of different care models are undertaken. Decision makers therefore lack the evidence and knowledge to spread interventions that actually prove to be beneficial. A comprehensive assessment framework for palliative care services in Ontario is needed. The Cancer Quality Council of Ontario has developed a set of indicators to assess end of life care for cancer patients, and this could be a useful model. Systematic assessment of palliative care to non-care cancer patients, including patients with cardiovascular disease (the second most common cause of death after cancer) and other chronic disease is equally necessary. Outcome measurement could include the number of deaths in hospitals, the number and length of hospitalizations in the last month of life, and re-admission rates.

Standardize advance care plan**ning.** Dying is inevitable and expected, but planning for the end

of life is uncommon in Canada. 120 British Columbia and Alberta are at the forefront in making advance care planning (ACP) routine practice, while Ontario has yet has to formulate a system-wide strategy for this issue, despite evidence of its benefits.<sup>121</sup> ACP is a document that allows individuals to define their wishes for care at the end of life, in the event that they are unable to participate directly in medical decision-making. The systematic application of ACP procedures can reduce cost and unwanted or inappropriate intervention at the end of life and can improve patient and caregiver satisfaction. 122 In 2012, Fraser Health in British Columbia implemented a policy that requires all health care institutions to make use of a dedicated placeholder for ACP information at the front of a patient's chart. 123 In the city of La Crosse, Wisconsin, all patients have access to trained personnel to discuss ACPs, which are subsequently documented in patients' electronic health records. The La Crosse model

- 118 Philippa H. Hawley, "The Bow Tie Model of 21st Century Palliative Care," Journal of Pain and Symptom Management, 2013, Vol. 47, No. 1,
- 119 Thomas J. Smith, Sarah Temin, Erin R. Alesi, Amy P. Abernethy, et al., "American Society of Clinical Oncology Provisional Clinical Opinion: The Integration of Palliative Care Into Standard Oncology Care," Journal of Clinical Oncology, 2012, Vol. 30, No. 8, pp. 880-7
- 120 Sharon Carstairs, Raising the Bar: A Roadmap for the Future of Palliative Care in Canada, The Senate of Canada, June 2010.
- 121 Nathan Stall, Christopher Doig, and Joshua Tepper, "Planning for care at the end of life: Our collective responsibility," Healthy Debate, 30 May 2013
- 122 S. Kirk Payne, Patrick Coyne, and Thomas J. Smith, "The Health Economics of Palliative Care," Oncology, 2002, Vol. 16, No. 6, pp. 801-8.
- 123 Fraser Health, "Medical Orders for Scope of Treatment/ Advance Care Planning," accessed January 15, 2014, http://physicians. fraserhealth.ca/news/medical-orders-for-scopeof-treatment--most----advance-care-planning.

<sup>116</sup> As outlined in Local Health Integration Networks, Quality Hospice Palliative Care Coalition of Ontario, and Government of Ontario, Advancing High Quality, High Value Palliative Care in Ontario: A Declaration of Partnership and Commitment to Action, December 2011

<sup>117</sup> Denise Marshall, Doris Howell, Kevin Brazil, Michael Howard, et al., "Enhancing Family Physician Capacity to Deliver Quality Palliative Home Care," Canadian Family Physician, 2008, Vol. 54, No. 12, pp. 1703-1703.e.7.

has increased completion rates of ACP, achieved higher patient satisfaction at the end of life, and led to lower care costs. <sup>124</sup> The cost of care at a La Crosse hospital for an individual in the last two years of life is about \$18,000, while the US national average is close to \$26,000. <sup>125</sup> In Ontario, however, the lack of information technology infrastructure may be a significant impediment for making ACP a standard of care. <sup>126</sup>



### Introduce a savings plan for prefunded drugs

The intergenerational contract of Ontario's health care financing model is due for a review, and it is time to carefully re-think it and to ask whether we can craft a more equitable allocation of resources for the future. A new contract could include a principle that each generation pays for its own health care costs through a prefunded scheme in which individuals pay during their working lives into a fund that helps defray drug and care costs during their retirement years. Prefunding is currently used for the Canada Pension Plan, which ensures that tomorrow's seniors prepay some of the predictable cost of retirement, while they are still economically active. That same principle could apply to health care so that the costs of public health care are spread more equitably across the population, and not assumed solely by the younger generation.

