Toward Seamless Patient Care
A Review of International and Provincial Health Systems with an Ontario Perspective
Roberta Heale

This report is a review of the concept of seamlessness as it applies to the health systems of six countries including Australia, Netherlands, USA, UK, Canada and Singapore as well as all ten Canadian provinces. The review was presented to an expert panel for discussion, resulting in a series of recommendations to enhance seamlessness within Ontario.
Toward Seamless Patient Care

Prepared for the Ontario Ministry of Health and Long-Term Care

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Please note: views expressed do not necessarily reflect those of the Province

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http://www.uwo.ca/fammed/csfm/siiren/primaryhealth/research_knowledge.html#questions
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Executive Summary

Health care systems are extremely complex and are shaped by such things as history, societal values, culture, economic structure, geography and political climate. An ideal system will have a strong primary health care sector that has services seamlessly linked with all other sectors of the health system. This seamless approach will be uncomplicated and allow people to get the health care they need in a timely manner. Outcomes include better health and increased cost effectiveness.

Although complex, there is value in reviewing health systems and the key components that support seamlessness. Features of health systems throughout Canada and the world may provide ideas for policy changes that could move Ontario closer to seamless delivery of health care. To that end, the first phase of this report is a review of health systems in six countries and all Canadian provinces. The review identifies what is known about healthcare service delivery and funding models to link primary health care services to hospital care and community services. The second phase is a summary of interviews with experts in primary health care in Ontario. The panellists were asked to review the health system reports and provide insight into potential changes in Ontario that would enhance the seamless delivery of care.

The countries that were reviewed were Australia, The Netherlands, Singapore, the United Kingdom, the United States and Canada. The health system of each of the provinces was also reviewed, with emphasis on the Ontario experience. A framework for the review of each jurisdiction was developed from literature and databases of the World Health Organization (WHO). Key features of each health system were highlighted.

There are limitations in a report of this nature. The available data about health systems does not always reflect the quality of the health care being provided. At the same time, there is a wealth of information about specific areas within health systems. Data for this report was summarized and edited in order to maintain consistency of the data as much as possible for each jurisdiction. It is difficult to determine the extent to which a jurisdiction has achieved seamlessness in their health system. Despite the drawbacks, the snapshot provided about health care in each of the targeted jurisdictions, along with the professional experiences of the expert panellists, provides a framework for preliminary discussions about potential changes in health policy in Ontario.

The expert panellists were chosen from across the province. They represent a variety of positions and perspectives within Ontario’s health care system. Each panellist consented to a taped interview. The main concepts and recommendations from each interview were reviewed with respect to the reports from each targeted jurisdiction in phase one and summarized into a list of themes. The themes are:

- Seamless health care delivery requires that the health care system be reorganized around the experiences of patients rather than the perspectives of health care providers.

- A comprehensive Electronic Health Record (EHR) system in Ontario is essential to providing seamless care across all health sectors.
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- Seamless health care delivery requires real time, patient-focused, evaluative data.

- Considerations for restructuring health care governance in Ontario to promote seamless health care delivery could include integrating health and social services.

- Creating a department within the Ontario government that has authority over primary health care activities would provide a single entity that could issue directives (such as pandemic flu directives). It would also create a mechanism for accountability and evaluation in the primary health care sector.

- Multi-year funding commitments are essential for stability in health care programming.

- Addressing the unintended outcomes of physician funding models in primary health care will encourage stronger interprofessional health care teams.

- A strong commitment to the resuscitation of community health and long-term care is vital not only to seamless health care delivery, but also to the sustainability of the health care system as a whole.
**Introduction**

Primary health care is the core of a health care system. PHC is foundational to the goal of optimal health for all people. An ideal primary health care sector will ensure full and continuous access to information and health care services. In addition, there will be a seamless transition between providers, facilities, programs and other sectors of the health care system, particularly for those people with complex chronic illnesses. However, health care systems in the developed world are highly complex. They are shaped by history, values, culture, economic structure, geography, political climate, and more. The complexity affects the extent to which seamlessness can be achieved. This report includes a review of health care systems both internationally and in Canada. Reflection on this data, specific to the level of seamless delivery of care achieved by each jurisdiction, informs recommendations for improved primary health care delivery in Ontario.

The concept of seamlessness is similar to ‘integration’ in that it speaks to the “the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money” (WHO, 2008). Seamless health care includes care that is integrated, smooth and easy to navigate. The result is coordinated service that minimizes the number of stages, or points of contact with the health care system that are required achieve a health care objective.

There is no one measurement of the level of seamlessness in a health care system. Rather, a review of the various factors and variables in a health care system provides insight into how well it meets the needs of the people served. The review of seamlessness takes into account health care system resources, structures and the ease and efficiency of service in addition to how well these services address the specific needs of the population. Patient perception and satisfaction with health care system services is also a factor in the overall assessment of seamlessness of a health care system.

**Aim of Report**

This report represents a two-part project related to seamless client care and/or delivery of care to clients with complex care needs. The report reviews what is known about best practice service delivery and funding models to link primary health care services to hospital care and community services.

The first phase of this report is a comprehensive review and synthesis of information about health care systems in relation to system outcomes. The report compares current data from six countries and all of the Canadian provinces.

In phase two of the project, an expert panel has provided commentary on translating the international and provincial findings to the Ontario experience. This information will be used to generate ideas and strategies regarding primary health care reform.
Study Approach- Phase One

Selection of Countries
Target countries reviewed are Australia, the Netherlands, the United Kingdom, the United States, Singapore, and Canada. In addition, there is a comparative review of the Canadian provinces.

Data Sources
Information provided in this report was gathered primarily by desk reviews of existing reports, surveys and studies from selected ministries of health under study, published reports, WHO reports and statistics, Commonwealth Fund reports and statistics, OECD reports and statistics, World Bank data, the Health Council of Canada, McMaster Health Forums, the Canadian Institute for Health Information and Canadian provincial ministries of health. Documents were identified by searching online public technical reports and government databases. When research data or reports were unavailable, there was a search of the grey literature.

Methods
Documents were selected for review if they addressed the following topics: health systems and their functions, primary health care, chronic care, statistical descriptions, health outcomes, and patient or provider surveys about the responsiveness of the health system. All documents were written between 2000 and 2011. Key messages were extracted from each document. The documentary data was analyzed thematically within each of the health system functions (and related subdomains) using a constant comparative data set where possible.

Data Limitations
WHO and the OECD note that while every effort has been made to maximize the comparability of the statistics across countries and over time, users are advised that country data may differ in terms of the definitions used, data-collection methods, population coverage and estimation methods.

The estimates are derived from multiple sources, depending on each indicator and the availability and quality of data. WHO and the OECD note that in many countries statistical and health information systems are weak and the underlying empirical data may not be available or may be of limited quality. They also report that every effort has been made to ensure the best use of country-reported data, adjusted where necessary to deal with missing values, to correct for known biases and to maximize the comparability of the statistics across countries and over time. In addition, they have used statistical techniques and modelling has been used to fill data gaps.

Data on risk factors and health-related behaviours are generally drawn from household surveys. It is important to note that the reliability of these estimates depends on the overall quality of the sampling frames and methods used; on interviewer training, data-quality assurance procedures, and statistical analyses of the data; and on the ability and willingness of respondents to provide accurate responses. Where data from household surveys are not available, statistical techniques have been be used to develop estimates in some settings.
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Caution should be exercised when attempting to identify or describe trends using the information and data because data covering a long enough time period to reach any conclusions about trends are often not available. In addition, the reader should note that statistical significance tells us nothing about what may be causing the noted change. For example, while one may observe a change between two time periods for a given indicator, one may not be able to adequately or fully explain the reasons behind these changes because a given phenomenon (such as physical activity or body mass index) may be influenced by any of a number of variables that are not captured by this report.

This report includes numerous concepts and terms for which there can be several meanings. For the purposes of this paper, definitions for a common understanding are listed at the end of the report.

**Overview**

**Health Systems**
Modern health systems developed during the 1940s and 1950s. These systems were soon overwhelmed as the volume and intensity of hospital-based care increased. Each system adapted and integrated reforms that would meet the needs of the population while incorporating the ever expanding knowledge and technology in the health care field. Interest has turned to primary health care with its promise of disease prevention, health promotion and management of complex chronic conditions.

The most recent wave of change in health systems is defined by WHO as the “new universalism”—high-quality delivery of essential care, defined mostly by the criterion of cost-effectiveness for everyone, rather than all possible care for the whole population or only the simplest and most basic care for the poor. In this era, reforms are characterized by strategies such as “money follows the patient” and a shift away from global budgets. The impact of socioeconomic status on health has also been recognized. Health inequalities must be addressed in order to achieve a higher level of universalism.\(^1\)

Health systems not only contribute to population health but also contribute to broader societal well-being in three main ways. Health systems contribute to health and well-being both directly and by affecting the creation of wealth; contribute to economic growth; directly increase societal well-being because societies value and derive satisfaction from the existence and accessibility of health services.

Health contributes to well-being both directly and indirectly. The direct contribution is widely known. Health also affects well-being indirectly through its role in increasing economic productivity and wealth at the individual and societal levels. Healthier people are likely to contribute more productively to the workforce and have higher earnings. Moreover, they have greater economic incentives to invest in education and training, which then stimulates greater labour productivity.

The links between health systems, health, wealth and societal well-being provide a framework for policy-makers to balance the key elements in decision-making and to

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highlight the importance of looking beyond cost-containment for health reform.

**Commission on Social Determinants of Health Conceptual Framework**

Source: CSDH, 2008

**Health System Outcomes**

A well-balanced health system responds to the population's needs and expectations by:²

- Improving the health status of individuals, families and communities
- Responding to people's expectations
- Defending the population against what threatens its health
- Protecting people against the financial consequences of ill-health
- Providing equitable access to people-centered care
- Making it possible for people to participate in decisions affecting their health and health systems

Health System Building Blocks

Health system outputs are accomplished by building blocks that provide services

- **Leadership and governance:** Authority responsible for the both public and private health care systems. This authority is transparent in the development of health policies and regulations, strategic planning, collaboration with other sectors and provides a mechanism for public input.

- **Health information systems:** A comprehensive, multi-sector evaluation strategy that includes systematic data gathering, monitoring and analyzing of target areas in the health care system.

- **Health financing:** A funding program supported by legislation, routinely audited and with clear operational rules.

- **Human resources for health:** An adequate mix of health care workers who are responsive to the needs of the people, have appropriate education and training, are sufficient in numbers and adequately distributed across the jurisdiction.

- **Essential medical products and technologies:** A regulatory and distribution system for medical products that promotes universal access and national availability.

- **Service delivery:** A health care system with quality indicators embedded, anchored in a strong primary health care sector with coordinated specialized and hospital services for defined populations. In addition, a public health program and health care standards that respond to the full range of health problems.
Relationship between Functions and Objectives of a Health System

**Figure 2**

Source: WHO (2000)

**Evaluation of Health System Functioning**

Health is the defining objective for the health care system. Evaluation of the overall functioning of a health system includes a review of the health status of the entire population including the whole life cycle, taking into account both premature mortality and disability. There are five measures of a health system’s functioning: the overall level of health of a population; the distribution of health in the population; the overall level of responsiveness; the distribution of responsiveness; and the distribution of financial contribution.

Effective, seamless health care is achieved when a health system meets the goals of good health, responsiveness and fair financial contribution. However, this is no easy task. Health system priorities are often in conflict with one another. Identifying needs, setting goals and creating policy does not guarantee that the system will be able to find mechanisms that will ensure policies are implemented. In order to be an effective, seamless system, health care needs to take into consideration rationing, organizational structures, and incentives for providers to ensure that they are congruent with the overarching goals of the health care system.

**Health System Responsiveness**

In general, responsiveness contributes to health by promoting utilization. There are two main elements of responsiveness: respect for persons (respect for dignity, confidentiality and autonomy) and client orientation (prompt attention, quality of amenities, access to social support networks and choice of provider). WHO (2000) conducted a survey in 35...
countries to determine the importance of the different elements of responsiveness. The results showed equal importance for respect for persons and client orientation, and higher individual ratings for prompt attention and quality of the amenities.

