

Ideas and Opportunities for Bending the Health Care Cost Curve

Advice for the Government of Ontario

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Together, we represent a group of provider associations committed to building a better health system:

- The Ontario Association of Community Care Access Centres (OACCAC);
- The Ontario Federation of Community Mental Health and Addiction Programs (OFCMHAP)
and;
- The Ontario Hospital Association (OHA).

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Introduction

Ontario's health care system, like any other, has always been under pressure to meet growing demands with constrained budgets. For government and providers alike, the continued pursuit of higher quality, greater access and newer treatments means there is always more to do. A strong health care system requires ongoing investment in improvements and modernization.

Within the current economic environment however, the task of meeting Ontarian's health care needs has become even more challenging. With a projected provincial deficit of \$21.3 billion for 2009, slower economic growth and lower tax revenues, there is a reduced capacity to maintain current rates of health care spending. As Ontario continues through this period of restraint, there is a great need to find new ways to operate more efficiently—getting greater value for money—and also to “bend the cost curve”.

In the past decade, the Ontario government's health expenditure cost curve has grown by an average of 7.7% per year.¹ The major categories of expenditures have grown on average, as follows: hospital expenditures by 6.5 % per year; physician expenditure by 7.8 % per year; drug expenditure by 9.2 % per year; public health by 12.7 % per year; and other institutions including long term care homes by 7.2 % per year.

In dollar terms, total Ontario government health expenditure has doubled from \$21.6 B in 1999 to a forecasted \$45.2 B in 2009. Although Ontario's per capita spending is the second lowest in the country, next to Quebec, this measure has increased from approximately \$1,900 to \$3,500 per person (84%). In comparison, over the same time period, Ontario's GDP grew much less, at 39% (from \$409 billion to \$570 billion) even with high growth rates occurring prior to the economic downturn.

There are many ways in which the system can respond to current fiscal realities. It must be recognized however, that while there are pressures to find short-term solutions, there are few quick and easy ideas left. There is currently no option but to take a primarily longer-term view in order to yield lasting results. In an effort to put forth effective solutions for Ontario, this report provides a sampling of several ideas and opportunities to enhance value and reduce costs in the short, medium and longer-terms.

These ideas represent areas identified as good prospects, have been brought to light through new data or are examples of current initiatives that could be expanded. They include: swift implementation of leadership and strategies to better manage costly chronic illness; rapid uptake of results-oriented leading practices; appropriate shifting of services and funding from hospitals to the community; management of expenditure on physician services and drugs to move towards the significantly lower levels attained in other provinces; targeted human resource initiatives and others.

¹ See appendixes for a series of data charts.

High level estimates of the potential for cost savings are provided. In the absence of more detailed information, some estimates are “order of magnitude” calculations. Other estimates represent the opportunities identified through comparisons with spending patterns in other provinces. Given the range of possibilities for achieving savings, the investments needed to advance these initiatives have not been specifically identified within the overall estimates of savings. As there is some overlap of initiatives, in order to avoid double counting, dollar savings should not be summed.

Some may question the focus on cost savings when non-financial outcomes—lives saved, better health and quality of life, greater safety, shorter waits—are the results that matter. These are of course, the aims of delivering high quality health care in the first place. When funding is tight, however, even practices with substantial health benefits may not gain traction if they are viewed as unaffordable new expenses. By taking a “business case” approach that provides a clear return-on-investment, decisions to implement new initiatives that pay for themselves—either within an organization or between organizations—can easily proceed.

By supporting the initiatives outlined here, the Government of Ontario can build on its track record of addressing complex challenges. As evidenced by the Wait Times Initiative and other systemic *Transformation* projects, government clearly recognizes the importance of holding a vision of the system for the short, medium and longer-term, and of considering cross-sectoral impacts. Our health care system has never stood still. With leadership and collaboration, and a focus on lasting results, we can achieve what is necessary to ensure a high quality, affordable system in years to come.

1. HBAM 1% Investigative Project

With the development of Ontario's Health Based Allocation Model (HBAM) through the Ministry of Health and Long-Term Care (MOHLTC), it is now possible to conduct new analysis about the costs, quantities and distribution of health care services. Summary-level HBAM data have been presented publicly in various health care forums. A key finding revealed through the data is that a great deal of Ontario's health expenditures are concentrated among a small proportion of the population. Specifically, on an annual basis:

- **1% of the population accounts for 49% of combined hospital and home care costs;**
- **5% of the population accounts for 84% of combined hospital and home care costs.²**

The HBAM dataset can be drilled down to very specific service types and patient groupings to identify opportunities to improve quality and cost in targeted areas. For example, within the high-use "one percent" population, the top three acute care service categories are: circulatory; neoplasms and; injury and poisoning. Within each of these categories, further specificity is possible, enabling the identification of groups with high hospital re-admission rates and other occurrences as measured by quality-related indicators.

A comprehensive, provincial-level analysis using HBAM data would be a fruitful step in finding process improvements *across the system* with the potential for a large payoff of quality and efficiency. By focusing on sub-populations within the one-percent group it will be possible to streamline and integrate care and to develop better prevention and management programs. It will no doubt be possible to reduce the need for expensive hospital utilization.

Cost Saving Potential:

For 2009, the forecasted expenditure on hospitals by the Ontario government is \$16 billion for a total population of 13 million³. If roughly half of this expenditure is attributed to 130,000 people then significant opportunities exist to achieve savings on \$8 billion⁴ using specific, focused initiatives.

Every 10% reduction on the \$8 billion expenditure used by 1% of the population equals \$800 million in savings.

If expenditures can be reduced by:	the potential savings are:
5 %	\$400 Million
10 %	\$800 Million
20 %	\$1.6 Billion

² See Appendix 2.0.

³ Canadian Institute for Health Information, National Health Expenditures Database 2009.

⁴ This excludes possible savings in areas such as for physicians or drugs, currently excluded from HBAM.

Recommendation:

The MOHLTC should conduct a comprehensive analysis of service utilization, at the level of specific patient categories in order to select key priorities for implementing new initiatives with expected financial and non-financial benefits.

Every 10% reduction on the \$8 billion expenditure used by 1% of the population equals \$800 million in savings.

2. Province-wide Implementation of Ontario’s Existing Chronic Disease Prevention and Management Framework

Chronic Disease has a Major Impact

Chronic disease is widely recognized as *the* major cause of world-wide death and disability. The World Health Organization (WHO) projects that in Canada, in the next decade, a large proportion of all deaths will be caused by a chronic condition: 34% of all deaths will be caused by cardiovascular disease; 29% will be caused by cancer; 17% will be caused by “other chronic diseases”; 6% will be caused by chronic respiratory disease and; 3% will be caused by diabetes alone. The economic impact is estimated at over \$9 billion over a decade, when measured in terms of lost productivity to the Canadian economy, health system costs and costs borne by individuals.⁵

In Ontario, a large and growing number of people live with a chronic condition. Seventy percent of these Ontarians have *at least* two chronic conditions.⁶ As well, depression is not uncommon among those coping with ongoing health conditions.

Chronic Disease Prevention and Management has Many Facets

Elements of prevention and chronic disease management (CDM) extend well beyond simply receiving treatment in the traditional sense, through the health care system. These elements involve: substantial patient education and self-management; wide-spread use of standardized protocols; public health initiatives; information systems including electronic health records; and performance monitoring to track results in terms of health outcomes and health system impact.

Ontario’s Existing Framework for Chronic Disease Prevention and Management

In recognition of the well-known fact that prevention and proper management of chronic disease is highly cost-effective, the MOHLTC published a Chronic Disease Prevention and Management Framework in 2007 to improve chronic illness outcomes and to reduce costs.

⁵ World Health Organization. http://www.who.int/chp/chronic_disease_report/media/canada.pdf .

⁶ Ministry of Health and Long-Term Care. *Preventing and Managing Chronic Disease: Ontario’s Framework*, May 2007. <http://www.health.gov.on.ca/english/providers/program/cdpm/index.html#1> . The Framework describes the many benefits of Chronic Disease Prevention and Management.

The Ministry's Framework is a good one. It is based on the highly respected U.S. Chronic Care Model which has been widely adopted internationally. An expanded version is being applied in British Columbia, Alberta, Saskatchewan and Manitoba.

Some Incremental Progress is Occurring, More is Needed

The Framework clearly articulates aspects and key requirements of prevention and CDM. As the health care system continues to proceed through its *Transformation*, certain components of the Framework are underway. For example, those with chronic illness should benefit from initiatives such as the formation of Family Health Teams. Local Health Integration Networks (LHINs) are considering approaches that are consistent with or specifically aimed at implementing a chronic disease management strategy.⁷ Public health initiatives and patient education programs are also in place for certain disease areas. A diabetes strategy involving development of an on-line registry and new funding for education and equipment has been initiated. As well as new initiatives, many organizations have had patient programs to address particular chronic illnesses for quite some time.

Undoubtedly, positive things are happening and are making a difference in pockets of the province. However, the practice is not large-scale, wide-spread or strategic by any means. The Ontario Quality Council's 2008 report profiles the status of CDM in Ontario and states:

*“Quite simply, Ontario is failing to meet the challenge of chronic disease. Close to 8,000 lives could be saved annually—and the quality of life improved for many more people—if we did a better job of delivering the all-important regular care and monitoring that prevents the chronically ill from falling into severe bouts of illness.”*⁸

Strong Provincial Leadership is Essential

Ontario can go much further. To be truly effective in targeting this large-scale issue, with wide-ranging impacts, a provincial effort is needed. Ontario must get beyond the Framework phase to large-scale implementation. What is needed now is a major push to implement province-wide initiatives known to be highly effective. It is the application of comprehensive practices working in a standard, coordinated way, across the entire province that will reap the greatest benefits. Strong provincial leadership is required to make this happen.

A single provincial organization with a mandate to implement a range of CDM initiatives across several chronic disease areas, as outlined in the Framework, should be created. The model of Cancer Care Ontario (CCO), due to its tremendous impact by way of a single cancer care system for all of Ontario, could be adopted for other chronic illnesses.

The overlapping nature of chronic disease means that CDM initiatives should not be stand-alone or implemented one at a time. Large benefits are possible through a single point of accountability and

⁷ In particular, see the approach taken by the Central LHIN at <http://www.centrallhin.on.ca/Page.aspx?id=9252>.

⁸ Ontario Health Quality Council. QMonitor: Report on Ontario's Health System, 2008. http://www.ohqc.com/pdfs/ohqc_2008_report_-_english.pdf

concentrated expertise, through one provincial organization responsible for the majority of CDM. The degree of responsibility by a provincial organization, for various aspects of CDM should be determined. Locally driven initiatives through LHINs, could be further strengthened and disseminated more widely with a provincial strategy to ensure coordination.

Under such a provincial structure, comprehensive programs, in addition to cancer, should be developed for a range of categories of ongoing illness, including but not limited to: cardiovascular disease; chronic kidney disease; diabetes; and chronic respiratory illness. As well, a provincial structure should reflect an effective model to successfully transform how mental health conditions and addictions are addressed, due to the ongoing nature of recovery in these areas, and due to the fact that services for these conditions cross ministry boundaries.

Cost Saving Potential:

The nature of chronic illness is such that the bulk of savings through CDM will occur over a period of time. If no action is taken, however, it is a certainty that health care costs will rise to levels that will be considered unacceptable by most, and there will still be unmet need.

While hard data on the cost impact of specific projects is often not readily available, the potential for savings can be estimated using some existing calculations to assess the order of magnitude. The MOHLTC Framework document states that over a third of Canada’s direct health care costs arise from major chronic illness and injury.^{9 10} Extrapolating from this statistic, using 2009 data, one third of Ontario’s direct health expenditures of \$48.5 billion is \$16 B. If an estimated 25% of expenditures can be attributed to major chronic illness (excluding injury), the figure is \$12 B.