A number of reports have made convincing cases for prefunding health care. Busby and Robson, Stabile and Greenblatt have proposed prefunding for part of Canada's health care costs, and justify this model by citing intergenerational fairness and sustainable funding. 127 Similarly, the Clair

Commission in Québec proposed prefunding to pay for part of Québec's health care costs in 2001 and noted that Canada is increasingly out of step with international practice. 128 Germany, for instance, introduced a statutory prefunding insurance scheme for long-term care (Pflegeversicherung) in 1995. The long-term care insurance is operated by the government and funded by contributions from employers and employees, with the contribution rate currently at 2.05 percent, divided equally between employees and employers. The insurance covers a portion of long-term care needs in retirement through the same organization that provides general health insurance, but with entirely distinct funding. 129

### Saving up for future health care cost is necessary

Ontario's current financing mechanisms for health care do not provide the revenue required to match the province's health care expenditure growth. Health care in Ontario is predominantly financed through taxes, based on a pay-as-you-go model. Within the pay-as-you-go model, tax revenues collected in a given year are used to fund health care expenditures of that same year. Currently, however, Ontario's working population is shrinking, while its non-working population is growing; hence, the fiscal sustainability of this model is in doubt.

Essentially, revenues collected and benefits paid out do not reflect these fluctuations in cohort sizes, and the capacity of the public revenues to pay for public expenditures is therefore diminishing. The result is an increasingly unaffordable health care system. From an intergenerational equity perspective, as noted previously, the current financing mechanism also poses considerable challenges as the burden of health care cost is tilted heavily toward age-related benefits.

### Drugs are the best candidate for prefunding

Prefunding for drug coverage would place drug provision, a key health program, on more fiscally sustainable footing. There are several justifications for this step. First, since most drug expenses are not covered under the publicly funded provincial insurance scheme, setting aside funds in the near term for predictable needs in the future would help to improve access to drugs, just as raising revenue through a prefunded model could achieve universal pharmacare in Ontario. Second, increases in drug spending are predictable. Drugs have been the fastest-growing component of health care spending in Ontario in the last three decades. Pharmacare expenditures will undoubtedly continue to expand as technological developments give drugs an evermore central place in the health care.

- 124 Agency for Healthcare Research and Quality, "Community-Wide Education, Trained Facilitators, and Improved Processes Lead to More Advance Care Planning, Consistency Between Plans and End-of-Life Decisions, and Low Care Costs," US Department of Health & Human Services, last modified December 9, 2013, accessed February 18, 2014, http://www.innovations.ahrq.gov/content. aspx?id=2713.
- 125 The Dartmouth Institute for Health Policy & Clinical Practice, Tracking the Care of Patients with Severe Chronic Illness, The Dartmouth Atlas of Health Care, 2008.
- 126 Nathan Stall, Christopher Doig, and Joshua Tepper, "Planning for care at the end of life: our collective responsibility," Healthy Debate, 30 May 2013, http://healthydebate.ca/2013/05/ topic/community-long-term-care/advancedcare-planning.
- 127 Colin Busby & William B.P. Robson, "A Social Insurance Model for Pharmacare: Ontario's Options for a More Sustainable, Cost-Effective Drug Program," CD Howe Institute Commentary No. 326, April 2011; Jacqueline Greenblatt, Michel Grignon, and Mark Stabile, "Providing Pharmacare for an Aging population: Is Prefunding the Solution?" IRPP Study No. 2, February 2010; Colleen M. Flood, Mark Stabile, and Carolyn H. Tuohy, Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Queen's University, 2008.
- 128 Austria, Germany, France, Luxembourg, and Japan are examples of countries that established compulsory plans to fund various home support services, residential and long-term care services for the elderly (Québec Commission of Study on Health and Social Services, Emerging Solutions: Report and Recommendations, 2001, p. 183)
- 129 Bundesministerium für Gesundheit, "Gesichte der Pflegeversicherung," last modified August 8, 2013, accessed February 24, 2014, http:// www.bmg.bund.de/pflege/pflegeversicherung/ geschichte.html.

Third, while health care spending tends to go to a small group of high users, pharmaceutical spending is much more evenly distributed among the population, especially for individuals aged 65 and over. 130

Ontario's first priority should be to focus on financing the Ontario Drug Benefit (ODB) program through prefunding.<sup>131</sup> Because most ODB beneficiaries are seniors (67 percent in 2010), the program is a particularly attractive candidate for prefunding.132 In 2013-14, with an estimated cost of \$4.5 billion, the ODB program accounted for about one-ninth of all government health care spending.