**Respect for Persons**

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<tbody>
<tr>
<td>Total</td>
<td>50%</td>
</tr>
<tr>
<td>Respect for dignity</td>
<td>16.7%</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>16.7%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>16.7%</td>
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</tbody>
</table>

*Source: WHO (2000)*

**Client Orientation**

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<tbody>
<tr>
<td>Total</td>
<td>50%</td>
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<tr>
<td>Prompt attention</td>
<td>20%</td>
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<tr>
<td>Quality of amenities</td>
<td>15%</td>
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<tr>
<td>Access to social support</td>
<td>10%</td>
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<tr>
<td>networks</td>
<td></td>
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<tr>
<td>Choice of provider</td>
<td>5%</td>
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*Source: WHO (2000)*

**Health System Financing**

Fair financing is a system that will contribute to optimal health of a population. It occurs when costs are distributed according to the ability to pay rather than the risk of illness. A fairly financed system ensures financial protection for everyone. However, the allocation of financial resources to deliver health services is an ongoing challenge. The following strategies are needed for effective interventions at an affordable cost:

- Ongoing detailed assessment of underlying risk factors, disease burden and utilization patterns of the target populations.
- Intervention strategies and health care delivery adapted to local prices and local contexts.
- Policies to ration interventions and to ensure that limited resources are spent in identified high priority areas.

**Health System Inputs**

Health care requires many resource inputs in order to deliver an enormous number of service outputs. There are three principal health system inputs: human resources, physical capital and recurrent costs or consumables. Special consideration should be given to the nature of investments in health care since they tend to be very expensive and irreversible.

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Health System Inputs: From Financial Resources to Health Interventions

**Figure 5**

<table>
<thead>
<tr>
<th>Health System Inputs</th>
<th>Expenditure Categories</th>
<th>Budget Elements</th>
<th>Health System Inputs</th>
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<tbody>
<tr>
<td></td>
<td>Capital</td>
<td>Training of People</td>
<td>Human Resources</td>
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<tr>
<td></td>
<td>Recurrent</td>
<td>Investments in Buildings and Equipment</td>
<td>(Retirement obsolescence)</td>
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<td></td>
<td></td>
<td>Labour Costs</td>
<td>Physical Capital</td>
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<td></td>
<td></td>
<td>Maintenance</td>
<td>(Depreciation obsolescence)</td>
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<tr>
<td></td>
<td></td>
<td>Other recurrent</td>
<td>Consumables</td>
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<td></td>
<td></td>
<td></td>
<td>(Expiration loss)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Production of Health Interventions</td>
</tr>
</tbody>
</table>

Source: WHO (2000)

Health human resources are the most important of the health system’s inputs. The effectiveness of a health care system is dependent upon the knowledge, skills and quality of care provided by its health care workers. There are many strategies to fully utilize the human health resources (HHR) in a system. Successful strategies are those that include policy that promotes the appropriate geographical distribution of health care providers, promote a greater use of multi-skilled personnel and ensure that the health care providers are in roles that are the best use of their knowledge and skills. Physical capital includes things such as hospital buildings. Investment is any addition to this stock of capital, such as more nurses in the workforce or adding a wing to a hospital. Investment also refers to any new program, activity or project.

Increasing an input, such as human resources, into the health care system initially benefits the system. However, the continued addition of the resource actually reduces the value of it. For example, the initial influx of nurses in an area where there is a shortage is beneficial to health care delivery. However, the addition of more nurses in an area with too many is more likely to add cost to the system rather than improved health care.
Health System Rationing

Cost containment of health care systems is a global concern. Governments have finite resources and have developed a number of strategies to control costs of health systems. The method of financing a health care system has a direct effect on the seamlessness delivery of care. A common rationing strategy is to simply provide a limited budget for health care with strict expenditure controls. This strategy does not target any specific diseases or interventions. Since this process is not directed to health needs, large segments of the population, usually the most vulnerable, do not have access to appropriate health care. A second strategy is to ration explicitly according to priorities that were set using predetermined criteria. Often this includes affordable health care packages that include "essential" or "basic" or "core" interventions.

Another rationing strategy is to cover common health care costs, but to exclude rare and very expensive services. This is a fairly common approach with private health insurance. It is not necessarily cost-effective, but is often necessary in systems with very limited resources. There is a risk of catastrophic loss if a service is either not available or is prohibitively expensive to the consumer who must pay out-of-pocket. The opposite approach is to require out-of-pocket payment for inexpensive, common services that are then excluded from health insurance models. This type of rationing may save in administrative costs, but does not save the system money overall.

Strategies that ration health system costs by the price of interventions alone create disparities in access to health care between the rich and poor in a society. The poor pay comparatively more for health care. If pricing is the baseline for rationing of a health system, then socioeconomic status should be taken into consideration. Rationing all services in the same proportion also poses problems as it does not take level of need into consideration.

Health System Opportunities and Incentives

The goal of seamless care is threatened by health care system structures. As autonomy increases, so often does fragmentation of care. For example, the more autonomous a health care organization, the less integrated it has to be with other organizations in the health care system. However, autonomy of an organization is also an incentive for the
organization to be more responsive to the needs of the people it serves. At the same time, fragmentation of services in health care systems is costly. Governments need to identify areas of fragmentation and create financing policy that will address both the incentives to health care organizations that will promote efficient and effective care while safeguarding against organizational independence that detracts from the seamless delivery of care.

Governments need to balance incentives that increase organizational responsiveness to people with the need to maintain a level of involvement. As autonomy of an organization increases, the degree of accountability the government is able to demand from the agency decreases. Organizations will need to be accountable through monitoring, evaluation and contracts. Autonomous organizations need to be fiscally responsible and find their own means for economizing. At the same time, governments will need to find mechanisms to compensate organizations for unfunded services that are mandatory as providing health care to the poor.

**Primary Health Care Delivery and Reform**

Fragmented care is listed as one of the five most common shortcomings of health care delivery. Fragmentation is a result of the excessive amount of specialization of health care services, such as programs directed to the management of one disease which do not offer comprehensive, holistic care. Fragmentation in the system often augments with care provision for marginalized populations.

Other shortcomings of health care delivery systems include the lack of appropriate health coverage resulting in excessive out-of-pocket payments or catastrophic personal expenses and an imbalance of resources directed to treating illnesses and injury rather than focusing on preventative care and health promotion. In addition, the social determinants of health are not considered in the structure of some health systems whereby the wealthy are healthier but also the most able to access health care services.

Primary health care (PHC) reform has been identified as the key to addressing these shortcomings. However, changing the focus from an acute-care, hospital based attitude to a PHC model is no easy task. Reorienting a health system to a PHC focus takes a strong commitment of government, health care providers and administrators and the consumer. It also requires a suitable timeframe (one to two decades), appropriate financing and allocation of resources and supportive alignment of all system policies.

The implementation of primary health care reform usually occurs in one of three ways. The 'big bang' is when a country adopts a new framework in one step. The 'blueprint' denotes a comprehensive framework that is implemented in established phases over time. Finally 'incremental' refers to individual adjustments to the health care system without changes to the overarching national primary health care framework. Globally no one of these strategies has been more successful than the others. However, the success of any primary health care reform is dependent upon the successful engagement of stakeholders throughout the reform process.

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4 The following narrative on primary healthcare delivery and reform is principally informed by the work of WHO (2008).
The success of establishing an alliance with key stakeholders for primary health care reform is dependent upon the impact that the proposed reforms will have on the current structures. This is particularly true of reforms that overturn existing financial models and the threat that a reform may have on an individual stakeholder’s profit margin. Strategic alliances are central to bringing about change, especially strategic alliances within subsectors. The success of reform depends significantly on the leverage that those subsector alliances have on the system as a whole.

In spite of barriers to the implementation of PHC reforms, there are some strategies that are reflective of the values inherent in PHC models.⁴

- **Universal coverage reforms** ensure that health systems contribute to health equity, social justice and the end of exclusion, primarily by moving toward universal access and social health protection.

- **Service delivery reforms** reorganize health services around the population’s needs and expectations to make the services more socially relevant and more responsive to the changing world, while producing better outcomes.

- **Public policy reforms** secure healthier communities by integrating public health actions with primary care, pursuing healthy public policies across sectors and strengthening national and transnational public health interventions.

- **Leadership reforms** replace disproportionate reliance on command and control on one hand and laissez-faire disengagement on the other with inclusive, participatory, negotiation-based leadership.

Other tools that enhance seamless of health care systems are being explored. One tool that promises to decrease fragmentation is ‘virtual integration’ which includes the use of technology to enhance communication in the health care system. An example of this is a quick referral sent to a specialist from an EMR system in a PHC office.

Virtual integration, including the implementation of system wide communication strategies faces barriers such as decentralization of service delivery. In order to be more responsive to the needs of targeted populations, many jurisdictions have moved to a decentralized approach to health care. This strategy requires collaboration and policy to achieve a common, centralized goal such as an Electronic Health Record system. In addition, a shift in responsibility for health care from a central to local level does not eliminate the problems that are often deeply embedded within health care organizations.

Jurisdictions are also looking at the structures of primary health care delivery. The lone family doctor who tended a community for all their needs from ‘cradle to grave’ is being replaced in many areas with collaborative, interprofessional teams. Programs meant to address the needs of those with complex, chronic conditions are being developed and implemented. There is a shift of focus to health promotion and illness prevention.

Next is a review of six countries and Canadian provinces. Health care delivery systems and key features and outcomes are described. *(This is followed by recommendations for changes that will augment the seamlessness of care in Ontario.)*


Australia

Context/Profile

Australia lies between the Indian Ocean to the west and the Pacific Ocean to the east. The country is located below the equator and southeast of Asia.

Australia is a commonwealth made up of six states and two territories. Government powers are shared between the Commonwealth of Australia (or Australian Government) and the state/territorial governments. The Constitution of the Commonwealth of Australia defines the responsibilities of the Australian Government, which include foreign relations, trade, defence and immigration. The governments of the states/territories are responsible for anything not designated to the Australian Government. Under this system, the states/territories are subject to both the national constitution and their own state constitution; however, federal law overrides state law if there is any inconsistency. The Australian Parliament is made up of the Queen (represented by the Governor General), the Senate and the House of Representatives. The country has a liberal democratic tradition, including religious tolerance, freedom of speech and freedom of association.

Australia’s economic outlook is strong. The unemployment rate is one of the lowest among advanced economies, and the labour market held up well during the global recession. Further, economic growth was 1.5% in 2008/2009, including government stimulus. On the other hand, approximately 2.1 million Australians were estimated to be
living in poverty in 2006 (11.7% of the population), based on poverty being defined as below 50% of median disposable household income.

Though Australia has one of the lowest population densities in the world, the population is very sparse in remote areas and very dense in the inner cities. The continent (the smallest in the world) is 7,686,850 square kilometres and had a population of 22,065,670 (10,987,130 males and 11,078,540 females) in 2009. Overall population density is 2.9 people per square kilometre, but 89% of the population lives in urban areas, which are concentrated along the eastern seaboard and in the south-eastern corner.

Though the population in Australia is aging, much like most developed nations, life expectancy has increased and is one of the highest in the world at 81.4 years (79.2 for men and 83.7 for women). A couple of the key reasons for the increase in life expectancy are reduced child and maternal mortality and improved longevity, particularly for older people with chronic diseases. The crude death rate (or mortality rate) declined from 7.3 per 1,000 population in 1988 to 6.7 in 2008, while the standardized death rate declined from 9 per 1,000 population in 1998 to 6 in 2005, where it has stabilized. Of note, the mortality rate for indigenous people is much higher than for non-indigenous peoples at 3.0 times higher for males and 2.9 times higher for females.

Overall, the health of Australian’s is improving and rankings on my health factors compared with OECD countries are rising. Between 1987 and 2005, the country’s OECD rankings for mortality rates related to coronary heart disease, stroke, lung and colon cancer, and transportation accidents all improved. In 2005, the ranking has also declined for death rates related to respiratory diseases, diabetes and prostate cancer. Though there has been a small increase in the ranking for adult obesity, Australia is still in the bottom third among OECD nations. It is important to note, however, that Australia provides actual measures of height and weight, whereas in other countries obesity is self-reported and thus the data may not be comparable. Regardless, many conditions that affect Australians are related to lifestyle and health risk factors, at the root of which are improper nutrition and inadequate amounts of physical activity.