Every 10% reduction on expenditures of \$12 billion (attributed to major chronic illness) equals \$1.2 billion in savings.

If expenditures can be reduced by:	the potential savings are:
5 %	\$ 0.6 Billion
10 %	\$ 1.2 Billion
20 %	\$ 2.4 Billion

These figures, which consider hospital, physician, drug and other health care costs, are consistent with the calculations using HBAM findings for hospital expenditure alone. Savings calculated for CDM will overlap with savings calculated through HBAM analysis.

In addition, the Ministry’s Framework document cites examples of the cost impact of chronic disease and the economic benefits of specific strategies in various jurisdictions. In Canada: a congestive heart failure discharge program resulted in over 60% fewer hospital readmissions; a primary care asthma intervention plan saw 50% fewer emergency visits and; an Alberta study of

⁹ The MOHLTC’s statement references the following: Public Health Agency of Canada, “Economic Burden of Illness in Canada”, 1998. <http://www.phac-aspc.gc.ca/publicat/ebic-femc98/index-eng.php>

¹⁰ Direct costs are calculated using CIHI data and include expense by all levels of government (in addition to the provincial government) on hospitals, physicians, drugs, other institutions and other types of care and expenses.

heart failure care following hospitalization reduced hospital use by 3.6 days per participant, saving \$2,500 per case. As well, in the United States, a RAND Corporation study reduced hospital costs by “tens of billions of dollars” by better management of four chronic diseases: diabetes, congestive heart failure, asthma and chronic obstructive pulmonary disease.^{11 12}

Recommendations:

The MOHLTC should implement its Chronic Disease Prevention and Management Strategy comprehensively, through the establishment of a single provincial organization with a mandate to implement initiatives across multiple categories of ongoing and often concurrent conditions.

The MOHLTC should ensure that provincial-level leadership and coordination for chronic disease prevention and management results in equitable access to services across the province, and strengthened, high quality local delivery of services based on leading evidence-based practices.

Every 10% reduction on expenditures of \$12 billion (attributed to major chronic illness) equals \$1.2 billion in savings.

3. Implementation of Leading Practices in Targeted Areas

Projects for Results

Leading practices exist in health care for both clinical and non-clinical services. While certain models of chronic disease management are leading practices, suggestions and examples presented here represent specific practices or programs targeted to achieve a very precise result and which may be achievable in a shorter time period through a particular project.

Again, as with CDM, various leading practices exist all over the province, across sectors, LHINs and institutions. What is lacking in Ontario is coordinated, wide-spread adoption of practices and protocols that are known to be effective but are also known to have less than optimal usage. For example, some ideas which may achieve relatively quick results in the elderly population include the following:

- Provision of Vitamin D/calcium supplements to long-term care residents (at less than \$10 per year per person) to ensure bone health and improve posture which would reduce fractures and costly hospitalizations due to falls.

¹¹ Ministry of Health and Long-Term Care. *Preventing and Managing Chronic Disease: Ontario's Framework*, May 2007. <http://www.health.gov.on.ca/english/providers/program/cdpm/index.html#1> .

¹² Bigelow et. al. *Analysis of Health Care Interventions that Change Patient Trajectories*. RAND Corporation, 2005. http://www.rand.org/pubs/monographs/2005/RAND_MG408.pdf The document, interestingly, provides a comprehensive description of the extensive process of calculating costs and benefits for a CDM program.

- Appropriate prescribing of ACE inhibitors for diabetics to help prevent progression to end-stage kidney disease thus avoiding the need for dialysis at approximately \$50,000 per year.
- Provision of nocturnal dialysis for long-term care residents to reduce transfers to hospital for dialysis and reduce associated risks of acquiring pneumonia during those transfers.
- Expanded deployment of advance practice nurses and physician assistants to long-term care homes to reduce transfers to hospitals.

While news of excellent programs, bright ideas and recommendations are widely available across the spectrum of health care literature, dissemination of information differs from uptake. The wide-spread implementation of known good ideas requires strong, focused leadership—and frequently, a business case approach to decision making—to achieve.

Leading Practice Expert Panels

Focused, provincial-level expert panels should be formed with the mandate to identify and develop ways to promote rapid and wide-spread adoption of leading practices for key areas of clinical care, that are known to be under-utilized.

In some instances this may involve “knowledge transfer” where experts disseminate knowledge and practice of proven methods to other practitioners and providers in the system. In other instances controlled shifts of programs between various health care sectors may be required to harvest known benefits.

Recommendation:

The MOHLTC should create provincial expert panels to identify and develop ways to promote rapid, wide-spread adoption of leading practices for key clinical areas with large-scale, systemic potential for quality improvement and cost efficiencies.

The items outlined below represent areas of potentially significant opportunity and include estimates of potential savings.

3.1 Provision of Continuing Care in the Most Appropriate Location

Ensuring that people who need on-going care—either at home in the community or in an institutional setting—receive that care in the most appropriate location is a key aspect of delivering quality, from the individual’s point of view, and in efficiently operating the health care system. It is now well-recognized that inappropriate placement leads to system bottlenecks, excessive levels of Alternate Level of Care (ALC) patients in hospitals, increased wait times throughout—especially longer wait times in emergency rooms—and sub-optimal care.

While this issue requires a multi-pronged approach, the MOHLTC's *Aging at Home Strategy* will play an important role. For example, the expansion of the cross-sectoral Transitional Care programs—which include hospital-based Complex Continuing Care and Rehabilitation as well as community programs—has been effective in facilitating discharge from acute care to home by maximizing an individual's functioning following hospitalization.

It is now possible however, to **further leverage** the *Aging at Home Strategy*'s benefits beyond what was originally envisioned. Decisions about where best to spend new monies allocated to this program, can be informed through new datasets and information available through the Resident Assessment Instrument (RAI). Funding can then be targeted in very strategic ways to specific programs which ensure appropriate placement, appropriate supports, better quality for individuals and at lower cost to the system. Areas of the province with the greatest expected benefits can then be strategically targeted for funding.

To further support this point, the Ontario Association of Community Care Access Centres (OACCAC) co-sponsored a project with several partners, including the Ontario Home Care Association, the Ontario Community Support Association and The Change Foundation, called 'Valuing Home and Community Care'. The project identified ways in which home and community care drives net and real economic value, creating a net savings of approximately \$13 million, excluding caregiver contribution, when applied to a subset of one CCAC's clients. If the cost savings are extrapolated across the province to all CCAC clients, the study has found that home and community-based services have the potential to save the health care system an estimated \$150 million in value per year.

The OHA and the OACCAC are jointly engaged in two other studies which will inform this targeted funding approach to maximize benefits. In these studies, hard evidence obtained from the RAI enables the identification of specific groups of hospitalized individuals who can be appropriately discharged to home, with the right supports.

The first study—*Potential for ALC Reduction via Additional/New CCAC Services*—is expected to assess the potential for directly transferring resources from hospitals to home care for individuals who do not necessarily require institutional care, but who may require more home care and intensive service than is currently funded and provided.

The implications of this study are that while additional investments to home care can be made, the actual dollar savings can really be captured. Essentially, a proportion of the large number of Ontario hospital beds that are currently occupied by ALC patients could be permanently closed or made available for specifically pre-determined purposes. The transfer of funding could take place between the hospital and the CCAC. With the use of good quality data—primarily the RAI—qualifying individuals are identified as those who can succeed, with better outcomes, in a non-institutional setting, with the right supports.

The second study—*Case Study of Change of Practice*—aims to quantify the benefits of a particular practice in some LHINs, for its applicability Ontario-wide. Historically, a common assumption when discharging certain elderly individuals who seem destined for long-term care, is that there are no other options i.e. they cannot go home. Welcomed changes to regulations (and related funding increases) implemented by the government during the past year have expanded the

opportunity to send people home with supports who previously may have been destined for a long-term care bed. Programs are currently underway in which CCACs, being familiar with the full range of community supports, determine the appropriate place of discharge, rather than the hospital. Results are showing that people can go home again.

Each study demonstrates how the RAI dataset could be used to its full potential to identify and strategically target new opportunities for placement of patients/clients/residents. A focused, coordinated effort to exploit this dataset and implement necessary changes would result in significant improvement in quality of care, and would free up capacity throughout the system, including that in emergency rooms through ER wait time reductions. Additionally, the two practices under study could be implemented in other areas of the province.

Cost Saving Potential:

Specific calculations of the cost saving potential in the two studies noted above are currently in progress. A high level estimate of the potential for the province, based on what is currently known about ALC populations, provides an order of magnitude of the possibilities for shifting care out of the hospital, into the home, with appropriate supports and resources.

In March 2010 there were over 3,000 individuals designated as ALC waiting for placement in a long-term care facility. The estimated daily cost in acute care for these patients is \$450 which translates to almost \$500 million per year. An estimate of the average cost of maximum levels of home care services (maximums are expressed in terms of hours of particular service types within a time period) is \$100 per day. This group of ALC patients, on average, may require more than this estimated amount. If care requirements necessitate an increase of the home care daily maximum for these individuals to a level which would cost \$130 per day for example, there are still significant savings to be achieved over the provision of care in an acute setting. The cost differential in this scenario is \$320 per day.

Every 10% shift of ALC patients from acute care (waiting for long term care) to home care, results in a \$35 million saving.

If this portion of ALC individuals awaiting long-term care can be discharged home with appropriate supports:	the potential savings are:
10 % (300)	\$ 35 Million
20 % (600)	\$ 70 Million
30 % (900)	\$ 105 Million

There is a timely opportunity to implement initiatives such as these within the 2010/11 fiscal year. The MOHLTC has outlined year-by-year funding amounts for its *Aging at Home* strategy. Base funding in 2009/10 was \$187 million. In 2010/11 base funding will increase by approximately \$143 million to a total of \$330 million. As this additional \$143 million has not yet flowed, there is an opportunity to take an evidence-based approach to guide its allocation. By investing in home care services through the \$143 million and by further enhancing this investment through shifting of funds from hospitals to home care for specific groups of individuals, systemic improvements are possible.

Recommendation:

The MOHLTC should target the \$143 million increase to base funding for the *Aging at Home* strategy for 2010/11 to assist in the resolution of the ALC problem by enabling greater numbers of discharges to home care than are currently possible, for an appropriate category of individual.

Every 10% shift of ALC patients from acute care (waiting for long term care) to home care, results in a \$35 million savings.

3.2 Adoption of Leading Practices for Wound Care

Chronic wounds are those which have not healed as expected and continue to require intensive treatment and management. They can result from numerous conditions including: chronic illness such as diabetes, with leg and foot ulcers due to poor circulation; continuous pressure to skin and tissues (e.g. “bed sores”); various surgical procedures, and many others. Management is costly mainly due to the very labour intensive and on-going nature of treatment and due to the need for highly specialized equipment, supplies and medication to be used over a long period of time. Conditions which lead to chronic wounds are such that healing does not take place quickly.