Prefunding for long-term care, similar to the German model, is also an important area for the Ontario government to consider. Patients, known as Alternative Level of Care or ALC. who are in hospitals beds but do not require the intensity of care provided in a hospital, continue to be a major challenge for Ontario. Every month an average of 4,000 patients wait in an acute hospital bed for an alternate level of care placement, with close to half (44 percent) of ALC-designated patients waiting for long-term care placement.133

### Prefunding creates benefits and challenges

Combining tax financing with a prefunded, employment based insurance program will diversify the funding stream of public health care in Ontario and yield significant equity gains. Through prefunding, the proportional relationship between contributions and benefits will be much better aligned: resources will be set aside in the near term, while most members of the baby-boomer generation are still economically active, so that benefits are available to draw on when they are retired.

A prefunding program could also be a way to increase savings and provide assets to the Ontario economy. The savings that individuals accumulate while they are of working age could be invested in physical capital or other earnings assets, producing net additional savings, and as the funding accumulates, compound interest could have powerful effects.

Introducing a prefunding scheme will likely meet public resistance, because it will be perceived as a tax increase, and it may, therefore, prove politically difficult to do. A key advantage of the earmarked contribution system versus tax increases is, however, that there is a greater willingness to pay on the part of the citizenry because of the clear link between funds collected and benefits received. This was, for instance, the case with the late 1990s changes to Canada Pension Plan, which showed that there was public tolerance for increasing contributions.134

Another concern with an employment-based financing model is that it could dampen labour market participation and overall economic growth.<sup>135</sup> The prefunding would, therefore, need to be designed in a way that minimizes distortionary effects; for example, by setting the amount that individuals will be required to pay at a moderate level. Furthermore, the economic effects of an employment-based insurance model should be kept relative to the effects of raising equivalent revenues through general taxation. 136

Finally, a prefunding scheme will require political leadership, but this will most likely have to come at the provincial level. Although a federalled insurance scheme, using the current CPP infrastructure, would be ideal, federal involvement is unlikely. Real explanations of the options and costs to the public will be necessary; it will be important to emphasize that if Ontarians want to maintain the current health care system and avoid

squeezing out other public services, this is a realistic way to raise the additional revenue required to ensure that happens.

- 130 Jacqueline Greenblatt Michel Grignon, and Mark Stabile, "Providing Pharmacare for an Aging population: Is Prefunding the Solution?" IRPP Study No. 2, February 2010.
- 131 Colin Busby & William B.P. Robson, "A Social Insurance Model for Pharmacare: Ontario's Options for a more Sustainable, Cost-Effective Drug Program," CD Howe Institute, Commentary No. 326, April 2011; Jacqueline Greenblatt, Michel Grignon, and Mark Stabile, "Providing Pharmacare for an Aging population: Is Prefunding the Solution?" IRPP Study No. 2, February 2010
- 132 Ontario Ministry of Health, "2010/11 Report Card for the Ontario Drug Benefit Program," Presentation, 2012.
- 133 Access to Care for the Ontario Hospital Association, "Alternate Level of Care (ALC)," December 2013.
- 134 Colleen M. Flood, Mark Stabile, and Carolyn H. Tuohy, Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Queen's University, 2008, pp. 102 & 259.
- 135 Sara Allin, Mark Stabile, and Carolyn Hughes Tuohy, "Financing Models for Non-Canada Health Act Services in Canada: Lessons from Local and International Experiences with Social Insurance," Canadian Health Services Research Foundation Series of Reports on Finance Models, Paper 2, May 2010.
- 136 Colleen M. Flood, Mark Stabile, and Carolyn H. Tuohy, Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Oueen's University, 2008.



### Build the case for co-payment

With the exception of the United Kingdom, Canada is the only country in the OECD that does not require any form of income-tested co-payments or user fees for core health care services. 137 Whereas most other OECD universal public health care systems, including those of France, Germany, Italy, Japan, Australia, and Sweden require patient co-payments for hospital and physician services, Canada maintains a universal care model without price signals. However, as these countries demonstrate, universal health care does not need to mean free health care: a price mechanism such as patient co-payment, if carefully designed and well implemented, could bring benefits of both cost efficiency and equity.