Though Australians are generally in good health, there are discrepancies based on socioeconomic factors. The burden of disease suffered by indigenous Australians is estimated to be two-and-a-half times higher than the burden of disease for all Australians combined. Circulatory diseases, diabetes, respiratory diseases, musculoskeletal conditions, kidney disease, and eye and ear problems are among the long-term health conditions that affect indigenous people. For most of these conditions, indigenous Australians experience earlier onset of disease than other Australians.

The prevalence of HIV/AIDS is low in all populations in Australia, largely as a result of significant cooperation between all levels of government and other stakeholders. Both nationally and internationally, the Australian Government coordinates and provides

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5 The crude death rate is the registered number of deaths for every 1,000 population in a given year or period of time, disaggregated by gender. The standardized death rate adjusts for the ageing of the population. (Source: WHO website – http://www.wpro.who.int/countries/aus/2010/AUS.htm)

6 The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2008, Australian Institute of Health and Welfare (AIHW).
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expert advice for monitoring and responding to communicable diseases (including food borne diseases). For children aged 12 to 15 months, immunization rates reached 91.4% as of March 31, 2010, up from 53% in 1990.

In 2008, the three leading causes of death were ischemic heart disease, cerebrovascular disease, and dementia and Alzheimer’s disease. Of the top 20 leading causes of death, seven are types of cancer, with cancer of the trachea or lung being the highest. Other major causes of death are transportation accidents and suicide.

Though infant deaths are less than 1% of total deaths in Australia, they are an important factor in public policy. There continues to be a significant discrepancy between mortality for indigenous infants and other infants; however, the gap is declining, with mortality declining by roughly 47% in the indigenous infant population between 1991 and 2006, versus 34% for non-indigenous infants in Western Australia, South Australia and the Northern Territory. There has also been a dramatic decline in women’s deaths during childbirth as a result of better nutrition, overall improvements in general health, medical interventions and lower pregnancy rates.

Components of the Health Care System

Australia’s health care system is a partnership between the federal government and the state/territorial governments. Generally, the federal roles are funding and policy, while the state/territorial governments primarily deliver services and share in funding the system. More specifically, the Australian Government funds medical and pharmaceutical benefits, private health insurance subsidies and training, and shares funding of public hospital services with the states and territories. The federal government is also the national leader for strategies to tackle significant health issues and for regulatory responsibilities. The states and territories provide public hospital, community and public health services; clinical training in public hospitals; and private hospital regulation.

The Health and Ageing portfolio is the Australian Government department that provides national leadership in policies and outcomes; program management, research and regulation; and partnerships with state/territorial governments, stakeholders and consumers. The department’s priorities include:

- Supporting the government in its reform of the health and hospital system;
- Refocusing primary health care on people’s needs and prevention to help reduce the incidence of chronic illness;
- Improving the capacity of the health workforce through education and training and by expanding the roles of non-medical health professionals;
- Improving the delivery of health care and early intervention measures for indigenous Australians to help close the gap in life expectancy rates between indigenous and non-indigenous Australians;

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- Supporting people living with mental illness, their families and their carers through integrated, effective and evidence-based mental health care;

- Reconfiguring health service delivery to achieve better health outcomes for people living in rural and remote communities;

- Supporting older Australians with a national health and ageing system responsive to their needs and improved governance arrangements and reforms.

The core values of the Australian health care system are affordability, accessibility, equitable access to necessary care and choice. Equitable access is an important part of reducing the socioeconomic gap in health outcomes.

The health care system is a complex mix of public and private services. Though substantial private sector financing and delivery provides choice within the system, Medicare, which is funded by the Australian Government, provides universal access. Medicare is a compulsory insurance program that is funded through general tax revenue and some income levies. The three pillars of Medicare are:

- **The Medicare Benefits Schedule:** A universal program that provides consumers with access to privately provided medical services and may include co-payments by users where the cost of services is not fully covered by the rebate.

- **The Pharmaceutical Benefits Scheme:** Subsidization of a wide range of prescription medications supplied by community pharmacies.

- **Funding provided to states and territories** to assist them in providing access to free public hospital services.

A large proportion of health care workers are employed in the private sector, with private practitioners providing most medical, dental and allied health services. Corporatization is becoming a key factor in the organization of Australia’s health care system, particularly for general medicine, pathology and diagnostic imaging. Though the role of the private sector is expanding, health care is still two-thirds funded by the public sector and health costs are growing faster than GDP.

A number of factors influence Australia’s health care system: an increase in life expectancy and both a greater number and proportion of people over 65 years of age, medical and technical advances that require new knowledge and skills, and consumer awareness and demand for more sophisticated services. All of these factors mean there is a need for more health care workers and more funding.

Although the number of health professionals is increasing, growth in overall demand, particularly in certain specific professions, has outstripped growth in supply. For example, the increase in the number of general practitioners numbers has barely kept pace with population growth, and reduced working hours has counteracted the perceived growth in the workforce. Of note, health workforce shortages are more acute in rural and remote areas. The Australian governments have implemented two programs to address workforce shortages. In 2010, Health Workforce Australia was established to assess and plan for the country’s long-term health workforce requirements. And, the National Registration and Accreditation Scheme (NRAS) was implemented on July 1, 2010, to
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provide greater safeguards for the public; facilitate workforce mobility; streamline registration processes for practitioners; and facilitate the provision of education, training and assessment of overseas-trained practitioners.

Pathways for Change

Australia’s health care system is a complex combination of public and private sectors. A number of issues have informed health system policy change in Australia. Health issues such as cancer, mental illness, musculoskeletal diseases, obesity and diabetes plague the developed world and Australia is no exception. Population density patterns reveal urban centres juxtaposed with very sparsely populated rural and remote areas which pose additional problems for health care delivery. There are notable disparities between health outcomes of vulnerable populations, such as indigenous people, and the rest of the population. An aging population, advances in technology and expectations of patients are other important considerations. Health service delivery to those with chronic disease and complex needs is fragmented and difficult to navigate. The Australian government finds itself confronting fiscal realities for health care change while, at the same time, striving to meet the health care needs of the population.

Actions for Change in the Health Care System

The reaction of the Australian government to the health care system issues was to launch a major reformation of the health care system in April, 2010 that will be implemented in a step-wise approach over a number of years. All jurisdictions in the country, with the exception of Western Australia, agree to the creation of the National Health and Hospitals Network. In the NHHN, the Australian government will be the major funder of public hospitals, general practice, and primary health care and will both fund and manage a national aged care strategy. The purpose of national management of funding to public hospitals is to control costs and ensure sustainable funding of this sector. This will be met through a nationally consistent Activity Based Funding approach which started in 2008.

One goal of the Activity Based Funding initiative is to promote hospital spending to enhance models of care that will be more fully integrated with the community health care sector. For example, a hospital will receive a specific dollar amount for hip surgery. It is in the best interest of the hospital to ensure that the patient recovers well and is discharged home in a timely manner. A well-coordinated and effective primary health and community care system will support the patient in the home environment, preventing complications and readmissions to hospital. Funding of the primary health care sector will enable the government to coordinate and integrate health care services, strengthening health care in the community sector and better meeting the needs of the people served. The State/Territory governments will support to these health care areas and continue to be responsible for public hospital health care planning, delivery and performance evaluation within their jurisdictions.

The move to a national approach to health care allows for Australia’s first comprehensive national policy for primary health care in Australia. One of the first strategies under this mandate is The National Preventative Health Strategy (May, 2010), which will tackle the health and economic effects of obesity and tobacco and alcohol use. A second national strategy arising from The National Health and Hospitals Network
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Agreement is the development and implementation of an Electronic Health Record. Work in this initiative started in 2010. The goal is that by 2013 patients and their health care providers will have access to a secure, comprehensive health record via the internet.

Another purpose of a national health strategy is to develop and implement a health care resource program that will address gaps in numbers health care providers and non-acute hospital beds as well as implement programming for specific health issues. In 2010 the NHHN approved over one thousand hospital beds dedicated to the needs of those with mental illness, and those requiring rehabilitation or palliative care. Hospitals received funding to assist them with reaching the goal of a “four hour emergency department treatment target” and to increase the numbers of elective surgeries. Funding is also targeted to double the number of health care facilities and services to those suffering from mental health issues. Programs to prevent and address addiction have been established.

Plans for 2011 include the implementation of a national after-hours telehealth system. Networks offering ‘one-stop shops’ for the aged will eliminate the fragmentation of health care delivery to this population. By 2012 the Australian government’s diabetes care strategy will commence and by 2013 the number of physicians specializing in general practice will double to 1,200 and there will be one thousand more nursing education seats.
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ORGANIZATIONAL CHART: Department of Health and Aging (Australia)

Figure 7

Executive
Secretary
Chief Medical Officer
Deputy Secretary

National Health and Medical Research Council
Therapeutic Goods Administration
Office of the Gene Technology Regulator
National Industrial Chemicals Notification and Assessment
Audit & Fraud Control
General Counsel
Health Reform Transition Office

Health and Ageing Sector Divisions

Cross Portfolio Divisions

Chief Nurse & Midwifery Officer

Portfolio Strategies Division

Business Group

Regulatory Policy & Governance Division

Population Health Division
Office of Health Protection
Primary & Ambulatory Care Division
Pharmaceutical Benefits Division

Aging & Aged Care Division
Office of Aged Care Quality & Compliance
Office for Aboriginal & Torres Strait Islander Health

Population Health Division
Acute Care Division
Mental Health & Chronic Disease Division
Health Workforce Division

State and Territory Offices
Australia Financing of Health Care, 2006

Figure 8

Source: OECD Health Data, June 2010
The Netherlands

Source: Schäfer et al. (2010)

Context/Profile

The Netherlands, a member of the European Union, is located in Western Europe, with the North Sea to its west and north, Germany on its eastern border, and Belgium to the south.

The government is a parliamentary democracy, constitutional monarchy with a bicameral parliament composed of the Senate and the House of Representatives. The Netherlands is one of the wealthiest countries in the world, in the top 20 based on GDP and in the top 10 for export volume. The country’s key economic drivers are financial and commercial.

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8 The description of the Netherlands health system has been excerpted from Schäfer et al. (2010).
services. Both the unemployment rate (3.5%) and the poverty rate (4.7% of families) are low in the Netherlands, primarily because of generous social payments. The Netherlands is 41,543 square kilometres and has a population of 16.4 million (2008), the majority of whom (80.4%) are native Dutch. Population density is roughly 400 people per square kilometre; however, almost half of the population lives in three provinces, two of which border on the North Sea. Further, almost 90% of the population lives in urban centres.

Life expectancy at birth for the Dutch population was 79.7 years in 2006, up from 73.6 in 1970. In 2009, the crude death rate was 8.2 deaths per 1,000 population, while the standardized death rate was 5.6. The infant mortality rate of 4.5 per 1,000 live births (2006) was slightly below the average of 4.9 for high-income OECD countries, but neonatal deaths of 3.2 per 1,000 births in 2007 was slightly above the EU average of 3.0.

In 2007, most deaths in the Netherlands were a result of malignant neoplasms (cancer), whereas in the European Union diseases of the circulatory system are the main cause of death. The burden of disease is higher among immigrants than among native Dutch inhabitants. Between 1995 and 2006 the average number of regular daily smokers was slightly above the EU average. According to self-reported data, almost half of the population is overweight.

Components of the Health Care System

The Netherlands’ health care system was changed radically in 2006 with the enactment of the Health Insurance Act. The government is committed to equal access to health care, and this Act provides tools to ensure financial access, geographical access, timeliness, access according to needs, availability of personnel and freedom of choice.

Under the new system, it is mandatory for everyone in the country to have at least a basic level of health insurance and the government can either warn or fine those that do not have such coverage. The system also requires that all insurance companies provide a regulated basic package of care to anyone who applies, regardless of health status or age.