While the Canadian Association of Wound Care (CAWC) states that little is known about the total cost of managing wounds in Canada, the costs are thought to be extremely high. Generalized annual costs of approximately \$10 billion for North America have been cited although further substantiation is required.^{13 14} However, a brief review of this topic reveals that it is widely-known among clinicians to be a severely resource intensive problem but that the spotlight is only beginning to shine on this area. One case example provided by the CAWC calculated a cost differential of over \$9,000 for managing skin ulcers on a young diabetic patient using a “best practice” protocol versus a “previous management” protocol.¹⁵

Currently, the OACCAC has launched a model project in this area through a joint initiative called the Integrated Client Care Project (ICCP).¹⁶ With additional sponsorship from the MOHLTC, the Rotman School of Management at the University of Toronto and with the Centre for Healthcare Quality Improvement (CHQI) At The Change Foundation providing quality improvement

¹³ Waters, N. The Challenges of Providing Cost Effective Quality Wound Care in Canada. Wound Care Canada. Volume 3, No. 1, 2005. <http://cawc.net/os/open/wcc/3-1/waters.pdf>

¹⁴ Swanson, L. “Solving Stubborn Wound Problem Could Save Millions” CMAJ Feb. 23, 1999; 160(4) <http://www.cmaj.ca/cgi/reprint/160/4/556>

¹⁵ Teague, L.M. and J. L. Mahony. “ Cost Effective Wound Care: How the Advance Practice Nursing Role Can Affect Outcomes in an Acute Care Setting, Wound Care Canada, Volume 2 Number 1. http://cawc.net/os/open/wcc/2-1/Teague_V2_Iss1.pdf

¹⁶ See: <http://www.ccac-ont.ca/Content.aspx?EnterpriseID=15&LanguageID=1&MenuID=1054> .

coaching and capability-building, the ICCP project will initially focus on organizing home care services around particular clinical conditions—in this instance, wound care—with the primary aim of improving value for clients. The delivery of care for particular types of wounds in the home care setting (venous leg ulcers and foot ulcers) will be reorganized and will involve the application of evidence-based leading practice protocols that have been proven to improve quality of life, wound healing time, pain and the occurrence of adverse events and complications during treatment. As an added benefit, these overall better outcomes can be achieved with lower costs.

A 2007 report produced in *Wound Care Canada*, commissioned by the MOHLTC, provides an estimate of the potential for savings that can be achieved in Ontario for the ICCP’s wound care implementation initiative.¹⁷ Based on an estimated 90,000 diabetic foot ulcer clients and 15,000 leg ulcer clients in Ontario, the yearly cost of providing care in the community is estimated at \$511 million under “standard community” care. By adopting best practices, this study estimated that \$338 million could be saved—a 66% reduction in costs. As well, it was estimated that \$24 million would be saved from reduced hospitalizations alone, due to fewer infections and amputations.

The ICCP’s wound care implementation initiative is an excellent example of the possibilities that can be achieved through the coordinated application of leading practices. Given that the project is focused on adopting leading wound care practices in a community setting, it is recommended that a similar initiative be developed and implemented for both hospital and long-term care settings. Particular expertise in wound care often resides in hospitals with complex continuing care programs and in hospitals with clinical practitioners with advanced training in wound care. This expertise could be transferred throughout the long-term care sector and to more hospitals.

Cost Saving Potential:

As noted above, the *Wound Care Canada* report estimates that the cost of community care in Ontario for leg ulcers and diabetic foot ulcers is approximately \$511 million. Taking a much more conservative approach than that used in the report (with estimated savings at 66%), even a ten percent savings would yield a substantial \$50 million.

Definitive estimates of the cost of wound care in hospitals and long term care in Ontario are currently in progress through the MOHLTC. A preliminary estimate may put the figure at over \$1 billion. To be very conservative, if the cost is even half of that (\$500 M), and only marginal improvements are achieved, one could estimate that substantial amounts could be still be saved by adopting practices that speed healing, reduce hospital length of stay and reduce costs in long term care. If a ten percent reduction in costs can be found in these sectors, the savings would be \$50 million.

¹⁷ See: Shannon, RJ “A Cost-utility Evaluation of Best Practice Implementation of Leg and Foot Ulcer in the Ontario Community. *Wound Care Canada*, Vol. 5.Suppl. 1. http://cawc.net/images/uploads/wcc/5-1-Cost-utility_Evaluation.pdf

Every 10% reduction of expenditures in the community, acute and long-term care sectors may yield \$100 million in savings.

If expenditures can be reduced by:	the potential savings are:
10% in the community sector	\$ 50 Million
10% in the acute and long term care sectors	\$ 50 Million

Recommendation:

The MOHLTC should expand on the Integrated Client Care Project’s community wound care initiative by developing a plan to implement identified leading wound care practices in the institutional setting, across hospitals and long-term care organizations.

Every 10% reduction of expenditures in the community, acute and long-term care sectors may yield \$100 million in savings.

3.3 Adoption of Leading Practices for Palliative Care

A body of literature surrounding palliative care and end of life practices within the Canadian context exists. While there are many dimensions and options for best practices, one particular aspect, that being the setting in which palliative care is provided is a prime consideration.

Increasingly, the call for more palliative care options in the home, rather than in hospital is being heard but this is not a widely available option in Ontario. Often, home-based services are preferred by patients and families and result in better outcomes when properly resourced. With increased care provision out of the hospital setting, with proper resources, opportunities also exist for cost reduction.

Various home-based palliative care initiatives are established across the province. What is needed is an expansion of such services in accordance with leading practices. To begin to address this need, the Integrated Client Care Project, working with experts and resources across the system, has selected palliative care as a priority clinical category for further development. Work is currently underway as part of the project, to identify evidence based leading practices and models for implementation which will have positive clinical and quality outcomes and will provide greater value for money spent.

Cost Saving Potential:

One evaluation of a Hamilton area program operated through the Hamilton Niagara Haldimand Brant CCAC, that enabled more palliative care clients to die at home, showed that palliative care

provided at home was half the cost of comparable care provided in hospital.¹⁸ Further preliminary data from Ontario, gathered through the Integrated Client Care Project, points to the large cost saving potential of proceeding with the ICCP’s palliative care implementation initiative. The cost of providing palliative care in the home is approximately \$4,700 per client, (including costs related directly to palliative services plus other non-palliative services). A preliminary estimate of the cost of providing palliative care in an acute setting is approximately \$19,900 per client for 6,084 patients annually (although the actual number of palliative care patients in acute care is likely higher). The total expenditure is therefore conservatively estimated at \$121 million.¹⁹ The cost differential is \$15,200 per client.

Every 10% shift of palliative care patients from an acute care setting to a home care setting results in \$9 million in savings.

If the proportion of palliative care services can be shifted from acute to home care by:	the potential savings are:
10 %	\$ 9 Million
25 %	\$ 23 Million
50 %	\$ 46 Million

Recommendation:

The MOHLTC should continue to support the OACCAC’s leadership role in this initiative working with key partners across the sector to ensure increased integration and successful expansion of community-based palliative care.

Every 10% shift of palliative care patients from an acute care setting to a home care setting results in \$9 million in savings.

3.4 Increased Management of Mental Health and Addiction Issues in the Community

For mental health and addictions, there are some specific targeted areas in which individuals can be better served through leading practices, which also result in improved system efficiencies. In 2008, at the request of the Minister of Health and Long-Term Care, a report was produced by a partnership representing leading mental health and addiction organizations. Seven practical recommendations were made concerning ways to reduce emergency room wait times and to implement best practices related to mental health and addiction services.²⁰ These

¹⁸ Canadian Home Care Association. *High Impact Practices*. November 2006. <http://www.cdnhomecare.ca/media.php?mid=1684>

¹⁹ Source: preliminary estimates provided through the Integrated Client Care Project.

²⁰ A list of partner organizations and the full report are available here: <http://www.ofcmhap.on.ca/node/405>

recommendations have been reinforced with further advice provided to the Minister of Health in a September 2009 communication²¹ and include the following highlights:

- Strengthening mental health and addiction services and supports in the community by providing community-based crisis services that are available 24/7. This can be an effective alternative to emergency room usage through models involving both peer support and medical care that is of an equivalently high standard to that offered in hospitals.
- Strengthening hospital capacity through identified leading practice protocols that can be applied in the ER. Such practices include placement of community-based crisis workers and discharge workers in the ER and development of ER diversion programs. This reduces the likelihood of readmissions and ensures continuity of care between hospital and community through application of care plans that extend beyond the hospital treatment phase.

By way of example, a project at one Toronto hospital which worked to appropriately divert people towards community services saw a 50% reduction in repeat emergency department visits.²²

Cost Saving Potential:

Recommendations for mental health and addiction services in Canada have generally focused on how to address unmet need through more and better resources rather than on how to reduce costs. A proactive, preventive approach to mental health and addiction is better for all, but also has the additional benefit of leading to less reliance on care provided in hospitals.

There is a paucity of data, however, to assess the system cost of hospital utilization, specifically ER usage, attributed to mental health and addiction services which could be reduced through the provision of better community care. The HBAM dataset referenced above would be particularly useful in examining the cost implications of this category of care, and could be used to identify repeat and potentially preventable emergency visits for mental health and addiction reasons.

High level calculations provide a measure of the potential. Approximately 165,000 (3%) of the 5.5 million annual emergency department visits in Ontario are attributed to “Mental Health and Behavioural Disorders”. A large proportion of these visits are classified as high priority according to the Canadian Triage and Acuity Scale (CTAS) triage levels. The cost of a hospital emergency room visit for psychiatric services is estimated at \$350 which would bring the rounded total cost to approximately \$60 million. The cost of proactive community services would be significantly less.

Every 10% reduction on expenditures of \$60 million for hospital emergency room visits for psychiatric services equals \$6 million in savings.

²¹ The recent communication was signed by the Canadian Mental Health Association, the Ontario Federation of Community Mental Health and Addiction Programs, the Ontario Hospital Association and the Schizophrenia Society of Ontario.

²² Goodman, S. The Emergency Department Diversion Program at North York General Hospital. Poster Presentation: Celebrating Innovations in Health Care Expo. Toronto, 2008.

If the proportion of mental health and addiction visits that could be appropriately diverted from the emergency room is:	the potential savings are:
10 %	\$ 6 Million
20 %	\$ 12 Million
30 %	\$ 18 Million

This high level estimate does not take into account the additional savings that could be achieved through a reduction in hospital inpatient utilization.

Recommendation:

The MOHLTC should expedite the initiatives identified in the July 2008 report submitted to the Minister of Health and Long-Term Care by the partnership of mental health and addiction organizations. Implementation will significantly increase access to mental health and addiction services in the community and reduce the need for potentially avoidable hospital emergency services and reduce ER wait times.

Every 10% reduction on expenditures of \$60 million for hospital emergency room visits for psychiatric services equals \$6 million in savings.

3.5 Adoption of a Business Case Approach for Error Reduction Strategies

For years, the health literature has demonstrated that adverse events in the health care system lead to a range of detrimental outcomes. Adverse events harm patients and drive up costs. The well-known “Baker-Norton” report on adverse events estimated that in Canada in 2000, 7.5% of 2.5 million acute care hospital admissions (that were similar to those studied) were associated with an adverse event. It was estimated that 70,000 of these 2.5 million admissions (2.8%) were preventable.²³

The Canadian Patient Safety Institute (CPSI) works to improve quality and reduce health care errors across Canada and across health care sectors. Its “*Safer Healthcare Now!*” campaign is aimed at fostering uptake of specific safety practices such as ways to reduce infection rates, medication errors, risk of falls, and mortality from heart attacks, among others. While more organizations are coming on board and addressing safety and quality, either through the CPSI or other initiatives, the significant variation across the province in many published quality indicators demonstrates that much more work is required.

As with other initiatives, in the absence of a business case approach, patient safety initiatives can be seen as cost-increasing, despite the critically important non-financial benefits that are sought. In recognition of the fact that a business case, which outlines costs and benefits in financial and

23. Baker, G. Ross, et. al. The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada. CMAJ • May 25, 2004; 170 (11). <http://www.cmaj.ca/cgi/content/full/170/11/1678>

non-financial terms, improves the chances for implementation, the Institute for Health Improvement (IHI) in the U.S. offers tools and resources for developing business cases that get attention and move projects forward.²⁴

In order to step up the pace of error reduction practices, a paradigm shift within the entire health care system is needed to recognize that quality pays off. This is a concept that is embedded in organizations with cultures of continuous quality improvement. Leadership is required to promote the use of the business case approach to implement quality and error reduction strategies.