## The lack of price signals encourages inefficient health care use

Under the current financing system, efficiency is impaired, because neither health care providers nor patients has access to information on the link between benefits of receiving health care and the cost of providing these services. A major problem with zero pricing of health care services is that it may lead to moral hazard, a term used by economists, to describe how people tend overuse or waste resources when they are insulated from the cost of a good or service. Moreover, because price signals are lacking, there are no incentives or rewards for those who take preventive measures to ensure good health and avoid health care costs. 138

Although moral hazard in health care is an issue that is poorly understood,

researchers contend that some sort of pricing signal is necessary in health care to steer demand. 139 A common example is that some individuals may visit physicians and hospitals more often than they should, since they are insulated from the monetary cost associated with the visits. Going to the emergency room for a common cold is an example of such an unnecessary visit. While there is little evidence of the prevalence of moral hazard in the Canadian system, a CIHI report from 2005 shows that 14 percent of patients seen in emergency departments in Canada in 2003-2004 were triaged as non-urgent. 140 These statistics may not, however, be indications of moral hazard; 58 percent of Ontarians, compared with just 31 percent in the United Kingdom, report that getting medical care in the evenings or on weekends without going to the hospital emergency department is difficult, and this may explain why some people choose to go to an emergency room.<sup>141</sup> Moreover, the moral hazard argument only holds if health care is in fact both a market commodity and is consumed just as other goods are consumed. 142 For example, if an office provides one of its workers with a free car with unlimited miles, the worker would likely drive more than he or she otherwise might. The free cost of health care operates differently. The fact that it is free may not mean that people actually start demanding more health care. Who actually likes making the trip to the doctor's office?

### Introducing co-payment could enhance distributional fairness

A critical advantage of the Canadian health care system is that access is based on need, rather than ability to pay, and therefore no financial barriers to core health care services exist. The health care system is a major vehicle for resource distribution from the affluent to the less affluent via progressive tax financing, but there is still room to improve on the equity side.

Canada's tradition of universal health care means that someone with an high annual income currently gets the same health care benefits as someone with a low yearly income. This is clearly demonstrated in the Ontario Drug Benefit program that currently allows a senior with an annual income of \$300,000 to get the same benefits as someone with an income of \$30,000 per year. In the 2012 Ontario budget, the government, however, made an important and commendable change to this model by asking the highest income seniors to pay more of their own prescription drug costs. Starting August 2014, high-income seniors will pay a new income-tested deductible amount (for singles with income over \$100,000, the deductible amount will be \$100, plus 3 percent of income over \$100,000; for couples with a combined income of over \$160,000, the new deductible will be \$200 plus 3 per cent of their combined income over \$160,000) in addition to a copayment of \$6.11 per prescription. 143 This type of reform to health care benefits should be carefully monitored and evaluated, and further consideration should be given to how

- 139 OECD, OECD Economic Surveys: Canada, 2010; Shay Aba, Wolfe D. Goodman, Jack M. Mintz, "Funding Public Provision of Private Health: The Case for a Copayment Contribution through the Tax System," CD Howe Institute Commentary No. 163, 2002.
- 140 Canadian Institute for Health Information, Understanding Emergency Department Wait Times: Who is Using Emergency Department and How Long Are They Waiting? 2005.
- 141 Health Council of Canada, Where you live matters: Canadian views on health care quality, Results from the 2013 Commonwealth Fund International Health Policy Survey of the General Public, January 2014.
- 142 Malcolm Gladwell, "The moral-hazard myth: The bad idea behind our failed health-care system." The New Yorker, 29 August 2005.
- 143 Ontario Ministry of Finance, Strong Action For Ontario: 2012 Ontario Budget, Budget Papers, 2012.

<sup>137</sup> OECD, OECD Economic Surveys: Canada, 2010.

<sup>138</sup> Jack M. Mintz & Andrey Tarasov, "Efficient and Fair Financing of the Public Share of Canadian Health Care Insurance with Greater Reliance on the User-Pay Approach," in C.M. Flood, M. Stabile, C.H. Tuohy (Eds.), Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Queen's University, 2008, pp. 59-89.

fairness through a redistributive copayments system could enhance other areas of the health care sector.

### Co-payment creates benefits and challenges

A relevant model for steering demand in health care is a co-payment scheme, whereby individuals who have incomes above a certain threshold would pay for services used up to a certain ceiling. One model proposes a 40 percent co-payment by individuals and families for their health care services up to an annual limit of 3 percent of their income. Family and individuals with an annual income below \$10,000 would not make any co-payments and would continue to benefit from free health care services, while a family with an annual income of more than \$100,000 would make an annual contribution of \$987.144 Since no payments are collected when care is accessed, as is the case with user fees, the co-payment model is considered less of a deterrent for people seeking medical care. A benefit of this model is also that it would be administered by the income tax system, reducing some administrative costs otherwise incurred with a user fee system. Ontario is an advantageous position to introduce a co-payment system, because it can convert the existing health premium into usage-based premiums capped to ensure that the effect of co-payment on low-income individuals is reduced.145