The Dutch health insurance system has three segments. Basic social health insurance, which is regulated by the Health Insurance Act, covers the whole population for essential curative care tested against the criteria of demonstrable efficacy, cost-effectiveness and the need for collective financing. The compulsory social health insurance scheme for long-term care provides for those with chronic conditions that require continuous care that involves considerable financial consequences and is regulated by the Exceptional Medical Expenses Act. Voluntary health insurance can be bought to complement basic insurance to cover health services that are not covered under the other two segments schemes.

Changes to the structure of the health care system affected the roles of all stakeholders. The Ministry of Health now regulates and monitors the system for quality, accessibility and affordability, which leaves the other stakeholders—health insurers, insured and

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health care providers—to function within a regulated market. Health insurers have to offer the basic insurance package to citizens, but they can compete on service, price and quality of care. Citizens must purchase insurance, but they are free to switch insurers yearly. The insured, or patients, must seek care from health providers and, in principle, are free to choose their provider. Health providers and insurers negotiate the price, volume and quality of care provided and paid for by the insurers. To allow patients to make choices about insurance and care, the government has set up systems to make information on price and quality available to the public.

In the Dutch health care system, private health care providers are primarily responsible for the provision of services. Preventive care, including disease prevention, health promotion and health protection, is the responsibility of municipalities. Primary care providers include general practitioners, physiotherapists, pharmacists, psychologists and midwives. GPs function as gatekeepers in that hospital and specialist care (other than emergency care) are only accessible by referral from a GP. It is of note that only 4% of contacts with a GP result in a referral. Patients can choose which hospital they want to be treated in once they have a referral. Secondary care encompasses those forms of care that are only accessible by referral from a primary care provider and are mainly provided by hospitals and mental health care providers. Long-term care is mainly provided by nursing homes, residential homes and home care organizations.

Pathways for Change

Without question, the Dutch health care system has contributed to the health of the population. For example, the life expectancy increased by seven years from the 1980s to 2009. However, when compared with other developed countries, the Netherlands has an average score for indicators of quality and efficiency. It is too soon to fully assess the 2006 health care reforms and their impact on accessibility, affordability, efficiency and quality of care. Still, some evaluation has occurred that provides insight into the current state of the health care system in the Netherlands.

An overall analysis of the health care system indicates that the finances and human resources dedicated to health care in the Netherlands are sufficient to meet the needs of the population. However, there are still some problems with accessibility to hospital beds and waiting lists for specific health care issues as well as access to health care for people living in specific regions. Health care expenditure as determined by a share of the GDP is relatively low, but is above average in Europe for per capita spending. While the Dutch have few out-of-pocket expenses compared to other countries, it is clear that some families must spend more than others on health care.

Measures of efficiency and quality show mixed results. The rate of avoidable mortality and hospital mortality in the Netherlands is only average with respect to other OECD countries. The Netherlands also has an average score with respect to curative secondary care. Quality improvement in long-term care has been achieved through the reduction of pressure ulcers and malnourished patients, but patient and staff satisfaction in LTC facilities is very low. The Netherlands has relatively good scores for safe care and scores well with respect to health care innovations such as day surgery and patient record systems. Finally, analysis indicates that the health care system in the Netherlands remains somewhat fragmented and the coordination of care could be improved.
Areas for Improvement Noted for the Dutch Health System

The Dutch Performance Report (National Institute 2010) evaluates areas for improvement of the health care system in the Netherlands. Accessibility is unsatisfactory in some areas, as evidenced by persistent waiting times for mental health care, long-term care and at hospital outpatient clinics. In addition, accessibility by telephone to physician family practices is poor. There is great variety in the price and quality care outcomes of health care providers but data for comparison is not readily available and is most often based on physician self-reports. Health care co-ordination between health care providers needs improvement. Of concern are the numbers of health care provider vacancies in the health care system particularly in the long-term care sector. Caretakers in LTC constantly feel understaffed and overworked. LTC residents are generally satisfied with their care but commonly indicate that the staff ‘never’ had enough time for them. The vacancies in human health care will create dire problems for accessibility to care in the future.

Health care costs continue to rise and financial sustainability is a concern. In addition, the quality of care is not yet a driving force in the health care system. From 2002 through 2009 acute care costs increased. Hospital admissions rose by 3% and outpatient admissions by 10%. The volume of care provided by hospitals in this timeframe grew by 4.2% annually compared to the average rise of 1.6%. There continues to be tremendous discrepancy between physician consultation fees; the highest fee in a GP cooperative was over five times that of the lowest. The number of prescriptions filled increased by 15% in 2008. GPs were rated and 49%-77% of their prescriptions were written according to evidence based guidelines. Insurers are meant to have information about the quality and price of health care products but there is little information about quality, specifically patient outcomes. The goal of insurance companies is to keep the cost down and quality of care has little influence.

Strategies for health care prevention and better coordination of service did not always meet their targets. For example, cervical cancer screening is only at 66%, and 40% of patients with rheumatoid arthritis reported having to give their health history to several health care providers. One in five patients with specific conditions (breast cancer, rheumatism, cataract) report either insufficient or a lack of coordination or cooperation among their health care providers.

From the indicators used to measure the performance of the Dutch health system and compare it to that in other Western countries, it may be concluded that the Netherlands lies somewhere in the middle. Quality has improved in some respects, while the health care expenditures grew at an average annual rate of 6% to 7% between 2007 and 2009.

Actions for Change in the Health Care System

The Dutch government is dedicated to improving the quality of care in the health care system. This will be realized through the promotion of a more seamless coordination among the community care, LTC and acute care sectors. This will be achieved through the introduction of Electronic Medical Records (EMR) and initiatives within mental health, LTC and primary health care. Municipalities will be encouraged to improve cooperation between local health care providers in the field of prevention and primary care. Chronic disease management programs are under development. Primary care will be organized around the patient and functional payments will be implemented which mean that health care intervention is paid for no matter the health care provider.
Context/Profile

Singapore is a small country located at the south end of West Malaysia. The island city-state is a parliamentary republic with a legal system based on English common law. The head of state is the President, who is elected by popular vote for a six-year term. It is a unicameral parliament, with members elected by popular vote to serve five-year terms. The head of government is the prime minister and there are two deputy prime ministers, and a cabinet appointed by the prime minister.

Singapore has a free-market economy that is highly developed and very successful. The business environment is very open and corruption-free. Because Singapore is very small, with a total land area of only 712 square kilometres, and has limited natural resources, its primary strength is its human resources. The country is highly dependent on foreign investment, trade and the health of other economies. Singapore positions itself as a vibrant global city and a hub of talent, enterprise and innovation for the globalized world.
Singapore’s Department of Statistics\textsuperscript{10} shows resident population at 3.8 million and total population at 5.1 million in 2010. Population density is high at 7,126 people per square kilometre. The entire island is densely populated, with a few small regions that are somewhat less populated relative to the rest of the country. While the population is young relative to many developed nations, the proportion of residents aged 65 and over is projected to increase. In 2008, only 9% of the resident population was aged 65 and over; however, this is expected to rise to 19% by 2030.

For 2009, life expectancy at birth was 81.4 years (79.0 for males and 83.7 years for females). Statistics from 2010 show the crude birth rate at 9.3 per 1,000 residents and the crude death rate at 4.3. The total fertility rate per resident female was 1.2, and the infant mortality rate was a very low 2.0 per 1,000 resident live births.

Non-communicable diseases, like cancer, heart disease and cerebrovascular disease, remain the leading causes of death, together accounting for over half of all deaths. National representative population-based health surveys have shown that the prevalence of chronic diseases (such as diabetes mellitus and hypertension) and health risk factors (such as smoking, physical inactivity, obesity and high blood cholesterol) declined between 1992 and 2004. Singapore’s very open economy, coupled with its high population density, makes it particularly vulnerable to outbreaks of infectious diseases, such as sever acute respiratory syndrome (SARS). National efforts to combat traditional and vaccine-preventable communicable diseases have achieved great success. Though chronic infectious diseases, such as tuberculosis and HIV/AIDS, are still considered public health problems, in the 1950s, infectious diseases like tuberculosis featured among the leading causes of death.

Components of the Health Care System

The vision of the Ministry of Health is to develop the world’s most cost-effective health care system to keep Singaporeans in good health. Its mission is to:

- Promote good health and reduce illness
- Ensure access to good and affordable health care
- Pursue medical excellence

In Singapore, there is a dual system of health care delivery. The public system is managed by the government, while the private system is provided by private hospitals and general practitioners. Primary health care is provided through public outpatient polyclinics and private medical practitioners’ clinics, and secondary and tertiary specialist care is provided in public and private hospitals. Primary health care services are provided primarily (80%) by private practitioners, with government polyclinics providing the remainder. The ratios are reversed for hospital care, with 80% provided by the public sector and the remainder by the private sector. Patients are free to choose their health care providers within the dual health care delivery system.

\textsuperscript{10} http://www.singstat.gov.sg/stats/keyind.html
Singapore’s health care system emphasizes preventive health care programs and healthy living. Singaporeans are encouraged, through the public health education program, to adopt healthy lifestyles and be responsible for their health, and are made aware of the adverse consequences of harmful habits like smoking, alcohol consumption, bad diet and sedentary lifestyles. The child immunization program, which targets infectious diseases like tuberculosis, poliomyelitis, diphtheria, whooping cough, tetanus, measles, mumps, rubella and hepatitis B, is offered at government polyclinics, as well as private primary health care clinics. Health screening programs have been introduced for the early detection of common ailments, such as cancer, heart disease, hypertension and diabetes mellitus. These are available in both primary and secondary care settings.

The government ensures that good and affordable basic medical services are made available to all Singaporeans through heavily subsidized medical services at public hospitals and government clinics. The philosophy of Singapore’s public health care delivery system is strong government support combined with individual responsibility and community support. Though the government heavily subsidizes public health care, patients co-pay their medical expenses. The government’s financing framework, which consists of Medisave, MediShield, ElderShield and Medifund, helps Singaporeans pay for medical expenses.

**Medisave** is a national savings scheme that helps individuals put aside part of their income to meet their personal or immediate family’s hospitalization expenses. Every working person is required by law to save 6.5–9% of his or her income in a personal Medisave account. In 2006, the Ministry of Health initiated the Medisave for Chronic Disease Management Program, a coordinated, nationwide effort to transform care for the four most common chronic illnesses.

**MediShield** is a low-cost, catastrophic illness insurance scheme designed to help members meet medical expenses associated with a major or prolonged illnesses and for which their Medisave balance would not be sufficient.

**ElderShield** is an affordable, severe-disability insurance scheme designed to provide Singaporeans with basic financial protection against expenses required in the event of severe disability, especially in old age.

**Medifund** is an endowment fund set up by the government as a safety net so that no one is denied access to the health care system or turned away by the public hospitals because of their inability to pay. In 2007, part of Medifund was specifically set aside to be dedicated to needy, elderly patients (65 years and older).

Public sector health services are provided for lower income groups who cannot afford the private sector charges and to set the benchmark for the private sector on professional standards and charges. To support the latter objective, the Government requires public hospitals to publish basic consultation and ward charges for greater price transparency.
Pathways for Change

Singapore’s biggest challenge to the health care system is an aging population. By 2030 it is estimated that those aged 65 or older will take up 19% of the population from the current 8.5%. The Ministerial Committee on Aging is commissioned to create a comprehensive strategy to address the needs of the aging population with a focus on health promotion and healthy, active aging. Other challenges are the introduction of new technologies, the demand for lifestyle medicine and quality of care. There are shortages of health care professionals. Human health resources need to be addressed across all health care disciplines.
Context/Profile

The United Kingdom of Great Britain and Northern Ireland (U.K.) is made up of four constituent countries: England, Scotland, Wales and Northern Ireland. The United Kingdom lies between the North Atlantic Ocean and the North Sea, and is on the western edge of Europe. The coast of northern France is within 35 kilometres of the United Kingdom, and the two are separated by the English Channel.