Cost Saving Potential:

Canadian estimates of the system-wide costs of errors are elusive. A recent report commissioned by the CPSI entitled “One Dollar in Seven: Scoping the Economics of Patient Safety” puts a high dollar amount on the cost of adverse events. The report discusses the challenge in costing out health care associated injury and cites a number of studies which, when combined, point to a figure of 14% of health care expenditure.²⁵

What is known, from the Baker-Norton study and from other reports from various jurisdictions, is that there is clear room for improvement. Taking what may be a conservative approach, from a purely cost perspective, a very high level extrapolation of data from Baker-Norton points to a possible \$125 million in extra costs due to extra days of stay in acute care for *preventable* adverse events in Ontario, in 2009.²⁶

Within individual organizations, the potential for cost reduction and cost avoidance is substantial, depending on the particular initiative. Two key examples of the potential for error reduction strategies to save lives and dollars are highlighted here. There are many more possibilities across the different health care sectors.

Central Line Infections (CLI) are infections in the blood stream that can occur with the insertion of catheters into a vein. The mortality rate for central line blood stream infections is approximately 20 per cent.²⁷ As an indicator of quality, CLI rates are required to be reported by

²⁴

<http://www.ihi.org/IHI/Topics/LeadingSystemImprovement/Leadership/Tools/BuildingaBusinessCaseforPatientSafety.htm>

²⁵ Jackson, T. “One Dollar in Seven: Scoping the Economics of Patient Safety” Canadian Patient Safety Institute, 2009.

<http://www.patientsafetyinstitute.ca/English/research/commissionedResearch/EconomicsofPatientSafety/Documents/Economics%20of%20Patient%20Safety%20Literature%20Review.pdf>

²⁶ Baker-Norton calculated that an additional 1,521 hospital days were attributed to the 255 charts/admissions that were revealed to have at least one adverse event. This represents a roughly calculated average of six extra hospital days for each person with an adverse event. If 2.8% of Ontario’s 920,000 acute admissions experience a preventable adverse event, this would be 26,000 admissions. If each individual with at least one adverse event stayed an extra six days in acute care, at a cost of \$800 per day, the total cost is estimated at \$125 million.

²⁷ <http://www.saferhealthcarenow.ca/EN/Interventions/CLI/Pages/default.aspx>

Ontario hospitals.²⁸ As well, reducing CLIs is a priority project of the *Safer Healthcare Now!* initiative.

Published CLI studies typically report only the clinical impact of reducing CLIs. One recent Canadian study estimated the cost associated with blood stream infections acquired in the intensive care unit (ICU) to be just over \$25,000 per “case survivor” due to extra ICU days.²⁹ A second Canadian estimate, based on US data, projects the number of CLI cases in Canada at over 9,000.³⁰ Based on this second report, with 40% of Canada’s population, Ontario may have 3,600 CLIs every year.

Venous Thromboembolism (VTE) is a blood clot that forms in the veins and includes both deep vein thrombosis (DVT) and pulmonary embolism (PE). It is one of the most common preventable causes of hospital death. High risk levels are seen particularly in patients undergoing major general surgery and hip fracture surgery. VTE is another *Safer Healthcare Now!* Project and is cited as “the number one ranked patient safety practice for hospitals”. While the benefits of prevention through appropriate prophylaxis have been proven, its use falls short of what is recommended.^{31 32}

A 2006 Canadian study of postoperative complications in a Calgary hospital estimated that VTE in post surgical patients doubled both the cost and length of a hospital stay.³³ A recent American guide for prevention of VTE presents a “back of the envelope” calculation of the impact of VTE: a 300-bed hospital without a systematic VTE prevention approach, can expect to see 150 cases of hospital acquired VTE. The resulting additional (U.S.) costs are estimated at \$10,000 to \$20,000 per case.³⁴

While reports of the cost saving potential cited in the literature are very difficult to generalize to the Canadian context, to the health care system or to an individual hospital level, the emphasis on the need to reduce these types of preventable adverse events is clear, from both a safety and

²⁸ http://www.health.gov.on.ca/patient_safety/public/cli/cli_pub.html

²⁹ Laupland K. et al., Cost of intensive care unit acquired bloodstream infections. *Journal of Hospital Infections*. 2006. June; 63(2).

³⁰ Zoutman, D. 2009. “The Economies of Hospital Acquired Infections: Why they are a bad investment.” Presentation based on Weber D J. et al. “Comparison of Hospitalwide Surveillance and Targeted Intensive Care Unit Surveillance of Healthcare-Associated Infections”. *Infect Control Hosp Epidemiol*. 2007;28: 1361-1366.

³¹ See: <http://www.saferhealthcarenow.ca/EN/Interventions/vte/Documents/VTE%20Getting%20Started%20Kit.pdf>

³² VTE is also a component of Ontario’s Surgical Safety Checklist, the use of which will soon be a reportable quality indicator for Ontario hospitals. In 2011, VTE prevention will be one of Accreditation Canada’s “Required Organizational Practices”.

³³ Khan NA, Quan H, Bugar JM, et al. Association of postoperative complications with hospital costs and length of stay in a tertiary care center. *J Gen Intern Med* 2006;21:177-180

³⁴

http://www.hospitalmedicine.org/AM/Template.cfm?Section=Quality_Improvement_Resource_Rooms&Template=/C/M/ContentDisplay.cfm&ContentID=6092

costing perspective. Additional support to implement these types of error reduction strategies and others, can be obtained by taking a business case approach.

If preventable adverse events can be estimated to cost \$125 million, every 10% reduction may result in \$12.5 million in savings.

If expenditures can be reduced by:	the potential savings are:
5%	\$ 6 Million
10%	\$12.5 Million
15%	\$19 Million

Recommendation:

The OHA, together with its partners, will take a leadership role in spurring organizations to develop cultures of continuous quality improvement and to adopt a business case approach for evaluating error reduction strategies in high priority areas.

If preventable adverse events can be estimated to cost \$125 million, every 10% reduction may result in \$12.5 million in savings.

3.6 Expansion of Leading Practices for Supply Chain Management

While the greatest potential for improved quality and cost exists with clinical improvements, there are still opportunities in non-clinical areas, especially those which are interconnected with direct care delivery such as with supply chain management.

Through OntarioBuys, improvements in supply chain management in hospitals alone have already achieved annual cost savings in the area of \$10 million with expectations of \$50 million annually once existing projects are fully completed.³⁵

Additional opportunities exist with further expansion of leading practices due to the sizeable spending in this area. Specific additional areas of opportunity include:

- Expansion to more facilities in the Operating Room Supply Chain (ORSC) initiative—a highly successful targeted venture—and expansion beyond operating rooms to Cardiac Catheterization Labs and other interventional processes;
- Requirement that all hospitals be a significant participant in a supply chain organization, including minimum percentages of participation levels.

³⁵2008 Ontario Budget. http://www.fin.gov.on.ca/english/budget/ontariobudgets/2008/pdf/papers_all.pdf

- Establishment of Green Hospital initiatives that incent hospitals to be innovative or to purchase infrastructure with future environmental benefits;
- Leadership by hospital supply chain organizations to expand upon a successful CAHO pilot model for purchasing capital equipment, which over the last two years, is projected to yield over \$9 million in savings on a \$100 million capital expenditure.³⁶
- Leadership by hospital supply chain organizations in reaching out to other broader public service (BPS) entities to create supply chain organizations that benefit from purchasing common goods and equipment or consolidation of administrative efforts beyond just hospitals.

Cost Saving Potential:

Each year Ontario’s hospitals spend approximately:

- \$1.2 billion on medical and surgical supplies;
- \$900 million on drugs and gases;
- \$210 million on supply chain/materials management expenses.
- \$725 million on major capital equipment purchases;

As well, hospital balance sheet inventory levels for all product types for the province total approximately \$180 million (2008/09).³⁷

Estimated potential savings through continued supply chain improvements in hospitals: \$54 million annually plus one time savings of \$1.8 to 9 million.

If expenditures can be improved through:	the potential savings are:
2% reduction on medical surgical supplies	\$24 Million
Reduction of replenishment cycles and associated labour costs	\$10 Million
Capital expenditure saving through expanded group purchasing	\$20 Million
One time inventory reduction to efficient levels	\$1.8 to \$9 Million

Recommendation:

The Ministry of Finance, through OntarioBuys should continue to support focused efforts on adopting leading supply chain practices in hospitals and the health care system, more broadly.

Estimated potential savings through continued supply chain improvements in hospitals: \$54 million annually plus one time savings of \$1.8 to 9 million.

³⁶ See http://www.caho-hospitals.com/capital_equipment_gpi.aspx.

³⁷ Ontario Hospital Association.

4. Management of Expenditure on Physician Services

The Ontario government currently allocates 24% of its health care budget to services provided by physicians, which is the second highest expense category. Physician expenditure totals \$11 billion which follows hospital expenditure of \$16.1 billion, or 36% of the provincial health care dollar.

Over the last five years, on a per capita basis, the increase in physician expenditure is projected to be 49%.³⁸ In 2004, per capita physician expenditure was \$566 and in 2009 it is forecasted to be \$842. The number of physicians per capita has remained relatively constant over this time period at around 177 physicians per 100,000 people.

In comparison to the rest of Canada, the 2009 physician expenditure by non-Ontario provincial governments, was \$675 per capita. If Ontario were to spend at the same rate as the non-Ontario provinces, with 13 million people, Ontario would be spending \$2.2 Billion less than currently.

Determining precisely how to manage expenditure on physician services is a complex endeavour. The ways in which this expenditure category can be optimized in terms of cost effectiveness, involve: examination of policies which impact incentives for both physicians and patients; organization and delivery of primary care; review of legislation; and implementation of leading clinical practices, to name a few.

Incentives

Physicians' incentives are an important component of managing expenditure and influencing utilization patterns. In Ontario, there are several ways in which physicians are reimbursed. While fee-for-service remains the predominant mode of payment, other payment modalities are increasingly being adopted, particularly in the area of primary care.³⁹ Alternative compensation methods such as capitation, salary or blended models, for example, seek to achieve a range of results including: increased coverage and services for specific patient populations and areas of the province; improved predictability of expenditures; improved ER wait times and greater access to services that are complementary to medical services such as dieticians and pharmacists.

Throughout the system, for physicians and organizations alike, specific incentives exist, which intentionally or unintentionally, either promote or discourage the use of a particular technology or intervention over others. With medical advancements occurring all the time, it is important that financial incentives continually adapt in accordance with the best available evidence on best practice.

In Ontario currently, the Ontario Health Technology Advisory Committee (OHTAC)⁴⁰ works to inform system-wide decision making regarding the best use and dissemination of a range of specific health technologies and practices. Its reviews consider the effectiveness and resource implications and result in specific recommendations. For example, OHTAC reviews of Positron

³⁸ Canadian Institute for Health Information, National Health Expenditure Trends 2009.

³⁹ http://www.health.gov.on.ca/transformation/fht/guides/fht_compensation.pdf

⁴⁰ http://www.health.gov.on.ca/english/providers/program/ohtac/ohtac_mn.html

Emission Tomography (PET) scanning, an expensive newer technology, have informed MOHLTC decisions regarding OHIP coverage for specific clinical indications. The work of OHTAC could be further leveraged and expanded to inform decision making around appropriate reimbursement rates for a number of services in order to further support the use of best practices. Identification of a manageable number of key topics for which evidence is clear but not widely adopted could have a large impact on the system.

Hospital-Physician Relationship Contracts

In consideration of the fact that the health care system should function in a more coordinated way, with the “breaking down” of funding silos, attention should also be given to exploring ways in which to better integrate physician reimbursement with funding methods for other sectors and pools of funding. With some exceptions, physician services funding remains largely outside of every other health care funding envelope.