A number of challenges also arise with introducing price signals. Making a patient responsible for a share of the cost of health care is likely to reduce the individual's use of health care services, and this could come at a higher total cost to the health care system. Introducing user charges in one area of care, drugs for instance, can have a squeezed balloon effect; initially, they lower expenditures on drugs, but they may increase the use of other more costly services,

such as emergency care, because people may forgo necessary treatment or fail to adhere to treatment to avoid paying a fee. 146 In Québec, for example, when patients had to pay user fees for prescription drugs, they took less medicine and their conditions worsened. As a result, the Québec healthcare system ended up with more visits to emergency departments and a higher rate of adverse events, increasing the province's total health care costs.<sup>147</sup>

Another challenge with putting a price on health care is that it places the responsibility of the high cost of health care on the patients, but patients are not solely responsible for driving costs in the healthcare system. Patients do choose when to see a doctor, but the treatment that follows from that visit, such as the type of care, admission to hospital, and the intensity of care, is decided by the physician, who is the "gatekeeper" of the system. 148 Finally, a co-payment scheme based on levels of income is effectively another form of taxation, and this could meet public resistance and prove politically difficult.

### Use revenue to integrate essential drugs and home care services into the core public package

A main benefit of introducing a copayment model is that it provides a new source of revenues for Ontario. These revenues could either replace some of the general taxes now used to fund health care (which has the disadvantage of imposing distortions on the economy) or be used to fund health care services that are left out of the public package for many individuals, such as community care and prescription drugs. Alternatively, a portion of revenues raised or potential savings accruing from demandsteered health care usage could accommodate other important public policy areas, such as education or infrastructure.

Ontario has started an important process by introducing a higher share of co-payment in its Ontario Drug Benefit Program, and this reform work should continue. As proposed by the Commission on the Reform of Ontario's Public Services, the Ontario government should end the age-based drug benefit program all together and replace it with income-based pharmacare. This option would greatly strengthen the equity of the Ontario Drug Benefit plan, which currently applies to all seniors, regardless of their income level. 149 The government of British Columbia did this in 2003 with the introduction of Fair PharmaCare that offers incomebased drug coverage for seniors and non-seniors alike. All people are eligible, regardless of income, but the subsidies received are a function of income, rather than age. Since then, Manitoba and Saskatchewan have followed suit, and a similar program has recently been proposed for Alberta. 150 By linking benefits to income rather than age, Ontario could offer drug coverage for all Ontarians in need.

- 146 Sara Thomson, Thomas Foubister, and Elias Mossialos, "Can User Charges Make Health Care More Efficient?" British Medical Journal, 2010, Vol. 341, pp. 487-9.
- 147 Robyn Tamblyn, Rejean Laprise, James A. Hanley, Michael Abrahamowicz, et al., "Adverse Events Associated With Prescription Drug Cost-Sharing Among Poor and Elderly Persons," The Journal of the American Medical Association, 2001, Vol. 285, No. 4, pp. 421-9.
- 148 Canadian Foundation for Healthcare Improvement, "Myth: User Fees Ensure Better Use of Health Services," 2012.
- 149 Commission on the Reform of Ontario's Public Services, Public Services for Ontarians: A Path to Sustainability and Excellence, 2012.
- 150 Steven G. Morgan, Jamie R. Daw, and Michael R. Law, Rethinking Pharmacare in Canada, CD Howe Institute Commentary No. 384, 2013.

<sup>144</sup> Shay Aba, Wolfe D. Goodman, and Jack M. Mintz; "Funding Public Provision of Private Health: The Case for a Copayment Contribution Through the Tax System," CD Howe Institute Commentary No. 163, May 2002.

<sup>145</sup> Jack M. Mintz and Andrey Tarasov, "Efficient and Fair Financing of the Public Share of Canadian Health Care Insurance with Greater Reliance on the User-Pay Approach," in C.M. Flood, M. Stabile, C.H. Tuohy (Eds.), Exploring Social Insurance: Can a Dose of Europe Cure Canadian Health Care Finance? Kingston: McGill-Queen's University, 2008, pp. 59-89.

A next step for the Ontario government is to explore possibilities of developing an income-tested copayment system for the provision of home care and community care. Ontario's current home and community care system is underfunded and this makes it very difficult to divert patients from costly hospital beds to less expensive and more appropriate facilities. To tackle future increasing costs and demands for home care services, an approach could be to introduce income-based client rates for all publicly funded home and community care services. In British Columbia, for instance, individuals pay a modest income-based daily rate for their home care, long-term care, and assisted living services, unrelated to how much their service level changes.<sup>151</sup> In Australia, a similar system exists, with the price of a home care package for people on the basic rate of pension amounting to \$9.44 per day in Canadian dollars. 152 Introducing a co-payment system, tied to senior's income, would allow the government to expand and strengthen home care and community services, and has the potential to reduce the province's ALC rate.