The United Kingdom, a constitutional monarchy, is governed by the democratically elected members of parliament (MPs) of the House of Commons, and the hereditary and life peers of the House of Lords. Reforms have recently been introduced to create a National Assembly in Wales, the Northern Ireland Assembly and a Scottish Parliament. There is no written constitution, but the equivalent body of law is based on statute, common law and “traditional rights.” Although Parliament has the theoretical power to

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make or repeal any law, in practice the weight of 700 years of tradition restrains arbitrary actions.\textsuperscript{12}

The United Kingdom has the sixth-largest economy in the world, is the second-largest economy in the European Union and is a major international trading power. A highly developed, diversified, market-based economy with extensive social welfare services provides most residents a high standard of living.

The United Kingdom consists of the island of Great Britain, the north-eastern sixth of the island of Ireland and smaller surrounding islands. The land area is approximately 243,610 square kilometres. In 2004, the population surpassed 60 million, making it the third-largest populace in the European Union. The United Kingdom’s overall population density is one of the highest in the world and the highest in Europe at 385 people per square kilometre. Almost one-third of the population lives in England’s prosperous and fertile southeast. People predominantly live in urban and suburban areas, and about 7.5 million people live in the capital, London, which is the largest city in Europe.

Life expectancy at birth was 77.7 years for males and 81.9 for females in 2007/2008; however, life expectancy varies by country in the United Kingdom. England has the highest life expectancy at 78.0 years for males and 82.1 for females; Scotland has the lowest at 75.3 and 80.1, respectively.

**Components of the Health Care System\textsuperscript{13}**

The core principle of the National Health Service (NHS) is that good health care should be available to all, regardless of wealth. NHS services are free at the point of use for all residents of the United Kingdom, except for charges for some prescriptions and optical and dental services. The NHS covers care from antenatal screening and routine treatments for minor ailments to surgery, emergency treatment and end-of-life care.

NHS is funded directly from taxation, which, according to the King’s Fund, is the “cheapest and fairest” way of funding health care. Although NHS services are funded centrally from national taxation, the systems in England, Northern Ireland, Scotland and Wales are managed separately. While there are some differences between these systems, they are similar in most respects and in essence continue to be to a single, unified system.

The diagram to the right shows the structure of the NHS, including funding and monitoring. The system is divided into primary and secondary care.

\textsuperscript{12} Information taken from U.S. Department of State Background Note: United Kingdom.

\textsuperscript{13} Description of the health system extracted the U.K. NHS website — http://www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx and Sibbald (2004).
Primary Care Trusts (PCTs), which have strong public accountability mechanisms, control the majority of the NHS health care budget; have responsibility for arranging provision of all primary and community care services; commission the majority of hospital care; and lead partnerships working with local government services, including social care.

Within primary care, GP practices are formed into local networks that are governed by Primary Care Groups (PCGs), which are governed by a board, and usually chaired by a GP and with majority GP representation. PCGs have three core functions:

- To improve the health of local people and address health inequalities
- To develop primary and community care services
- To commission community and hospital services

Within secondary care, there are a number of trusts for various elements of this level of care, including acute trusts for hospital and specialist care centres, ambulance trusts for emergency vehicles and mental health trusts for mental health care in England.

PATHWAYS FOR CHANGE

Although England’s health and social system are considered to be excellent, there is room for improvement on a number of issues. The United Kingdom must cope with an aging population and rapidly changing technology, which is a global phenomenon in the developed world. At the same time, threats to fiscal sustainability and quality of care are realities. To address these concerns, the Department of Health released its White Paper in 2010 which outlines its vision of health care reform. It continues to support comprehensive health care service, no charge at point of use, based on clinical need and not the ability to pay. Reforms will need to cut waste and improve performance. An overall goal of these health care reforms is to improve efficiency and effectiveness of the system through better collaboration between health care and social services.

The United Kingdom hopes to achieve improved service through a shift to more local control over health care services. Councils will now be responsible to work with local health care services, GPs and others to define and develop programs to address the health care needs of their communities. The role of the NHS will be to measure the effectiveness of health care through the achievement of targets such as improved cancer survival rates or reduction in hospital acquired infection rates. An independent and accountable NHS Commissioning Board will be established to address inequalities in access to health care. It will ensure an economically sustainable health care system through the promotion of quality health care services, encouraging of competition and regulation of pricing. The Care Quality Commission will have a stronger role in evaluating the effectiveness and quality of health and social care.

The focus of the reforms is to address patient/public involvement in health care decisions, to change the relationship of health care providers and administrations in the management and delivery of health care and to pilot innovative funding models for

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14 Predominantly from Department of Health Website: [http://healthandcare.dh.gov.uk/context/quickguide/](http://healthandcare.dh.gov.uk/context/quickguide/)
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health care delivery. ‘No decision about me without me’ is the motto of the movement to change the way patient are treated. The movement will give patients more control over where they are treated and by whom. Health care information will be readily available to patients about their local hospital and other health services to help them to make decisions about their health care. Patients will have opportunities to rate hospitals and clinics with respect to quality of care and are able to contribute to HealthWatch, a national body that ensures the public, caregivers and communities have a voice in health care issues. This organization will assist the public in determining the nature of health care services in their area and to hold accountable those local services that have lower quality of service.

Changes in the administrative role in the health care system are meant to promote high quality care. GPs will be responsible for designing local services for patients and will become the managers in Primary Care Trusts. Since patients will have a choice in who provides them with treatment and where it is received, GPs and other health care providers will be more accountable.

Hospitals will have fewer set targets and greater freedom. They will be able to make money from a variety of sources and reinvest back into health care services. However, they will be funded according to performance. This means that good service including high patient satisfaction will result in growth of the organization. Providers will also be able to make more money from different sources of revenue and reinvest it into NHS services.

The NHS reports that there will be a need for radical change in the cost of health care if the United Kingdom is to have a sustainable health care system. Along with such things as cutting management in the NHS and reducing inefficient services, from 2009 through 2013 the Department of Health is piloting a Personal Health Budget.\textsuperscript{15} In this program, patients are told how much money they are allotted for their NHS care. They are encouraged to discuss and help decide upon the best way to spend it. The PHB can be used to meet a variety of health and wellness needs including therapies, personal care and self-management courses. A personal health budget makes it clear to the patient and the people who support them about how much money is available for their NHS care so they can discuss and agree the best way to spend it. This gives them more say over the care they get. It can be used for a range of things to help them meet their health and well-being needs. The government generally thinks it will include such things as therapies, personal care, lifestyle advice and self-management courses.

\textsuperscript{15} Department of Health (UK). \textit{Understanding Personal Care Budgets}.
The United States is a democratic, federal union of 50 states and the District of Columbia, a federal jurisdiction. All states are situated in North America with Canada to the north and Mexico to the south, with the exception of Alaska and Hawaii. There are 308 million Americans and an area of 9,158,918 sq km total which are the third largest country in population and landmass. The United States is home to people with wide variations in ancestry. The most common language spoken is English, followed by Spanish.

The United States has the largest and most powerful economy in the world with a strong emphasis on technological innovation. The per capita GDP is $47,400. The United States is the driver of Western culture and has global influence in politics, economics
and military issues. However, the United States is ranked 41st in the world for infant mortality rate and 46th for total life expectancy.\(^\text{16}\)

The Constitution of the United States of America provides the structure of the federal government. It outlines its powers and activities, and delineates the relationship between national and state governments. Power and functions are divided between three branches of government which are legislative, judicial and executive. Executive powers rest with the President. The president is elected for a four-year term and may be re-elected only once. Legislative power is granted to a two elected bodies, the Senate and Congress. Finally, judicial power lies with the Supreme Court. The balance of power is maintained through ‘checks and balances’ that ensure that no one section becomes more powerful than the others. An example is the President is able to make nominations to the Supreme Court and veto bills by Congress. At the same time Congress has the power to impeach the President as well as federal court judges. Finally, the Supreme Court can rule that Presidential actions or a Congressional law is unconstitutional.

The federal government is limited to the powers outlined in the Constitution and does not have the power to enforce the implementation of health care programs at the state level. The federal government will attempt to encourage states to adopt minimum standards set by law in a process known as cooperative federalism. This is often achieved through such things as attaching funding to specific criteria such as compliance to the drinking age for alcohol consumption of 21 is a requirement for targeted funding for highway maintenance.

The United States Department of Health and Human Services (HHS)\(^\text{17}\) is a cabinet in the federal government that oversees all health care legislation. This department is responsible for a number of services that are outlined in Figure 8. In addition, each state and municipal government has their own health departments. These departments have the authority to enforce state health care laws.

**Health Care Insurance Models**

The U.S. health care system is funded predominantly through a “Managed Care” approach. The term Managed Care refers to any program that strives to contain health care expenditures in a competitive marketplace. In the United States, the term is used to describe the system of patient enrolment to a health insurance plan which makes payments to health care providers on the patient’s behalf. This system is meant to shift the financial burden away from the patient and to providers who are given incentives to reduce costs.

The United States is the only wealthy industrialized country that does not ensure some kind of health care coverage to all people. Health insurance is privately run and accounts for 35% of total health spending in the United States; far higher than any other developed country. There are some publicly funded health insurance plans such as Medicare, Medicaid and the Veterans Health Administration which target vulnerable populations.

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\(^{17}\) Information taken from the Department of Health and Human Services website
populations such as the elderly, disabled, children, veterans and the poor. The number of private health insurance agencies in the United States is estimated to be in the thousands. Greater than 90% of Americans with health insurance purchase it through their employer where the cost of premiums is determined as a factor of all those who contribute to the plan. Although this can reduce costs overall, individuals often have an out-of-pocket deductible or copayment when they utilize an insured service, such as a doctor’s appointment. An outcome of multi-payer systems is the large overhead costs. Health care administrative costs in the United States are around 31% of health care dollars which is almost double that of Canada’s single-payer system.

Source: U.S. Department of Health and Human Services 2010

With the goal of keeping costs to the consumer low, several models of health care
insurance have evolved. The HMO, or Health Maintenance Organization, is one such plan. The HMOs offer less expensive health care through a number of strategies such as insuring large numbers of people, eliminating coverage for treatments deemed as unnecessary and focusing on preventative health care. The HMO sets guidelines for physician care. HMOs require patients to have a primary care physician (PCP) and to choose their PCP from one that is listed in the HMO ‘network’. Patients can choose hospitals and other health care providers from the network. Patients must be referred to specialist care by their PCP. There is no coverage for care outside of the HMO network. Some well-known HMOs are Blue Cross, Blue Shield and Kaiser Permanente, which was founded in 1945 and is the largest non-profit organization in the United States.

Preferred Provider Organizations are health care plans similar to HMOs but are more loosely managed and offer greater flexibility to the patient. Patients may choose physician, other providers and hospitals both in and outside of the PPO network. However, if they choose out of the network, the PPO will pay a percentage of the cost of the health care after payment of an annual deductible and co-payments. The out-of-network payments can be high; however, PPOs have grown and taken a share of the HMO market in the past decade. In part this is due to reducing overall costs through negotiation of favourable fees from providers, selecting those that offer competitive rates to be in the network and creating financial incentives to providers who demonstrate efficient work.

The structure of most health insurance plans has positioned the primary care physician as the point of entry to the health care. This, along with the organizational structure of the health care system in the United States, results in fragmented, poorly coordinated care. A survey in California revealed that 40% of physician admitted that their patients have had problems with coordination of care, more than 60% report that patients ‘sometimes’ or ‘often’ wait a long time to receive diagnostic tests and 20% stated that their patients often had to repeat tests because they were not available at the time of the next visit. Health insurance plans often mandate that hospital care is conducted by ‘hospitalists’, physicians who work only in the hospital. Thus the PCP is not involved despite knowing the patient and medical history.

Hospitals and Health Care Facilities
There is no system of national, government-owned health care facilities. Health care facilities and hospitals in the United States are predominantly owned and operated by the private sector; however, there are some federal, state, county, and municipally owned facilities. The non-profit hospitals account for approximately 70% of hospital capacity. There remainder are privately owned for-profit hospitals and government hospitals. Some local governments own medical facilities with general public access and military and veterans are able to access field and permanent hospitals operated by the federal Department of Defense. Individuals with private or government insurance are


limited to medical facilities which accept the particular type of medical insurance they carry. Visits to facilities outside the insurance program's "network" are usually either not covered or the patient must bear more of the cost. Federal law ensures that all people receive emergency care regardless of their ability to pay. There is no funding to support this law. The result is an influx of patients who cannot receive care elsewhere and who often wait until their conditions worsen. Overcrowding for expensive ER care is a national concern.