Within the hospital, a particular area of opportunity exists that will better align the incentives of hospitals and physicians and which will lead to better cost control. One way in which this can be done is through an existing recommendation of the OHA which is to amend the Public Hospitals Act (PHA) to move away from the current physician privileges system to a hospital-physician contract model.

Under the contract model, which is used in other countries, contracts typically set out the mutual rights and obligations of the parties. The model provides hospitals with greater flexibility to evaluate physicians on the basis of performance and quality and could be used to specify terms of physician reimbursement. A combination of various payment modalities for physicians working in hospitals is desirable so that payment reflects not only the type of work physicians perform, but also that payment reflects the aims of hospitals in providing a particular mix of services in accordance with its own contractual arrangements with LHINs and the MOHLTC.

Cost Saving Potential:

Every 10% reduction in the \$2.2 billion difference between Ontario’s expenditure on physician services per capita, and that in other provinces, results in \$220 million in savings.

If expenditures can be improved by:	the potential savings are:
10 %	\$220 Million
20%	\$440 Million
30%	\$660 Million

Recommendations:

The MOHLTC should explore ways in which the cost-effectiveness of expenditure on physician services can be optimized, given the wide variation in expenditure levels between Ontario and other provinces.

The Government of Ontario should amend the Public Hospitals Act (PHA) to move away from the current physician privileges system to a hospital-physician contract model.

Every 10% reduction in the \$2.2 billion difference between Ontario's expenditure on physician services per capita, and that in other provinces, results in \$220 million in savings.

5. Management of Expenditure on Drugs

Major opportunities are possible in the area of managing drug costs. The Ontario government spends \$310 per capita while the average expenditure in other provinces is \$280. An approximate \$30 cost differential, multiplied by the population of Ontario of almost 13 million, translates to almost \$390 million per year.

At a July 2009 presentation, the Minister of Health and Long-Term Care and the Deputy Minister outlined significant actions taken since 2005 when the Drug System Secretariat was established, and specified a targeted action plan for next steps.⁴¹ The plan is encouraging, outlining concrete ways to reduce costs and improve the system for Ontarians, drawing from practices occurring in other jurisdictions. Ideas on which the government is consulting the industry include things such as generic pricing, improved drug distribution channels, the operation of pharmacy services and professional allowances.

Ontario needs to move quickly with its plans to address the growth rate in expenditures on drugs. As the largest province in the country, Ontario can certainly leverage its size to achieve better pricing and purchasing arrangements than exist currently. Ontario also has the advantage of being able to learn from other jurisdictions that have made inroads to improving value for money from their drug systems. Targets for reduction of expenditure can be set to move towards levels of spending in other provinces, particularly that of B.C. which are the lowest in Canada at \$222 per person—28% less than in Ontario.

⁴¹ http://www.health.gov.on.ca/english/providers/program/drugs/resources/drug_system_renewal_forum.pdf

Cost Saving Potential:

Every 10% reduction on the \$390 million difference between Ontario’s expenditure on drugs per capita, and that of other provinces, results in \$39 million in savings.

If expenditures can be improved by:	the potential savings are:
10 %	\$ 39 Million
20 %	\$ 78 Million
30 %	\$117 Million

Recommendation:

The MOHLTC should expedite its current activities to reduce expenditure on drugs and set targets in order to achieve levels that have been attained in other provinces.

Every 10% reduction on the \$390 million difference between Ontario’s expenditure on drugs per capita, and that of other provinces, results in \$39 million in savings.

6. Implementation of Selected Hospital Human Resource Initiatives

There are a range of health human resource initiatives that could be implemented to improve system performance and save costs. Three initiatives outlined here relate to the hospital sector.

Establishment of the OHA as the Designated Employer Bargaining Agency

Although the vast majority of Ontario hospitals participate in central bargaining through the OHA, there is currently no requirement to do so. From time to time, non-participating hospitals have negotiated settlements at rates higher than those which would have been achieved through central bargaining. By not taking into account the broader interest of the hospital sector, rates of pay are driven up higher than they would be otherwise. This has been referred to as the “whip saw effect”.

There are substantial costs, in terms of both time and effort, in negotiating separate non-central labour agreements. Under the current voluntary system, for those hospitals that participate in central bargaining, OHA estimates that savings are approximately \$27 million. In other words, if these “voluntary” hospitals opted out of central bargaining—which is currently possible—this would cost the system up to this \$27 million. This \$27 million savings amount would potentially be at risk in a worst-case scenario. For those non-participating hospitals, should they be required to participate in central bargaining, there is a potential savings of up to \$10 million.

To address this situation, the OHA should be established as the designated Employer Bargaining Agency with the exclusive rights to represent hospitals as their bargaining representative.

Additionally, mandatory central bargaining should be required rather than allowing voluntary participation in central bargaining.

Workplace Safety and Insurance Act Revision: Transfer of Hospitals from Schedule I to Schedule II

Ontario's hospitals are covered under the Workplace Safety and Insurance Act (WSIA) as a result of inclusion in Schedule I of the Act. Employers listed in Schedule I pay annual premiums to the insurance fund and do not pay benefits directly to injured workers. In contrast, employers listed in Schedule II do not pay insurance premiums to the fund but rather pay the costs of benefits directly to their workers.

Schedules I and II are created by regulation. In determining whether employers are included in Schedule I or II of the Act, a primary consideration of the government has been whether an employer is financially capable of achieving the objectives of the Act, namely, the reduction of workplace accidents, the return to work of injured workers, and the provision of compensation and other benefits to injured workers. Many of Ontario's school boards have moved from Schedule I to Schedule II and have realized reduced insurance costs as well as decreases in frequency of workplace accidents and duration of lost time claims.

The OHA's analysis indicates that for Ontario's hospitals, the cost of Schedule I premiums exceed the cost of providing benefits to injured workers. Considerable savings could be achieved if the Act were amended to allow hospitals to transfer from Schedule I to Schedule II.

All Hospital Participation in Group Benefits Plan

Ontario's hospitals provide group benefits coverage primarily for full time employees. Coverage includes life and disability insurance as well as dental and other extended health care benefits. While the majority of hospitals currently obtain coverage through the OHA group benefits plan, individual hospitals have the choice of selection of a benefit carrier.

Benefits administration is complex. Hospitals not participating in the OHA plan typically do not have the essential expertise, in-house, that is required in selecting a benefits carrier and handling benefit renewals. Consultants are therefore required in order to ensure the proper administration of employee benefits. Consulting fees are currently estimated at approximately 3% of the \$360 million in benefit costs.

Substantial savings would be achieved if all hospitals participated in the OHA benefits plan through: elimination of benefit consulting fees; maximized provincial group purchasing power for insurance premiums and administrative charges; standardization of benefit plan provisions to reduce risk associated with "equivalency issues" (required by collective agreements); reduction of reserves held to cover incurred but not reported claims.

Cost Saving Potential:

Establishment of the OHA as the Designated Employer Bargaining Agency	
Estimated current savings at risk under today's voluntary central bargaining process	\$27 Million
<ul style="list-style-type: none">• Potential new savings through mandatory participation in central bargaining by currently non-participating hospitals	\$10 Million
WSIA Revision: Hospitals Transferred from Schedule I to Schedule II	
<ul style="list-style-type: none">• Estimated savings for large-payroll hospitals if permitted to transfer schedules.	\$20 Million
All Hospital Participation in Group Benefit Plans	
<ul style="list-style-type: none">• Estimated savings through elimination of employee benefit consultants.	\$11 Million

Recommendations:

The Government of Ontario should introduce legislation to establish the OHA as the designated Employer Bargaining Agency with the exclusive rights to represent hospitals as their bargaining representative. Additionally, mandatory central bargaining should be required rather than allowing voluntary participation in central bargaining.

The Government of Ontario should amend the Workplace Safety and Insurance Act to permit hospitals to elect coverage under Schedule II of the Act.

The OHA will fully explore the feasibility of mandatory participation by hospitals in the OHA benefit plans and fully assess costs and benefits of proceeding with further recommendations to government.

Estimated potential savings through selected hospital human resource initiatives: \$41 million plus avoidance of \$27 million in future risk.

Summary of Recommendations and Estimates of Potential Savings

High-level estimates of the potential for cost savings are provided for each topic. In the absence of more detailed information, some estimates are “order of magnitude” calculations. Other estimates represent the opportunities identified through comparisons with spending patterns in other provinces. Given the range of possibilities for achieving savings, the investments needed to advance these initiatives have not been specifically identified within the overall estimates of savings. **As there is some overlap of initiatives, in order to avoid double counting, dollar savings should not be summed.**

1. HBAM 1% Investigative Project:

Description:

- Identify new opportunities related to the forty-nine percent of hospital and home care costs attributed to one percent of Ontarians.

Recommendation:

- The MOHLTC should conduct a comprehensive analysis of service utilization, at the level of specific patient categories in order to select key priorities for implementing new initiatives with expected financial and non-financial benefits.

Estimated Saving Potential:

- Every 10% reduction on the \$8 billion expenditure used by 1% of the population equals \$800 million in savings.

2. Province-wide Implementation of Ontario’s Existing Chronic Disease Prevention and Management Framework

Description:

- Create central leadership to implement Ontario’s existing Framework; prevent or postpone the need for high cost, reactive, acute care interventions; eliminate duplication of effort; ensure standardized best practices across the province in all LHINs.

Recommendations:

- The MOHLTC should implement its Chronic Disease Prevention and Management Strategy comprehensively, through the establishment of a single provincial organization with a mandate to implement initiatives across multiple categories of ongoing and often concurrent conditions.
- The MOHLTC should ensure that provincial-level leadership and coordination for chronic disease prevention and management results in equitable access to services across the province, and strengthened, high quality local delivery of services based on leading evidence-based practices.

Estimated Saving Potential:

- Every 10% reduction on expenditures of \$12 billion (attributed to major chronic illness) equals \$1.2 billion in savings.

3. Implementation of Leading Practices in Targeted Areas

Description:

- Ensure the coordinated, wide-spread adoption of leading practices and protocols in key areas.

Recommendation:

- The MOHLTC should create provincial expert panels to identify and develop ways to promote rapid, wide-spread adoption of leading practices for key clinical areas with large-scale, systemic potential for quality improvement and cost efficiencies.

3.1 Provision of Continuing Care in the Most Appropriate Location

Description:

- Reduce reliance on hospital care and free up hospital capacity with targeted investments elsewhere in the system; improve quality of care and satisfaction levels.

Recommendation:

- The MOHLTC should target the \$143 million increase to base funding for the *Aging at Home* strategy for 2010/11 to assist in the resolution of the ALC problem by enabling greater numbers of discharges to home care than are currently possible, for an appropriate category of individual.

Estimated Saving Potential:

- Every 10% shift of ALC patients from acute care (who are waiting for long term care) to home care, results in a \$35 million savings.

3.2 Adoption of Leading Practices for Wound Care

Description:

- Disseminate and apply expert knowledge to reduce occurrence of, and speed the healing of, chronic wounds that are extremely costly to treat, in hospitals, long-term care facilities and in the community.

Recommendation:

- The MOHLTC should expand on the Integrated Client Care Project's community wound care initiative by developing a plan to implement identified leading wound care practices in the institutional setting, across hospitals and long-term care organizations.

Estimated Saving Potential:

- Every 10% reduction of expenditures in the community, acute and long-term care sectors may yield \$100 million in savings.

3.3 Adoption of Leading Practices for Palliative Care

Description:

- Reduce reliance on hospital care for instances in which it is not desired by patients and families; enhance choice and improve quality of care and satisfaction.

Recommendation:

- The MOHLTC should continue to support the OACCAC’s leadership role in this initiative working with key partners across the sector to ensure increased integration and successful expansion of community-based palliative care.