As many other jurisdictions have implemented co-payment systems to improve both efficiency and equity of their health care systems, Ontario needs to come to the understanding that universal health care does not necessarily need to mean free: a co-payment model could help create awareness of health care costs, fund essential areas of health care that currently are outside the public package, and bring greater fairness by decreasing the level of public subsidy to affluent citizens and increasing the subsidy for less-affluent citizens.



## Abolish the tax subsidy to employer-provided health insurance benefits

More than two-thirds of health care spending is done by the public sector. Yet one significant government expenditure is not included in health care sector spending data and has received relatively little policy attention: the exclusion of employersponsored health insurance from taxable income. In 2012, the Department of Finance Canada reported that the federal government forgoes \$3.4 billion in tax revenue annually, because health care benefits are not taxed as compensation. 153 Were employer-sponsored health benefits taxed, Canada could have reduced its public health care spending by 2.4 percent in 2012 using the tax revenue to offset health care spending. 154

While health insurance for all medically necessary hospital and physician services is publicly funded, 60 percent of Ontarians have additional private health insurance. 155 Private supplemental health insurance is typically a benefit provided by an employer, and it covers services such as out-patient prescription drugs, vision and dental care, home care, rehabilitation services, and private rooms in hospitals. Relative to other high-income countries, a large proportion of the Ontario population has private health insurance, similar to the United States (61 percent), but higher than Germany (32 percent), England (11 percent), and Sweden (less than 5 percent). 156

Tax exclusion for employersponsored private health insurance plans is both expensive and regressive

Economists continuously point out that the tax subsidy provided to

employer-sponsored health care insurance benefits is bad public policy. <sup>157</sup> The tax exclusion comes at high cost for both society and the health care system, and just as importantly, it contributes to income inequality. <sup>158</sup>

First, not taxing employer-sponsored health insurance plans represents a large amount of forgone tax revenue.

Second, the tax break is regressive because a person with a high wage will have a higher tax rate and thus a larger tax break. Moreover, secondary health coverage is most common for those with higher incomes. Benefit packages are generally restricted to people with permanent, higher-paid, unionized jobs, whereas people in "precarious employment," jobs that

- 151 Samir K. Sinha, Living Longer, Living Well, Ontario's Seniors Strategy, 2012.
- 152 Department of Health and Ageing, "Home Care Packages Program," Government of Australia, last modified November 26, 2013, accessed January 29, 2014, http://www. livinglongerlivingbetter.gov.au/internet/living/ publishing.nsf/Content/Consumer-Directed-Care-Home-Care-Packages.
- 153 Information not available on provincial level: Ontario Ministry of Finance, "Transparency in Taxation, 2012," 2012 Ontario Economic Outlook and Fiscal Review, 2012.
- 154 Public Sector Health Expenditure Canada 2012: \$144.6 billion (current dollars) based on data from the Canadian Institute for Health Information.
- 155 Health Council of Canada, Where you live matters: Canadian views on health care quality, Results from the 2013 Commonwealth Fund International Health Policy Survey of the General Public, January 2014.
- 156 Data for the US and England are from Sarah Thomson, Robin Osborn, David Squires, and Miraya Jun, International Profiles of Health Care Systems, The Commonwealth Fund, 2013. Data for Germany and Sweden are from OECD, OECD Health Statistics 2011.
- 157 Mark Stabile, "Canada needs to tackle the trio of inequality, taxes and deficits," Toronto Star, 13 December 2013.
- 158 Jonathan Gruber, "The Tax Exclusion For Employer-Sponsored Health Insurance," National Bureau of Economic Research Working Paper No. 15766, February 2010; Mark Stabile, "Private Insurance Subsidies and Public Health Care Markets: Evidence from Canada," Canadian Journal of Economics, 2001, Vol. 34, No. 4, pp. 921-42.

are often low-paid, temporary or seasonal, have limited benefits. 159 Fulltime employees are three times more likely to receive benefits than parttime employees, and those earning \$20 an hour or more are 2.5 times more likely than those earning less than \$12 an hour to receive benefits. 160

Third, the tax subsidy is inefficient and has negative spillover effects on publicly funded health care. Economists contend that, since individuals are buying health insurance with taxsubsidized dollars, they both buy too much insurance and use the health care system more. Studies show that supplemental private insurance has a positive and significant effect on both the probability of using health care services and the magnitude of utilization. It is estimated that individuals who have private health insurance use approximately 10 percent more publicly funded physician services than individuals who do not have such insurance. For instance, because the cost of prescription drugs is covered by the private insurance plan, individuals may see a doctor more often. 161 In effect, private insurance contributes to increasing the public cost of physician services. Finally, evidence suggests that the employersponsored insurance system causes labour market distortions, including limited labour market mobility. 162