In 2006, the United States accounted for three quarters of the world’s biotechnology revenues and 82% of world Research & Development spending in biotechnology. Private companies conduct the manufacture and production of pharmaceuticals and medical devices. The research and development of medical devices and pharmaceuticals is supported by both public and private sources of funding.

**PATHWAYS FOR CHANGE**

It is estimated that the lack of health care insurance is responsible for 100,000 deaths annually in the United States. In spite of the fact that in 2009 an estimated 50 million Americans did not have health insurance the United States has the highest per capita spending in the world. In 2004, private insurance accounted for 36% of health care expenditures, the federal government 34%, out-of-pocket 15%, state and local governments 11%, and other private funds 4%. Half of personal bankruptcies in 2005 were as a result of medical debt.

It is argued that the American health care system does not deliver equivalent value for the money spent for example, the infant mortality rate in the United States is higher than most other developed countries and life expectancy is 42nd in the world. The use of health care services in the U.S. is below the OECD median which renders the cost of health care services much higher in the U.S.

Current estimates put U.S. health care spending at approximately 16% of GDP which is expected to rise to 19.5% by 2017. Health insurance costs are rising faster than wages or inflation. The high cost of health care spending is associated with advances in expensive medical technology, higher income levels of health care providers, changes in insurance coverage, and rising prices. The highest costs to the system are from hospitals (31%), physicians (21%), prescription drugs (10%), nursing homes (8%), administrative costs (7%) and the remainder to all other categories. Among the 191 members of WHO, the United States ranked the highest in cost and responsiveness, but 37th in overall performance, and 72nd by overall level of health. The U.S. health care system costs the most and delivers low quality of care.

Significant gaps have been identified in the U.S. health care system. Although mental illness is the second leading cause of disability and affects 20% of all Americans, there is a lack of mental health coverage. Half of those with mental illness do not have access to health care which has serious negative outcomes in the social system and the economy. African and Native Americans and Hispanics have higher rates of chronic disease, higher mortality and poorer health outcomes compared to Caucasians.

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20 Primarily from OECD (2010), *OECD Health Data 2010: Statistics and Indicators*
Access to prescription drugs is another major concern in the United States. The United States spends more on pharmaceuticals per capita than any other country. It is also one of two countries in the world that permits direct consumer marketing of pharmaceuticals. This system is thought to be the cause of increased drug prices overall. It is estimated that 25% of out-of-pocket spending by patients is for prescription drugs.

**ACTIONS FOR CHANGE IN THE HEALTH CARE SYSTEM**

*The Affordable Care Act*

Despite evidence to the contrary, 45% of Americans believe that the U.S. health care system is the best. This belief is polarized by political party with Republicans far more likely than Democrats to believe that the U.S. system is superior to models in other countries. Added to this division is the lobbying power of private health insurance companies who do not favour change that will cut into their market share. Against this backdrop, President Obama proposed the Patient Protection and Affordable Care Act on March 23, 2010. This ambitious document, if enacted in its entirety will roll out some important changes from 2010 through 2014.

The changes in the Affordable Care Act will not be a huge departure from the current U.S. health care system. Rather, they will improve or enhance health care delivery in the current system. The Act will ensure new consumer protections such as preventing insurance companies from denying coverage to children or uninsured adults with pre-existing conditions, abolishing discrimination based on gender and making it illegal for insurance companies to deny payment for health care services to a patient based on errors, or technical mistakes on an application. Changes will be made that will improve quality of health care and lower costs. Some examples of these include paying physicians for Value Not Volume, implementation of $15 billion disease prevention programming, providing small businesses with health insurance tax credits, ensuring coverage for prescription medications to vulnerable seniors and increasing access to home care and community services. Further measures to increase access to health care services are increasing access to Medicaid for impoverished Americans, increasing Medicaid payments for primary care doctors, providing additional funding for Children’s Health Insurance Program and reducing waste and overpayment in the current system.

The Obama administration experienced strong opposition and immediate attack of the Act. The state of Florida has sued the U.S. Department of Health and Human Services citing that the law is unconstitutional. The suit is based on a clause that requires private citizens to obtain government approved health insurance or face a penalty. In January 2011, the state won the suit and the judge deemed the entire law to be unconstitutional. Suits by other states are pending; however, it is widely believed that “Obamacare”, as it is known, will be challenged in the U.S. Supreme Court.

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Canada, the northern part of North America, is bordered by the North Pacific Ocean to the west, the Arctic Ocean to the north, the North Atlantic Ocean to the east and the United States to the south (which is the longest border in the world).

Canada, a constitutional monarchy based on a Westminster-style parliamentary democracy, is also a federation of two orders of government recognized by the constitution. The federal government generally refers to the democratically elected members of parliament (MPs) of the House of Commons but also formally includes the appointed members of the Senate of Canada, an upper house. Senators are appointed on a regional basis by the Prime Minister of Canada. Provincial governments bear the principal responsibility for social policy, including health, education, social assistance and social services. Canada’s three northern territories in practice behave like provinces and are gradually moving toward full provincial status. Municipalities are not recognized in the constitution of Canada as autonomous orders of government but as “creatures of the provinces”. Municipal governments, including county governments in some provinces, are delegated authority and responsibility by the provinces (and territories) for the delivery of local public services and infrastructure.

\[\text{Context/Profile}^{16,23}\]

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\[\text{23 The majority of the description Canadian health care system is extracted from Source: Marchildon, 2005}\]
Toward Seamless Patient Care

Canada is an advanced industrial economy with a substantial resource base. Living standards are among the highest in the world. Between 1998 and 2003, Canadian GDP per capita grew more rapidly than any other G7 country, including the United States.

Canada, the second-largest country in the world, has a land area of 9.1 million square kilometres (including inland water), spanning 5,514 kilometres from east to west and 4,634 kilometres from north to south. Canada’s population is roughly 34 million, and on average population density is 3.33 people per square kilometre; however, most of the population is concentrated in the country’s more southern urban centres. A relatively small number of Canadians live in the immense rural and northern regions of the country.

Despite the demographic ageing of its population since 1970, Canada is still a young country, with fewer older people than most European Union countries and Japan. Individuals aged 65 years and older made up 12.8% of the population in 2003 compared to 7.9% in 1970, but they are projected to constitute 20% of the population by 2025.

The estimated life expectancy at birth in 2011 is 81.4 years (78.8 for males and 84.1 for females), with a death rate estimate for the same year of 8.0 deaths per 1,000 population.¹⁴

Components of the Health Care System

The Canadian constitution did not assign authority over health care specifically to either the federal government or provinces. The exceptions are hospitals and psychiatric institutions where authority lies exclusively with the provinces. Interpretation of the constitution has been that the provinces have primary, but not exclusive jurisdiction over health care. However, the federal government continues to be responsible for protecting the health and security of Canadians and has leverage with financing. This has allowed for a national set of standards for Medicare, a role in public health, drug and food safety regulation and health research. In addition, the federal government is responsible for the health care of First Nations people living on reserves and the Inuit, members of the armed forces, veterans, the Royal Canadian Mounted Police and inmates of federal penitentiaries.¹⁶

An important federal regulation is the Canada Health Act. The primary objective of the Canada Health Act is “to protect, promote and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers.” ²⁴The federal government upholds the following principles of health care: public administration, comprehensiveness, universality, portability, and accessibility. Public health care in Canada is highly decentralized. The provinces are responsible for the administration and delivery of health care and they vary considerably in terms of financing, administration, delivery modes and range of public health care services. The federal government has no direct control over these areas; however, it reviews the performances of the provinces and provides transfer payments to the provinces based on their performance in upholding the principles of the

Canada Health Act. Provinces are penalized for the introduction of such things as user fees for health care services that are deemed to be protected under the CHA.\(^{25}\)

While responsible for the administration of public health care, with a few exceptions, the provinces deliver very few health services directly. Most public health care services are organized or delivered by regional health authorities that have been delegated the responsibility to administer services within defined geographical areas. Canada’s health system is predominantly publicly financed, with delivery by both the private (for-profit and not-for-profit) and public (arm’s-length and direct) sectors. The 10 provinces have single-payer, universal systems of hospital and primary physician care defined as “insured services”. Provinces set rates of remuneration for physicians through fee schedules that are negotiated with provincial medical associations. Approximately 70% of total health expenditures are public spending by provincial governments. Generally hospital care, nursing homes and some home care and community care are administered by geographically based regional health authorities. Provincial governments are responsible for administering prescription drug plans and paying for physicians’ public health care services. The remaining 30% of health expenditures are paid to the private sector either out-of-pocket or through private health insurance. Most dental and vision care services, some prescription drugs and virtually all complementary and alternative medicines and therapies are private sector services. Canadians also pay privately for some home care, community care and long-term care services and facilities. Provinces also provide, directly or indirectly, a variety of home care and long-term care subsidies and services. Finally, all provinces administer their own prescription drug plans providing varying degrees of coverage to residents. These services have grown over time, and occupy a large part of provinces’ resources.

Spending on health in Canada has risen by about 5–6% (1–2% increase after adjusting for inflation) for the past decade to total $191.6 billion in 2010. For the same year, per capita expenditure is $5,614. The share of public-sector funding is 70.5% with the remainder either private pay or out-of-pocket for the consumer.\(^ {26}\) Most private health insurance comes in the form of group-based benefit plans that are sponsored by employers, unions, professional organizations and similar organizations. The remaining 3% comes from other sources such as worker’s compensation benefits and charitable donations.

In 2010 the federal government spend $6.1 billion in the provision of direct health care services to the targeted areas within their domain. In 2008, only 5% of public-pay funding was a result of transfer payments from the federal government to the provinces. However, the reporting of expenditures is related to the responsibility related to the payment rather than the provider of the payment. Thus, the provincial health care programs that are supported by federal funds (Canada Health Transfer, Canada Social Transfer, Health Reform Transfer, Equalizations and Territorial Formula Financing) are reported under the individual provincial programs that they support. In 2004, the first ministers signed a 10 year agreement to strengthen the health care system including


increased federal government spending, particularly in targeted areas such as Aboriginal and northern health.²⁶

In 2008 hospitals took the largest share of the health care dollars (28.7%) closely followed by Drugs (16.3%) and physicians (13.3%). Physician funding remains predominantly fee-for-service through contracts negotiated with provinces. The FFS system has allowed physicians to quite autonomous with low transactional fees and high levels of influence in health care system policy development in all sectors of the health
care system. With a remuneration strategy separate from other health organizations and with relative lack of fiscal controls, FFS remuneration has resulted in medicine remaining relatively untouched by reforms designed to control health care costs. The past decade has seen the implementation of various physician remuneration strategies which have not necessarily lead to cost containment or improvements in primary health care. Capitation with corresponding bonuses for targeted preventative care and chronic disease management is one strategy in Ontario. There are other alternative payment strategies, which are directed most often to specialities such as cancer care and psychiatry.

**Percent Fee-For-Service Physician Payment by Province, 2002/2003 Figure 11**

<table>
<thead>
<tr>
<th>Province</th>
<th>Fee-for-service payment</th>
<th>Alternative payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>80.8%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Alberta</td>
<td>91.4%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>86.6%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>64.1%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Ontario</td>
<td>87.8%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Quebec</td>
<td>77.4%</td>
<td>22.6%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>81.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>68.4%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>78.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>63.3%</td>
<td>36.7%</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td><strong>82.8%</strong></td>
<td><strong>17.2%</strong></td>
</tr>
</tbody>
</table>

*Source: CIHI 2004f.*  
*Source: Marchildon, 2005*

Health expenditure in the provinces and territories varies considerably based on factors such as population density, geography and age distribution. Also to be considered are population health needs and differences in remuneration of health care workers across the country. Comparing provinces in 2010, Alberta had the highest per capita spending on health care and Quebec the lowest. However, health expenditure as a percentage of per capita GDP is only 8.2% in Alberta contrasted to 17.4% in PEI.