Estimated Saving Potential:

- Every 10% shift of palliative care patients from an acute care setting to a home care setting results in \$9 million in savings.

3.4 Increased Management of Mental Health and Addiction Issues in the Community

Description:

- Reduce the need for crisis intervention in the emergency room through 24/7 access to community services of an equivalently high standard as that offered in hospitals.

Recommendation:

- The MOHLTC should expedite the initiatives identified in the July 2008 report submitted to the Minister of Health and Long-Term Care by the partnership of mental health and addiction organizations. Implementation will significantly increase access to mental health and addiction services in the community and reduce the need for potentially avoidable hospital emergency services and reduce ER wait times.

Estimated Saving Potential:

- Every 10% reduction on expenditures of \$60 million for hospital emergency room visits for psychiatric services equals \$6 million in savings.

3.5 Adoption of a Business Case Approach for Error Reduction Strategies

Description:

- Reduce adverse events and improve quality by proving the case for effective strategies through financial and non-financial analysis—i.e. a “business case” approach.

Recommendation:

- The OHA, together with its partners, will take a leadership role in spurring organizations to develop cultures of continuous quality improvement and to adopt a business case approach for evaluating error reduction strategies in high priority areas.

Estimated Saving Potential:

- If preventable adverse events can be estimated to cost \$125 million, every 10% reduction may result in \$12.5 million in savings.

3.6 Expansion of Leading Practices for Supply Chain Management

Description:

- Reduce direct costs, significantly free up time of clinical staff, streamline processes through standardization and application of proven practices

Recommendation:

- The Ministry of Finance, through OntarioBuys should continue to support focused efforts on adopting leading supply chain practices in hospitals and the health care system, more broadly.

Estimated Saving Potential:

- Estimated potential savings through continued supply chain improvements in hospitals: \$54 million annually plus one time savings of \$1.8 to 9 million.

4. Management of Expenditure on Physician Services

Description:

- Reduce the expenditure gap between Ontario and other provinces through incentive and integration programs; introduce two-way accountability and align hospital-physician incentives by moving towards a hospital-physician contract model.

Recommendations:

- The MOHLTC should explore ways in which the cost-effectiveness of expenditure on physician services can be optimized, given the wide variation in expenditure levels between Ontario and other provinces.
- The Government of Ontario should amend the Public Hospitals Act (PHA) to move away from the current physician privileges system to a hospital-physician contract model.

Estimated Saving Potential:

- Every 10% reduction in the \$2.2 billion difference between Ontario's expenditure on physician services per capita, and that in other provinces, results in \$220 million in savings.

5. Management of Expenditure on Drugs

Description:

- Reduce the expenditure gap between Ontario and other provinces through concerted efforts to reform Ontario's publicly funded drug system.

Recommendation:

- The MOHLTC should expedite its current activities to reduce expenditure on drugs and set targets in order to achieve levels that have been attained in other provinces.

Estimated Saving Potential:

- Every 10% reduction on the \$390 million difference between Ontario's expenditure on drugs per capita, and that of other provinces, results in \$39 million in savings.

6. Implementation of Selected Hospital Human Resource Initiatives

Description:

- Implement selected hospital HR projects to improve performance and reduce costs.

Recommendations:

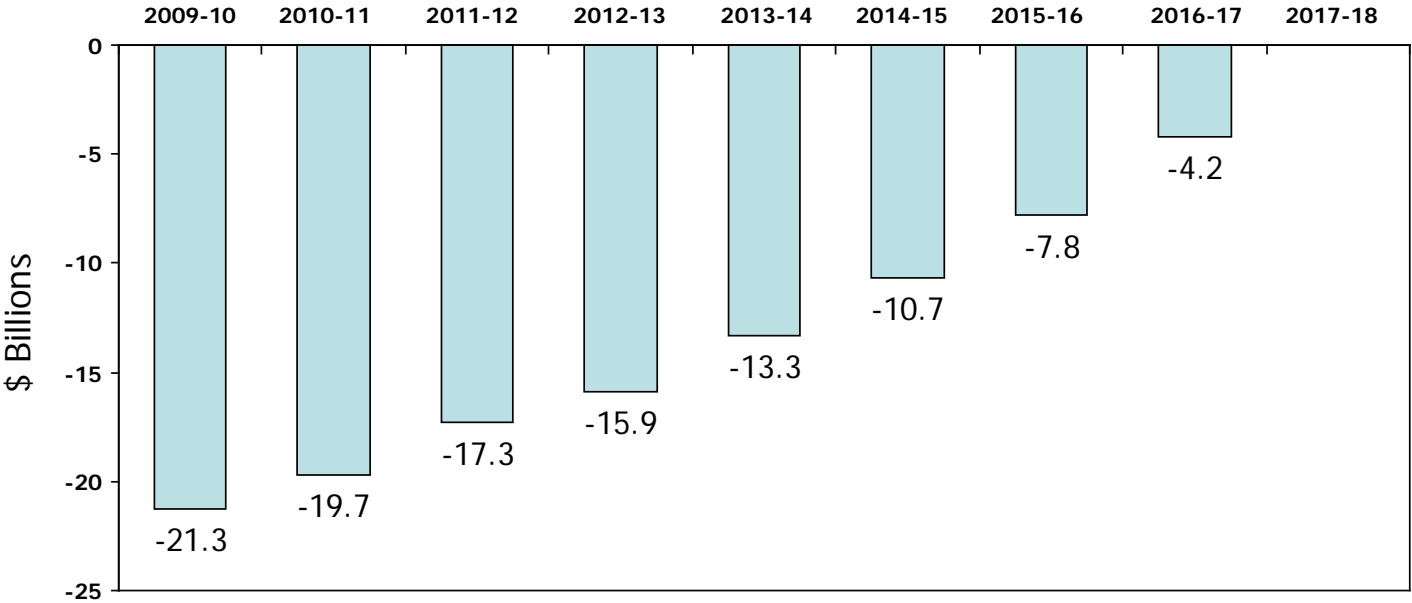
- The Government of Ontario should introduce legislation to establish the OHA as the designated Employer Bargaining Agency with the exclusive rights to represent hospitals as their bargaining representative. Additionally, mandatory central bargaining should be required rather than allowing voluntary participation in central bargaining.
- The Government of Ontario should amend the Workplace Safety and Insurance Act to permit hospitals to elect coverage under Schedule II of the Act.
- The OHA will fully explore the feasibility of mandatory participation by hospitals in the OHA benefit plans and fully assess costs and benefits of proceeding with further recommendations to government.

Estimated Saving Potential:

- Estimated potential savings through selected hospital human resource initiatives: \$41 million plus avoidance of \$27 million in future risk.

Appendix 1.1: Ontario Government Budget Deficit

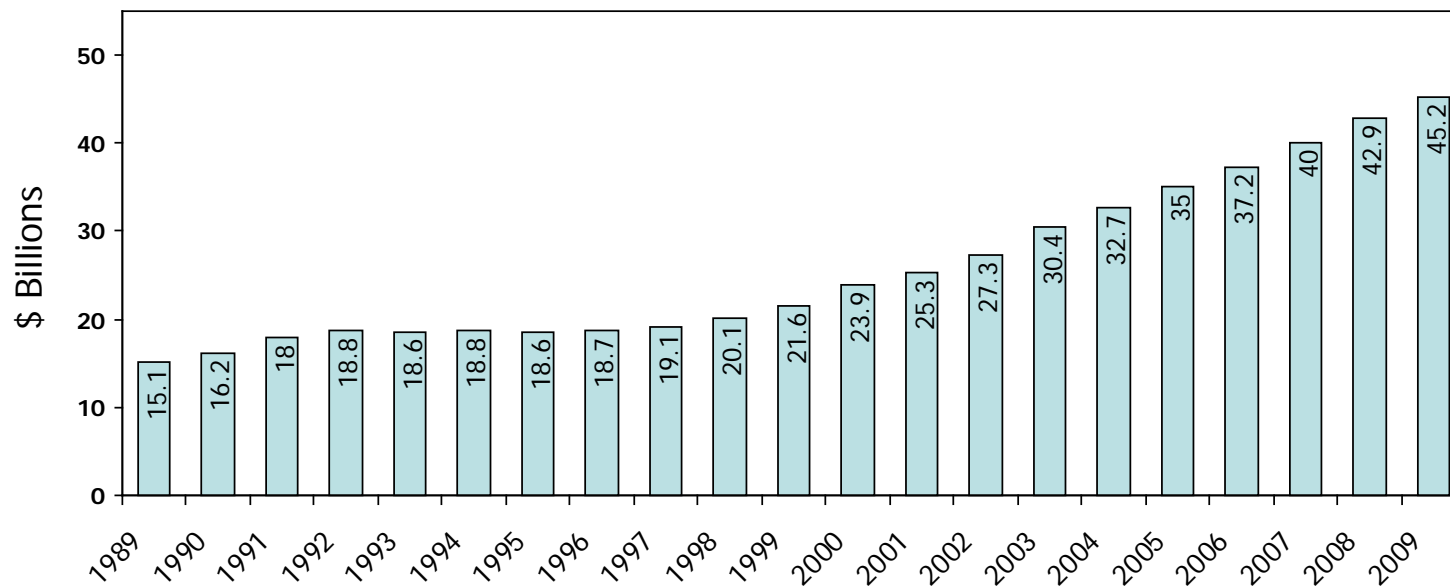
Ontario Government Budget Deficit



Source: 2010 Ontario Budget p. 48, March 2010.

Appendix 1.2: Ontario Provincial Government Expenditure on Health Care

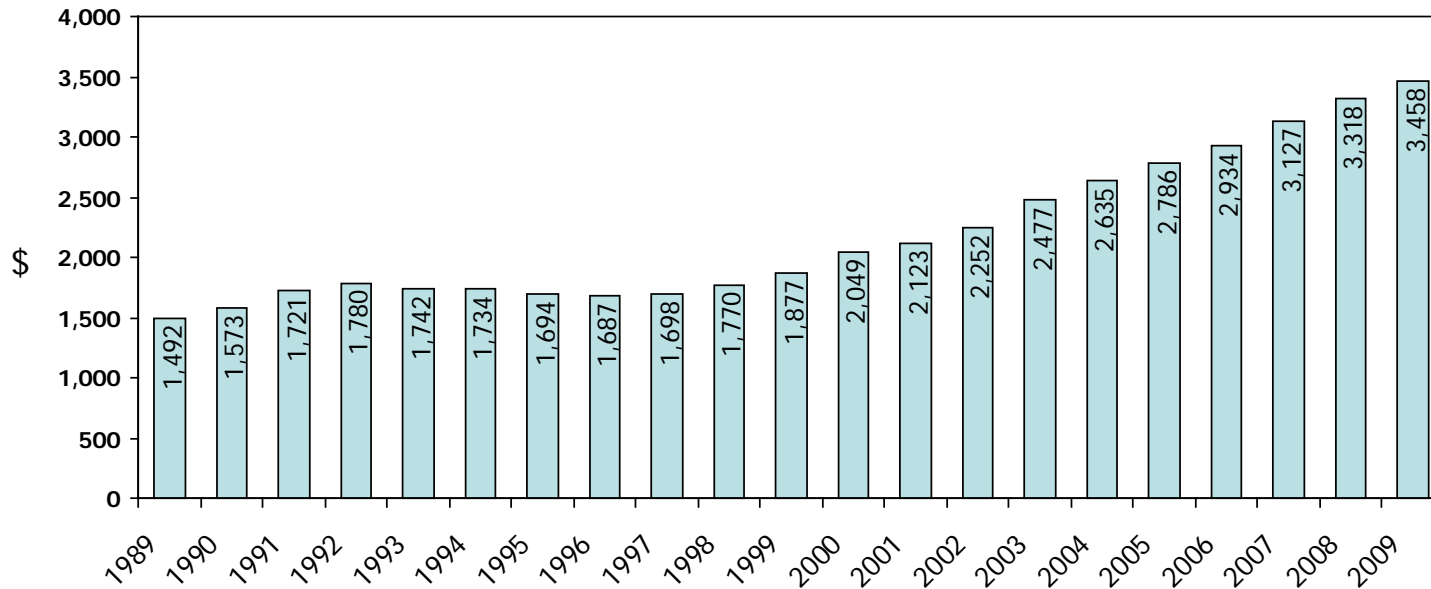
Ontario Provincial Government Expenditure on Health Care 1989 to 2009



Source: Canadian Institute for Health Information, November 2009. Current dollars (not adjusted for inflation). 2008 and 2009 are forecast.