Repealing the exclusion by implementing a tax on health insurance benefits, some argue, will lead to a decrease in health benefits offered to employees. This decrease will then leave more people with access only to OHIP insurance and without private insurance coverage. Therefore, when considering changes to the tax treatment of employer-sponsored health insurance, policy makers should simultaneously consider a universal public program for pharmacare, as proposed in this Working Paper.

### Rectifying the tax subsidy is a rare win-win situation

Both the United States and Canada exempt employment-based health insurance from tax. However, beginning in 2018, the so-called "Cadillac tax," a provision of the Affordable Care Act, will end the tax break of the most generous health benefit plans paid for by employers. The excise tax will be imposed on health plans that exceed a certain annual dollar threshold (\$10,200 for individual coverage and \$27,500 for family coverage). The purpose of the excise tax is both to reduce employer health insurance spending and to raise new revenues, to finance the expansion of health care coverage, and to contribute to reducing the federal government deficit. According to the Congressional Budget Office, the Cadillac tax will raise \$80 billion between 2013 and 2023.163 By implementing the excise tax on health insurance, the United States demonstrates that it can get serious about tackling this problem. Certainly, Ontario could set a new standard for Canada and take action on ending the tax subsidy. In comparison with the Cadillac tax, a much simpler way to end the problem of the tax subsidy is to treat health insurance like wages and to tax it as earnings. While it remains difficult to estimate the impact of the tax subsidy, the consensus among economists is that the current tax break is a significant driver of rising health care costs. Fortunately, rectifying the problem is a rare win-win solution: placing a tax on employer-sponsored insurance plans will not only help to curb health care costs, but could also raise substantial tax revenues.

<sup>159</sup> Institute for Competitiveness and Prosperity, Working Paper 17, Untapped potential: Creating a better future for service workers, October, 2013, p.29.

<sup>160</sup> Jeremiah Hurley & G. Emmanuel Guindon, 'Private Health Insurance in Canada," Centre for Human Economics and Policy Analysis Working Paper Series No. 08-04, October 2008.

<sup>161</sup> Mark Stabile, "Private Insurance Subsidies and Public Health Care Markets: Evidence from Canada," Canadian Journal of Economics, 2001, Vol. 34, No. 4, pp. 921-42.

<sup>162</sup> Jonathan Gruber, "The Tax Exclusion For Employer-Sponsored Health Insurance," National Bureau of Economic Research Working Paper No. 15766, February 2010.

<sup>163</sup> Julie Piotrowski, "Excise Tax on 'Cadillac' Plans," Health Affairs Health Policy Brief, September 2013



## **OPPORTUNITIES** FOR BUILDING BETTER **HEALTH CARE**

#### INVESTING IN PUBLICLY FUNDED HEALTH CARE MAKES ECONOMIC SENSE.

A sound health care system is a critical means to achieve long-term economic growth and social well-being. Yet, the public health care model that has brought tremendous benefits to Ontario's prosperity, is now putting the province's future prosperity at stake. Since the early 2000s, public expenditure on health has continuously outpaced the province's economic growth rate, its ability to raise revenue, and its spending on other areas of economic importance.

Despite immense resources poured into the health care system over the last decade, Ontario has not been able to secure the kinds of changes peer countries have made. They achieve comparable or better health care outcomes and higher health care quality, offer more extensive public coverage for health care services, and they do so at lower per capita cost than Ontario.

**ARGUABLY, THE UNCONDITIONAL FUNDING** provided to health care each year has allowed the health care system to circumvent having to make difficult choices of policy restructuring. Key elements of the health care system are not accountable for the outcomes they produce. As a result, everything from spending on drugs and physician compensation to end of life care evolve in directions that are neither cost efficient, nor meet the preferences of the population.

Ontario demonstrates little institutional capacity to control and manage its health spending. A careful examination of cost drivers in the health care system shows that Ontario misjudges the root causes of growth in health care expenditures. The effects of population aging on health care spending are potentially overestimated, while the effects of end of life care on health care spending are potentially underestimated. Spending on drugs and medical technology, increased utilization of health care services, and workforce compensation are influential drivers of cost, but they remain largely unaddressed in Ontario's policy efforts.