**Pathways for Change**

Canadians enjoy good health relative to other countries. This is attributed to many factors three of which are the relatively equitable distribution of increases in wealth, disease prevention initiatives and public health intervention that have led to improvements in overall health and the level of access to quality health care. Evidence includes the steady rise of life expectancy at birth since the late 1960's. Canada was ranked 5th among all OECD countries at the turn of the century. Potential years of life lost (PYLL), or the number of years lost “prematurely” by deaths prior to age 75, has dropped considerably in the past forty years.

There continues to be room for improvement in the Canadian health picture. Canada ranks 17th among OECD countries for its infant mortality rate and 11th for perinatal
mortality (deaths between 28th week gestation to first month of life). Canada is currently ranked 15th among OECD countries for deaths caused by cancer. Similarly, Canada has fared average to poor in terms of progress on respiratory and infectious disease. Improvements have been made in deaths from digestive diseases, Canada ranks 9th. However, the most improvement has been in reducing the death rate related to circulatory disease in half in the last three decades, putting this country 5th in the OECD ranking for all circulatory system diseases. Poorer health outcomes are seen more often in groups and regions with higher health risks and greater vulnerability. Those living in rural and remote areas, indigenous people, new immigrants, the poor and those with mental health issues and addictions are a few examples. It is crucial to address the issues of vulnerable populations in health policy discussions; however, an in-depth analysis is beyond the scope of this review.

Since the early 1990s provinces have strategized about ways to improve seamlessness of services from primary health care to other health care services and reduce health care costs. Most provinces established regional health authorities, although there is constant renewal and change. Global budgets are the funding model most commonly used whereby the provincial government gives the RHAs the authority to distribute funds to areas of need including public health measures and prevention strategies with the exception of physician remuneration or prescription drug plan administration. A comprehensive and systematic study of the impact of regionalization has not been carried out and concerns have been raised about the benefits particularly whether resources have been redirected to illness prevention and health promotion activities.

One measure of access to primary health care is the admission rate for ambulatory care sensitive conditions such as pneumonia, asthma, hypertension, angina and diabetes. Appropriate primary health care could prevent the onset or exacerbation of these conditions or manage a chronic condition more effectively. Notably, there was a significant decrease in the admission rate for these conditions in the years following the turn of the century.

Selected CIHI Health System Performance Indicators, 2000 through 2004 (age-standardized hospitalization rates per 100,000 population)

<table>
<thead>
<tr>
<th>Condition</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory care sensitive conditions</td>
<td>447</td>
<td>411</td>
<td>401</td>
<td>370</td>
<td>346</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1,241</td>
<td>1,273</td>
<td>1,297</td>
<td>1,092</td>
<td>–</td>
</tr>
<tr>
<td>Influenza</td>
<td>618</td>
<td>599</td>
<td>575</td>
<td>575</td>
<td>554</td>
</tr>
</tbody>
</table>

Source: CIHI discharge abstract and hospital morbidity databases.

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Actions for Change in the Health Care System

Canada has a highly decentralized health system with a mixed model of public and private health delivery. Health care system change on a national level is not possible due to the individual jurisdictional issues in each of the provinces and territories. However, the federal government has an important role in the coordination of national strategies related to innovations in health care. There have been several national strategies for improvement in primary health care and health care systems in general that have been facilitated by the federal government.

In 2004 the first ministers agreed to the ‘Ten-Year Plan to Strengthen Health Care’. A commitment from both the provinces and the federal government was made with respect to the following:28

- The development of benchmarks and comparable indicators for public reporting on waiting times, and targeted reductions in waiting times in five priority areas (cancer, cardiac, diagnostic imaging, sight restoration and joint replacement).
- The federal government also agreed to provide C$5.5 billion over 10 years through a Wait Time Reduction Fund to assist provinces and territories to increase access by reducing wait times.
- Target home care changes in three areas: post-acute, mental health and end-of-life.
- Primary health care: all governments said they would commit to providing at least 50% of their populations with 24/7 access to multidisciplinary teams by 2011.
- The federal government also increased its funding to territorial governments and Aboriginal organizations in order to facilitate reform and improve access, including medical transportation infrastructure for remote northern communities.
- Both orders of government created a ministerial task force to work on a national pharmaceutical strategy (with the exception of Quebec).

Primary Care Reform

The traditional model of primary care in Canada has been one in which a family physician, working individually on a fee-for-service basis, provides general medical services to his/her patients. There has been increasing recognition both nationally and internationally about the value in a team approach to health care. The Health Council of Canada reports that particular populations (such as those with chronic conditions) have better outcomes when they’re attended to by a team and therefore may eventually need fewer medical appointments and other more expensive health services.

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Toward Seamless Patient Care

In 2004, the provinces and the federal government of Canada committed to ensuring that 50% of Canadians have access to Interprofessional teams by 2011. The Canadian Health Services Research Foundation in its 2006 work "Teamwork in Healthcare: promoting effective healthcare in Canada" identified a number of areas that government needs to assist in to improve the chances of successful collaborative practice. The impact of barriers to teamwork is aggravated by a shortage of health care providers and an absence of ongoing, adequate funding to support collaborative activities. There is also a critical need for decision-makers to act as "leaders" in breaking down these barriers and developing the infrastructure required to support teamwork at the practice, organizational, and system levels.  

Another pan-Canadian initiative of the federal government is related to the role that technology can play in improving access, quality and efficiency of health care in Canada. The Government of Canada has been making investments in the area of eHealth since the 1997 budget. The federal government also made commitments through First Ministers Agreements in 2000 and 2003 toward a collaborative approach to the implementation of information technology into the health care system.

Arising from the federal government’s commitment to eHealth was the creation of Canada Health Infoway. This is an independent, not-for-profit corporation which was created by Canada’s First Ministers in 2001. The organization is funded by the Government of Canada and works with the provinces to ensure best practices in the implementation of secure EHR systems. This entails:

**Providing the technology Blueprint** to guide the development of electronic health records in Canada. The EHR Blueprint is useful to information technology professionals, in governments, health regions and hospitals planning to implement electronic health record solutions. Technology vendors may also use the EHR Blueprint to ensure that their product is compatible with the national vision.

**Supporting and sustaining communications and technology standards** that enable health information systems to share patient health information accurately and securely.

**Jointly investing with the provinces and territories** to implement the health information systems needed to manage Canadians’ health and health care information in every region.

**Providing certification services for technology vendors,** thus signifying their EHR-related products meet pan-Canadian standards and best practices regarding privacy, security and interoperability.

**Fostering and supporting clinical adoption of EHRs.** Some of the key components of EHRs are the range of point-of-care systems used by health care professionals, such as

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30 About Canada Health Infoway. Who we are. [https://www.infoway-inforoute.ca/lang-en/about-infoway](https://www.infoway-inforoute.ca/lang-en/about-infoway)
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electronic medical records (EMR) - the systems used in some private practices, clinics and hospitals to store, retrieve, and update health information.

Progress of Provinces and Territories in Six Categories of EHR Integration Figure 13


Provinces Introduction

The provinces and territories of Canada are responsible for the administration and delivery of health care services. The nature of each health care system in Canada varies, however the work of provincial and territorial governments includes the development of policies, legislation and standards, the allocation of resources, the creation and promotion of strategic directions and the fostering of responsible administration.

Health care is funded by provinces and territories with additional financial transfers from the federal government. Health care is guided by the Canada Health Act. The majority of costs of health care include insured primary health care provided by physicians and other health care providers and hospital care. Supplementary health benefits, such as prescription drug coverage, vary between jurisdictions.

Review of provincial systems reveals that there are similar priorities across the country. Each jurisdiction is concerned about the sustainability of the health care systems in the context of rising health care demands. All are concerned about accessibility to health care and the need for a focus on prevention and improved health of the people of Canada. The priorities and strategic directions of the health care systems for each jurisdiction are ultimately concerned about the key elements that promote the seamless delivery of care in a system.

The following section includes a review of the provinces of Canada (territories are excluded from this review). Ontario is reviewed in depth while key or unique features of the remaining provinces are summarized separately.
Ontario

Ontario is a province located in the east-central part of Canada. It is the largest province by population with over thirteen million residents and second largest in area totalling 1,476,395 km². The majority of the population lives in the southernmost quarter of the province. The remaining 75% of land to the north is sparsely populated. Life expectancy at birth of Ontarians is 80.7 years.

Description of Health System

The Ministry of Health and Long-Term Care is the branch of the Ontario government dedicated to health care. The MOHLTC’s mission and mandate is stewardship. “This new stewardship role will mean that the ministry will provide overall direction and leadership for the system, focusing on planning, and on guiding resources to bring value to the health system. The ministry will be less involved when it comes to the actual delivery of health care and more involved in:”

- Establishing overall strategic direction and provincial priorities for the health system;
- Developing legislation, regulations, standards, policies, and directives to support those strategic directions;
- Monitoring and reporting on the performance of the health system and the health of Ontarians;
- Planning for and establishing funding models and levels of funding for the health care system;
- Ensuring that ministry and system strategic directions and expectations are fulfilled.

In 2006 the MOHLTC reorganized health service delivery in Ontario through the creation of 14 Local Health Integrated Networks (LHINs). LHINs are not-for-profit corporations with a mandate to plan, fund and integrate health care services within their region. LHINs are meant to allocate funding to priority areas and to work toward more efficient and coordinated health care. Community consultation within each LHIN informed plans that not only meet the strategic directions of the province, but are tailored to the needs and priorities of the region. The LHINs are responsible for health services in their region including Hospitals, Community Care Access Centres (CCACs), Long-term Care, Mental Health and Addictions Services and Community Health Centres.

The MOHLTC continues to manage a variety of programs and services. Most notably are Ontario Health Insurance Plan, the Emergency Management Unit, Public Health and independent health facilities. The MOHLTC also continue to manage two primary health care initiatives Family Health Teams and Nurse Practitioner-Led Clinics.

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Toward Seamless Patient Care

The MOHLTC conducted a review of the development and roll out of the LHINs which spoke favourably to their effectiveness. LHINs create Annual Service Plans that outline the priorities. Unfortunately, there is no common format for the annual service plans so that it is difficult to make cross-provincial comparisons of them. Each LHIN has created a Health Professionals Advisory Committee which is responsible for assisting with the achievement of patient-centered care. The advisory committees consider the health status of targeted segments of the population, innovative approaches to health service delivery including those related to health promotion strategies, the appropriate distribution and utilization of health human resources and other issues that relate to the mandate of the Networks.

The relationship between the MOHLTC and each LHIN, as well as the goals and obligations of each LHIN in the delivery of health care services in their area, are outlined annually in Ministry-LHIN Accountability Agreements (MLAA). The agreements outline general and specific health service obligations of the LHIN.

Quality
The Ontario government has responded to concerns about the health care system with the legislation of The Excellent Care for All Act, passed in June 2010, is intended to improve the quality of care for Ontarians. The Act calls for continuous quality improvement in hospitals. There will be the creation of quality committees, which would report to the hospital board of directors on quality-related issues, the development of annual quality improvement plans, a patient relations process, patient/client/caregiver surveys to assess satisfaction of services and staff surveys to assess satisfaction with employment. Furthermore, executive compensation will be linked to achieving the improvements in the quality plan; values will be created with public consultation and more.

In 2005 the Commitment to the Future of Medicare Act allowed for the creation of The Ontario Health Quality Council (OHQC). The OHQC is an independent agency, which in 2008 was charged with measuring and developing public reports about the quality of long-term care and resident satisfaction. By the end of that year, the mandate was expanded to include the measuring and reporting to the public on the quality of home care services and client satisfaction of these services.

The Excellent Care for All Act further expanded the functions of the OHQC to now include the monitoring and reporting to the people of Ontario on access to publicly funded health services, health human resources in publicly funded health services, consumer and population health status and health system outcomes. In addition, the OHQC must support continuous quality improvement by promoting health care that is supported by the best available scientific evidence, make recommendations to health care organizations on the standards of care in the health system based on clinical practice guidelines and make recommendations to the Minister of Health and Long-Term Care concerning the government’s provision of funding for health care services and medical devised. The Council is required to deliver an annual report to the Minister about the state of the health system in Ontario.