Appendix 1.3: Ontario Provincial Government Expenditure on Health Care Per Capita

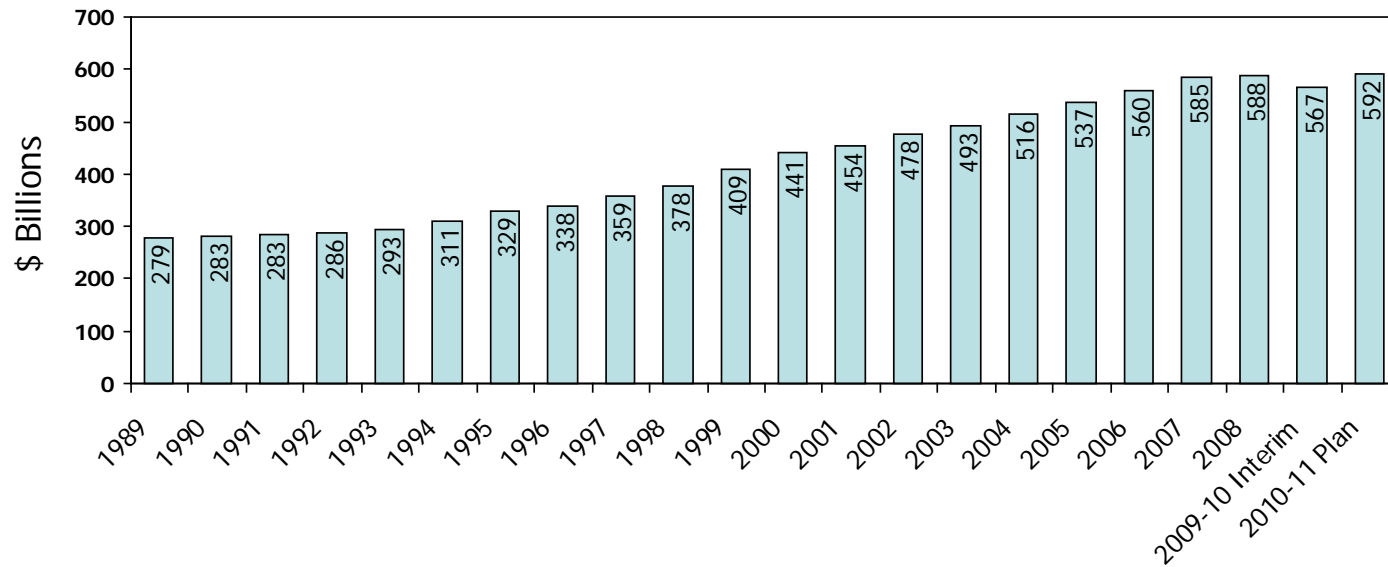
Ontario Provincial Government Expenditure on Health Care Per Capita, 1989 to 2009



Source: Canadian Institute for Health Information, November 2009. Current dollars (not adjusted for inflation). 2008 and 2009 are forecast.

Appendix 1.4: Ontario Gross Domestic Product

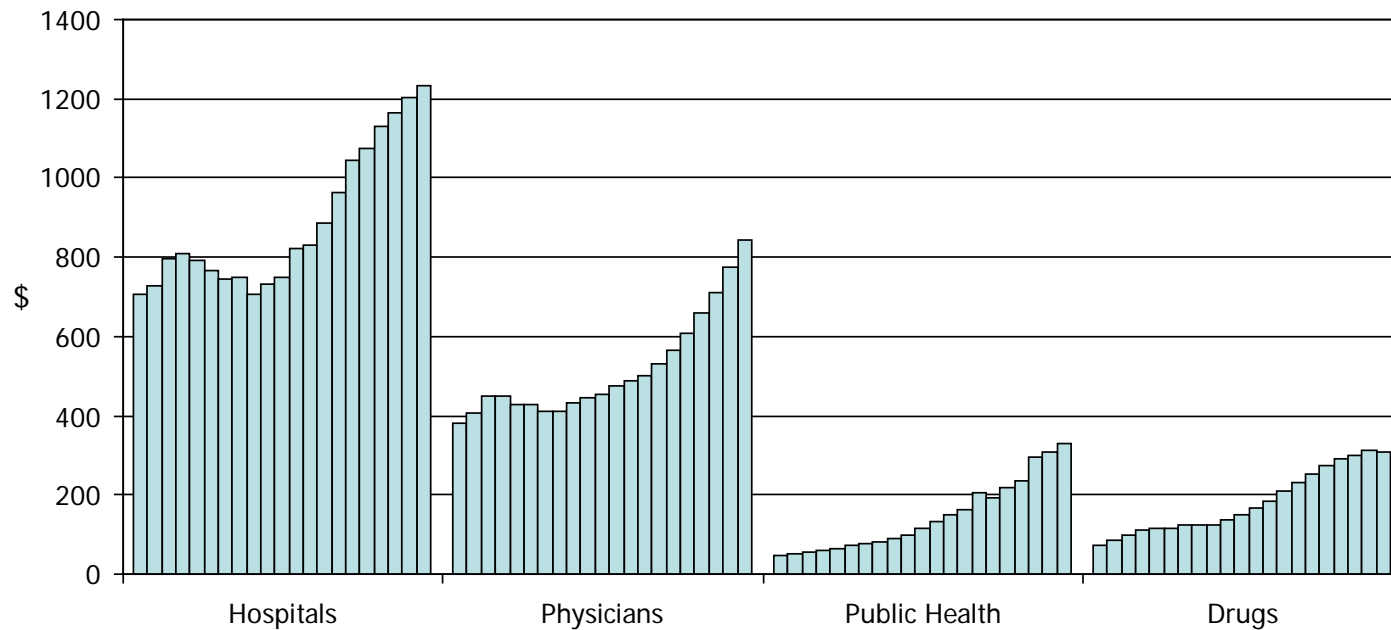
Ontario Gross Domestic Product (GDP) 1989 to 2010-11 Forecast



Source: Canadian Institute for Health Information, November 2009. 2010 Ontario Budget p.141, March 2010. GDP at Market Prices, current dollars (not adjusted for inflation).

Appendix 1.5: Ontario Provincial Government Health Expenditures, per Capita, by Type

Ontario Provincial Government Health Care Expenditures Per Capita, by Type: Hospitals, Physicians, Public Health, Drugs, 1989 to 2009



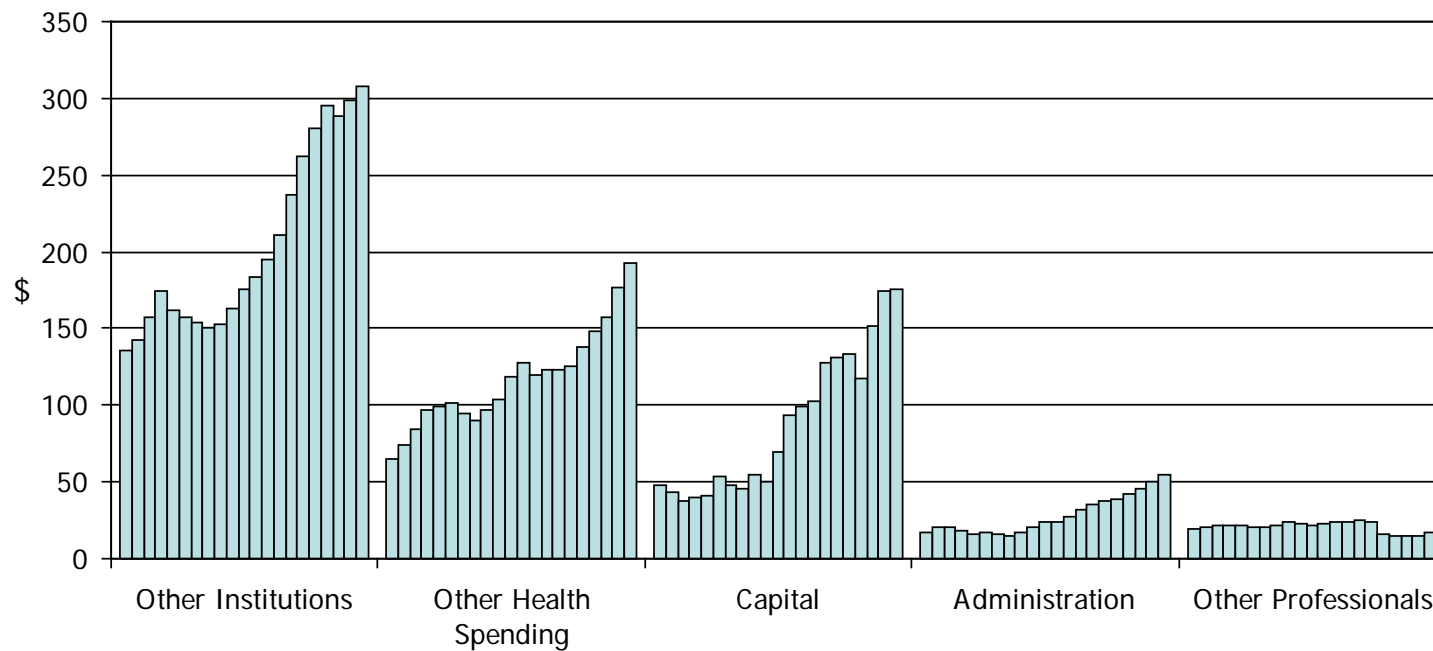
Percentage Change:	1989 to 1999:	6 %	1989 to 1999:	19%	1989 to 1999:	156 %	1989 to 1999:	99 %
	1999 to 2009:	64 %	1999 to 2009:	86%	1999 to 2009:	182 %	1999 to 2009:	109 %

Source: Canadian Institute for Health Information, November 2009. Current dollars (not adjusted for inflation).

Notes: Each bar represents one year from 1989 to 2009.

Appendix 1.5: Ontario Provincial Government Health Expenditures, per Capita, by Type

**Ontario Provincial Government Health Care Expenditures
Per Capita, by Type: Other Institutions, Other Health Spending, Capital,
Administration, Other Professionals
1989 to 2009**



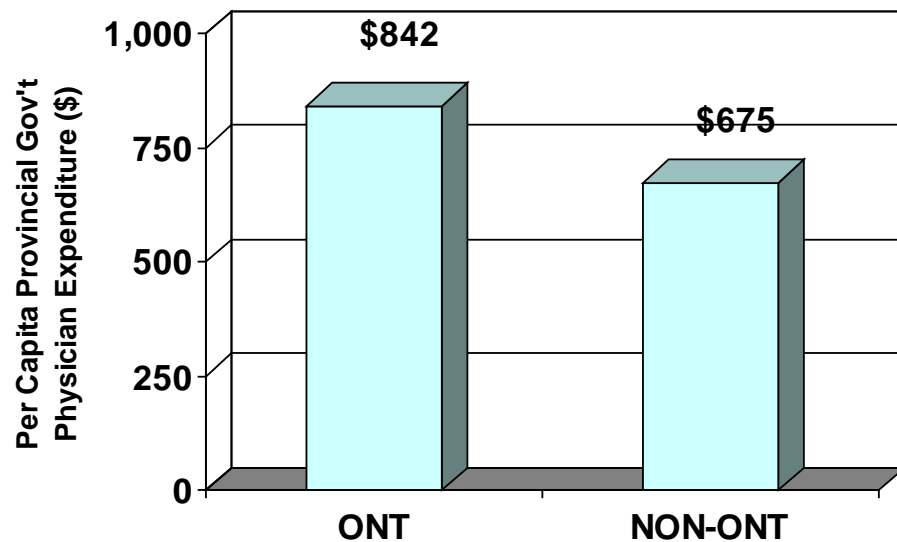
Percentage Change:	Other Institutions	Other Health Spending	Capital	Administration	Other Professionals
1989 to 1999:	29 %	81 %	44 %	41 %	12%
1999 to 2009:	76 %	62 %	152 %	123 %	-25 %

Source: Canadian Institute for Health Information, November 2009. Current dollars (not adjusted for inflation).