The pace and scope of health care reforms in peer countries leave Ontario's reform efforts looking feeble. Other countries have shown that there are sophisticated means of achieving efficient utilization of health care resources within the public health care model. In public health care systems similar to Ontario's, governments have used their influence to facilitate technical progress, encourage competition between providers, employ economies of scale in purchasing, and enable system integration of health care professionals.

Health care is an integral part of the economy and Ontario has a vested interest in implementing focused reforms to enhance it. In this Working Paper, the Institute identifies eight policy opportunities for meaningful reform to raise the efficiency and equity of the system and achieve greater affordability. They are based on pressures faced by the Ontario health care system, which emphasizes the need to:

- Address the real cost drivers in the system; tackle drug spending, physician payment reform, and end of life care
- Distribute the cost of health care more evenly across generations to raise intergenerational equity
- Introduce competition into the system and improve technical efficiency
- Enhance and diversify the revenue base and introduce price signals









### Strengthen primary care

A strong primary care health system is the backbone of a high-performing health care system, but despite reform efforts, Ontario's primary care performance continues to lag international peers. The sheer number of current primary care models in place (more than seven different models) suggests there is uncertainty about the best way forward. Priority should be given to improving accountability by involving various medical professions in reform efforts, strengthening primary care's ties to LHINs, measuring performance, focusing on the high needs patients and managing compliance with contract requirements.

### **Engage physicians** to be leaders for change and renew the payment model

To improve health care, the central power players of the system, the physicians, need to drive change. It is pivotal that the government and medical profession address how physicians can become better integrated into the system. Controlling spending on physicians has to be part of the solution to improve system efficiency. Physicians should be full partners in the systems where they work with a reasonable balance between entitlements and responsibilities. Policy makers in Ontario could learn from the US model of Accountable Care that incentivizes physicians to play an enhanced role in resource stewardship and creates opportunities for increased physician leadership.

### Accelerate the deployment of IT in health care

Health care systems that do not master the use of data will have major difficulties in improving efficiency and overall performance. Physicians respond to evidence and, if benchmark data show that they their practice varies from the norm, they will have incentives to improve. However, Ontario lags many other jurisdictions around the world in the use of IT in health care. A new strategy for improving the technical efficiency of Ontario health care is needed.

### Implement an **Ontario-made** pharmacare program

The current pharmaceutical insurance system makes little economic sense. The involvement of multiple payers weakens purchasing power and increases wasteful spending, because of a lack of drug assessment in private plans. Ontario spends significantly more on drugs than peer countries, but offers much less public coverage of drug costs, creating inequitable access to care. International comparisons indicate that implementing a universal pharmacare program could increase the ability to control drug spending and ensure better access to medications, and hence better health outcomes.









### Scale up policy focus on end of life care

End of life care will be critically important during the next decades of health care in Ontario. The cost of providing end of life care consumes a disproportionate share of health care resources, but little policy attention is directed toward this issue. Developing a system-wide end of life care strategy is essential to meet patient preferences and reduce unnecessary cost.

## Introduce a savings plan for prefunded drugs

Even if Ontario is extraordinarily successful in realizing efficiency gains, an enhanced revenue base for health care will be necessary. Given the rapid increase in spending on drugs over the last three decades and the need to distribute the financing burden of health care more equally across generations, shifting the financing of drugs for older Ontarians from the current taxation model to a partially prefunded model should be considered. Introducing a prefunded health care plan for drugs, like the Canada Pension Plan, would help achieve greater intergenerational fairness and place health care on a more fiscally sustainable footing.

### Build the case for co-payment

Ontario needs to come to the understanding that universal health care does not necessarily need to be free: a co-payment model could create awareness of health care costs, fund essential areas of health care that currently are outside the public package, and it could bring greater fairness by decreasing the level of public subsidy to affluent citizens and increasing the subsidy for less-affluent citizens.

# Abolish the tax subsidy to employer-provided health insurance benefits

The tax subsidy provided to employer-provided health insurance benefits comes at significant cost, both in terms of forgone tax revenue, income inequality, and negative spillover effects on publicly funded health care. Ontario could set a new standard for Canada and take action on ending the employer health insurance tax subsidy, which could both help curb health care costs and raise new revenues.

There is tremendous potential for Ontario's public health care model, and the province could be doing a lot more to make its health care system work smarter. The health outcomes of Ontarians and the effective allocation of health care resources are central to a productive workforce and a prosperous economy. Now is the time to think innovatively about how things may be done differently and to summon the public policy courage demonstrated decades ago in the creation of Canada's health system to help reform that system to the benefit of patients, citizens, the health care system, and Ontario's prosperity.

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