Notes: Each bar represents one year from 1989 to 2009.

Appendix 1.6: Expenditure on Physician Services: Ontario vs. Other Provinces

Expenditure on Physician Services: Ontario vs. Other Provinces



It would take \$2.2 billion to bring Ontario down to the average of what other provincial governments spend on physicians.

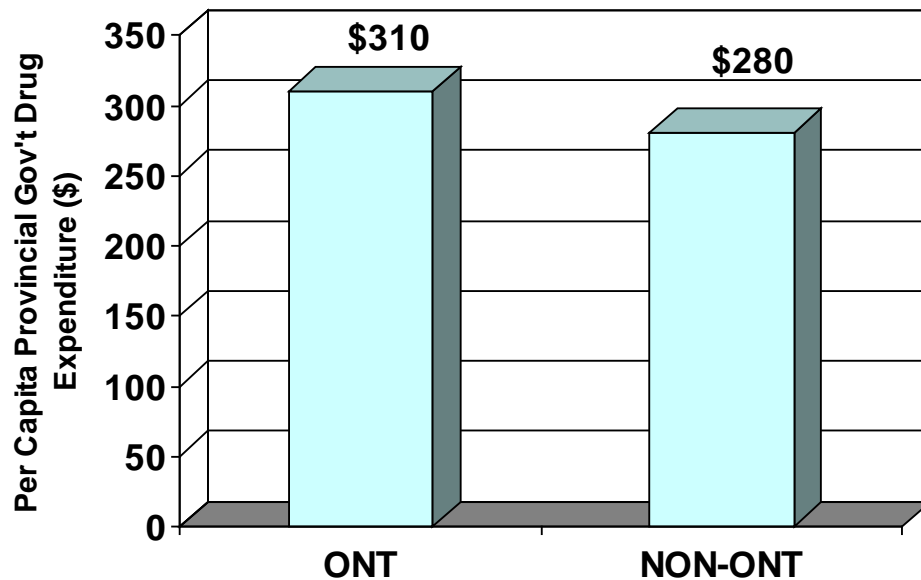
\$842 Ontario
-675 Non-Ontario
167 Differential
x 13 Ontario pop. in millions
\$ 2.2 Billion more expenditure

Note: 2009 Forecast. "Non-Ont" is all provinces excluding Ontario, YT, NWT & NUN.

Source: Canadian Institute for Health Information, November 2009.

Appendix 1.7: Expenditure on Drugs: Ontario vs. Other Provinces

Expenditure on Drugs: Ontario vs. Other Provinces



It would take \$390 million to bring Ontario down to the average of what other provincial governments spend on drugs.

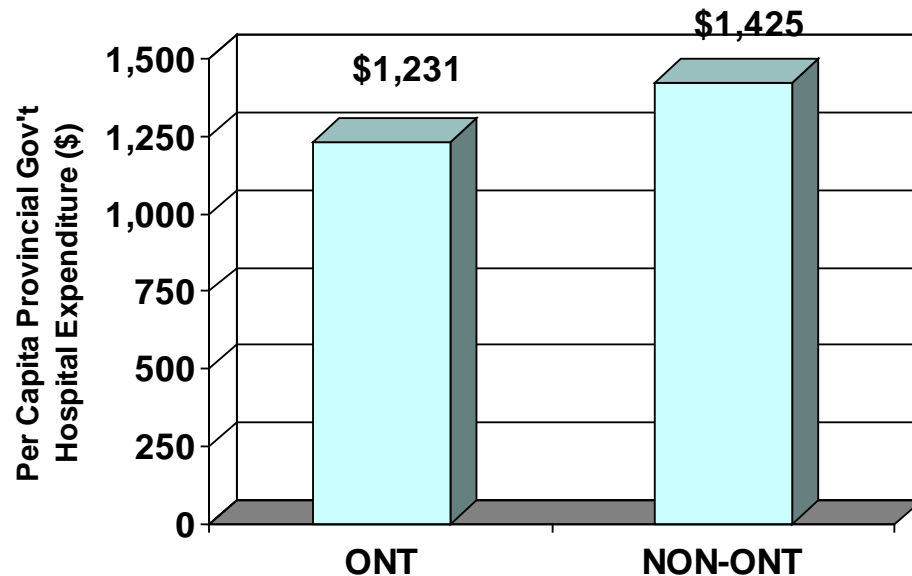
\$310 Ontario
-280 Non-Ontario
30 Differential
x 13 Ontario pop. in millions
\$ 390 Million more expenditure

Note: 2009 Forecast. "Non-Ont" is all provinces excluding Ontario, YT, NWT & NUN.

Source: Canadian Institute for Health Information, November 2009.

Appendix 1.8: Expenditure on Hospitals: Ontario vs. Other Provinces

Expenditure on Hospitals: Ontario vs. Other Provinces



It would take \$2.5 billion to bring Ontario up to the average of what other provincial governments spend on hospitals.

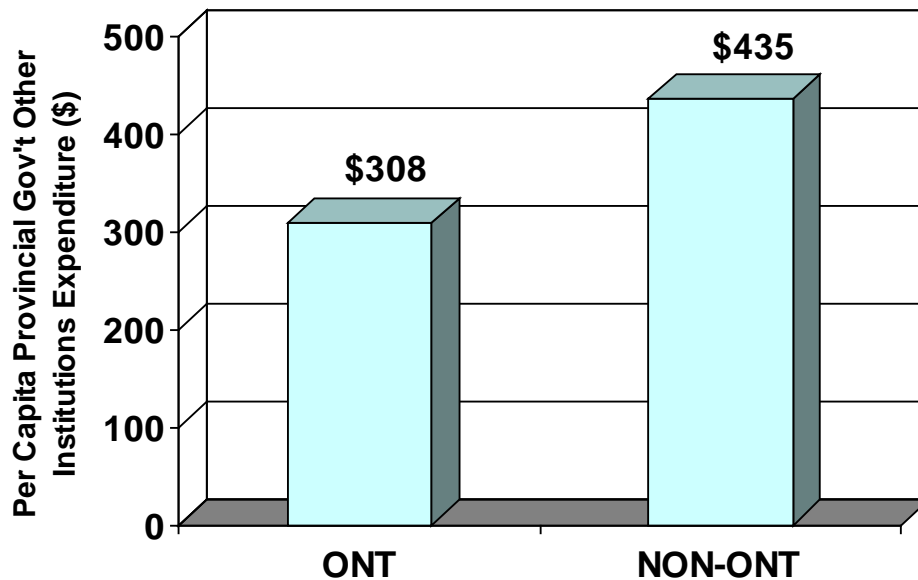
\$1,231 Ontario
-1,425 Non-Ontario
194 Differential
x 13 Ontario pop. in millions
\$ 2.5 Billion less expenditure

Note: 2009 Forecast. Operating expenditure only, excludes capital. "Non-Ont" is all provinces excluding Ontario, YT, NWT & NUN.

Source: Canadian Institute for Health Information, November 2009.

Appendix 1.9: Expenditure on Other Institutions: Ontario vs. Other Provinces

Expenditure on Other Institutions: Ontario vs. Other Provinces



It would take \$1.7 billion to bring Ontario up to the average of what other provincial governments spend on other institutions.

\$308 Ontario
-435 Non-Ontario
127 Differential
x 13 Ontario pop. in millions
\$ 1651 billion more expenditure

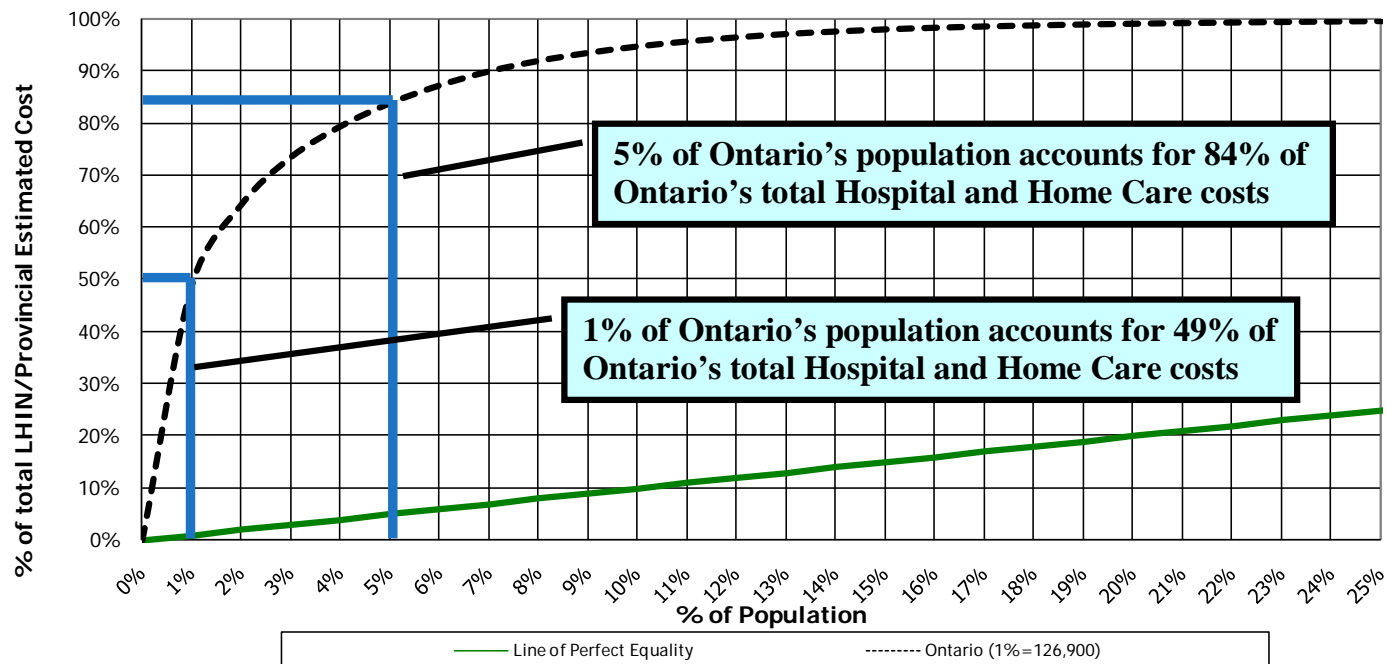
Note: 2009 Forecast. "Non-Ont" is all provinces excluding Ontario, YT, NWT & NUN.

Source: Canadian Institute for Health Information, November 2009.

Appendix 2.0 Ontario Health Care Cost Distribution

Just a Few People Account for Most of the Costs

Healthcare Estimated Costs Cumulative Distribution



- The proportion of Ontario's total Hospital and Home Care estimated costs accounted for by each percentage of Ontario's population (dashed black line)
- The line of perfect equality indicates the shape of the curve if each person consumed exactly the same volume of service (solid green line)

Source: Ministry of Health and Long-Term Care