Access
Each LHIN has created a comprehensive service plan based on such things as review of health care data and literature, community engagement, environmental scan, population
profiles, inventory of status of current program and service. These integrated health service plans address the unique access needs for each LHIN. The timeframe for the plans is typically three years. The service plans for each LHIN are posted on the individual LHIN website.

Access to appropriate and timely care in Ontario is a priority in this province. Primary health care initiatives have been undertaken to increase access. Telehealth offers 24/7 telephone health advice and health information by a registered nurse. Family health teams have after hours telephone information lines. The Ontario Telemedicine Network is a program that links patients and health care providers in small, remote settings to specialist care through video links. Walk-in- clinics in many centres offer after-hours health care service and emergency departments provide care for urgent health concerns.

Health Expenditures and Efficiency
The public funding of health service delivery is achieved predominantly through Ministry-LHIN Accountability Agreements (MLAA). The MLAAAs outline the administrative obligations of the LHIN which include such things as accounting standards, risk management strategies and balanced budget obligations. The MOHLTC continues to manage several programs including several primary health care programs.

Funding Components
The cost of hospital care, emergency health care services, visits to family doctor and specialists is publically funded through the Ontario Health Insurance Plan (OHIP). OHIP is funded through a portion of provincial taxes from individuals and businesses. Costs to access health care in primary health care facilities in the province including the care of health care providers at community health centres, aboriginal health access centres, family health teams and nurse practitioner led clinics is publically funded. The provincial government also funds public health units and their initiatives.

Ontario has a mix of public and private costs for home care and long-term care facilities as well as a publically funded prescription plan for specific, qualifying individuals. Individuals may be eligible for programs, such as the Trillium Drug Plan, that help to cover the cost of extraordinary prescription expenses. The remainder of health care including home care, prescriptions, dental care, eye care and allied health care is paid by a mix of third party insurance plans or out-of-pocket.

Hospital/Acute Care
There are four different types of hospitals in Ontario which are Public Hospitals, Private Hospitals (7), Federal Hospitals, and Cancer Care Ontario Hospitals. There are 227 hospital sites in Ontario, 150 hospital corporations and an additional 77 umbrella corporations.

Public hospitals in Ontario are incorporated and governed by a Board of Directors. Funding and health service planning for hospitals flows through the LHIN. Each hospital determines the services required by the community. Provincial payments provide 85% of hospital funding with the remainder arising from a variety of sources such as charges for private rooms. Provincial funding is governed under the Public Hospitals Act and is budgeted predominantly using a base funding or global funding model. Special programming like dialysis services may be awarded additional funding. Payment of
physician services in hospitals is not normally part of the global hospital budget but is paid through OHIP.

Public Health
Public Health is dedicated to the promotion and protection of health and the prevention of illness. Services are administered and delivered to Ontarians through the work of 36 boards of health. These boards are autonomous bodies, but are required to meet the standards of the Ontario Public Health Standards (OPHS) and Protocols. The OPHS establish the minimum requirements for fundamental public health programs and services which include assessment and surveillance, health promotion and policy development, disease and injury prevention, and health protection. The work of public health focuses on prevention of chronic disease, injury and substance misuse, reproductive and child health, infectious diseases programs (including immunizations), food and water safety and emergency preparedness.

Long-term Care
There are three types of long-term care facilities in Ontario including municipal homes for the aged, nursing homes and charitable homes for the aged. There is a mix of privately and publically owned facilities. The province pays for basic accommodations in all three types of homes for clients if required. Each province and territory in Canada has developed a long-term care strategy. The MOHLTC enacted changes to the regulations in the Long-term Care Homes Act that came into practice June, 2010. This legislation sets standards of care which for LTC facilities.

Home Care and Community Care
Home care and community care services in Ontario are directed through Community Care Access Centres. Funded and legislated by the MOHLTC, each LHIN has a CCAC that manages care within the LHIN boundaries. The role of the CCACs is to award contracts for and coordinate community based health care. In addition, the CCAC determines patient’s need and eligibility for LTC and coordinates the admission of people to LTC beds. Ontario has had a competitive bidding process in home care services. Health care delivery is contracted by CCAC to community agencies through a RFP process.

Those who are admitted to long-term care facilities require 24 hour care. However, there are other types of residence options in Ontario in the community for those with fewer care requirements. Supportive housing is rent-controlled or government subsidized, accessible apartments that offer personal care, social opportunities and meal options. Retirement homes are privately owned rental accommodations for seniors. There is no government subsidy for retirement homes so tenants must pay the full price. Tenants are able to manage and pay for their own care. Retirement homes offer various services including meals.

Primary Health Care
The last decade has seen a tremendous commitment from the provincial government in moving forward primary health care reform. In the last five years 170 Family Health Teams have been formed and 30 more were announced in August 2010. FHTs are expected to serve 2.7 million Ontarians. These are interprofessional, multidisciplinary ‘medical homes’. Physicians work with nurse practitioners, social workers, dieticians, pharmacists, registered nurses and more to provide health care to the community.
Toward Seamless Patient Care

The Family Health Team (FHT) is meant to be a comprehensive, ‘one stop’ primary health care facility that works with other organizations such as CCACs and Public Health. Most FHTs have moved to an EMR system for medical records and many are linked to a telehealth system for after-hours inquiries. FHTs are independently incorporated but are expected to meet expectations for quality health care service and access. FHTs belong to the Quality Improvement & Innovation Partnership (QIIP), which is an organization funded by the MOHLTC with the goal of building capacity and capability within the primary health care sector and sustaining and spreading initiatives that lead to improved clinical, functional and process outcomes.

In addition to FHTs, the MOHLTC committed to an innovative primary health care model known as the nurse practitioner led clinic. NPLCs arose to increase access to primary health care services in areas where large numbers of people are not able to find a primary health care provider. The first NPLC opened in Sudbury, ON in the summer of 2007. This was followed by an announcement of 25 more NPLCs by 2012. The MOHLTC has awarded all 25 NPLCs to date, but only a small number are operational at the time of this report. The nurse practitioner is the primary provider at the NPLC, however, physicians, pharmacists, RNs, social workers, dieticians and more work together in a collaborative, interprofessional model. NPLCs create strong partnerships with community organizations to create comprehensive and integrated care for their patients.

A cornerstone of a community-driven, interprofessional team approach to primary health care in Ontario is the Community Health Centre (CHCs) model. CHCs are non-profit agencies that provide comprehensive primary health and health promotion programs for individuals, families and communities. The board of directors of CHCs includes individuals from the community. CHCs have existed in Ontario since the 1970’s. The Association of Ontario Health Centres (AOHC) was established in 1982 and community-governed primary health care organizations are eligible to become members. CHCs have endured fluctuation in support over the decades in conjunction with shifts in political power. However, the model has remained true to the philosophy of a community based approach to care with a strong emphasis on health promotion. Currently, the AOHC represents more than 120 CHCs, Aboriginal Health Access Centres, Community Family Health Teams and Nurse Practitioner Led Clinics, all of which serve hundreds of thousands of Ontarians.

Ontario Health System Review
The Ontario Health Quality Council, an independent agency set up by the provincial government, monitors all aspects of the health care system and reports findings annually. The 2010 report indicated that “There are serious problems with how patients move through the health care system, from the emergency department to hospital to LTC. Patients wait too long and the system is wasting resources”. (p.2) Key concerns outlined in the report include:

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Toward Seamless Patient Care

• Wait times for LTC beds are too long

• Currently 16% of all hospitals beds are occupied by those designated as ALC

• ER patients admitted to hospital wait longer in an ER bed for a hospital bed. This slows the flow of acute patients in the ER.

• In 2009, 25% of patients spent more time in the ED receiving care than the recommended target.

• The majority of patients did not see a physician within the nationally recommended timeframe.

• About 6% left without being seen, which is attributed to longer wait times. This is the worst level in five years.

• Wait times for cataract surgery and hip and knee replacement surgeries has decreased, but only 53% of urgent cancer cases are completed within the 2 week target;

• Only ¼ of patients leaving hospital are given the information they need for self-care such as side-effects of new medications

• There are continued delays in the dissemination of specialist or hospital reports to physicians

While numerous strategies are being undertaken to improve patient flow, they do not address the root cause which is the backlog of people waiting for LTC placement. Home care services do not have the capacity to be an adequate alternative to LTC.

There are some improvements in cardiovascular disease care and small improvements in care for diabetes and other chronic diseases. There has been a steady decrease in heart attacks, mortality rate and hospital readmission rates. Hospitalization has decreased for angina by more than half in 6 years and 95% of cardiovascular procedures completed within timeframe. The rates of serious complications of diabetes starting to decline and the system has seen a decline in admissions for asthma.³²

Family doctors using an EMR system have risen from 26% in 2007 to 43% in 2009. This is significantly lower than other countries such as Australia and Netherlands where 95–99% of family doctors have an EMR system. Ontario is working toward an EHR system, which will result in fewer drug errors, fewer mistakes, and fewer delays in health care. Unfortunately progress in eHealth initiatives in Ontario were seriously hampered in 2009 when the provincial auditor informed the public of inappropriate contracting and waste in this provincial department.

The OHQC 2010 report also noted that although there have been significant financial investments in primary health care with the establishment of 150 FHTs, there has not been a notable increase in access to care. It is estimated that 7.1% or 730,000
Ontarians do not have access to a primary health care provider. In addition, Ontario (and Canada) has the worst record of 10 countries for timely access to primary health care. Almost 90% of Ontarians say they wait too long to see their health care provider. This although per capita supply of family doctors has increased by 6.2% and nurse practitioners by 82%.\textsuperscript{32}

Financial incentives in primary health care in Ontario have had unintended effects on interprofessional team approaches to primary health care. Ontario has followed the example of the United States in creating monetary incentives to primary health care physicians. Incentives are thought to encourage physician adherence to evidence-based practice and improve quality reporting although there is little data to support positive outcomes or cost effectiveness related to financial incentives.\textsuperscript{35, 36} Primary health care incentives are tied to rostering, an administrative link of a patient to a physician. Patients are asked to roster to a physician in their primary health care setting. At the same time, Ontario has moved a focus on interprofessional models of primary health care delivery. The process of rostering and the subsequent financial incentives is in conflict with an interprofessional team approach. In these models, physicians may receive financial bonuses for work that has been completed by other members of the interprofessional team. The AOHC has successfully lobbied for the removal of rostering and physician incentives in CHCs and a return to a salaried model of physician care.\textsuperscript{37} The Nurse Practitioners’ Association of Ontario has recommended a movement toward team-based bonuses as an alternative to physician-only incentives within interprofessional teams.\textsuperscript{38}


British Columbia

British Columbia has an estimated population of 4,419,974 and approximately half of this number lives in the Greater Vancouver Area. BC is defined in many ways by its geography. There is very mountainous terrain, but weather is comparatively milder than the rest of Canada so that the 5% of the land used for agriculture is quite rich. The mountains in conjunction with ferry system to the multiple islands off the coast have made transportation infrastructure an important feature of the province. Resources such as logging and mining have been the focus of economics in the past, but tourism is growing in importance. Each year 40,000 people immigrate to British Columbia, particularly from Asia-Pacific regions. The second most commonly spoken languages in BC after English are Chinese languages, followed by Punjabi.

BC continues to have an increasing demand for health services. The current system will not be sustainable. The factors that are driving the increased demand are an aging population, increased need for care for frail elderly, increased burden from chronic diseases, mental health illness, cancer, increased number of costly pharmaceuticals and treatments, and struggles to maintain adequate human health resources and health system physical infrastructure. A key objective of the 2009/2010 MHS Annual Report is to improve the integration of health service providers, processes and systems so that patients will move seamlessly through the system.

Description of Health System

Ministry of Health Services provides governance to the BC health care system through legislation, developing strategic directions for health care, evaluating health system performance, managing ministry budgets and reviewing human resource and information needs. The MHS delivers two public services which are the BC Ambulance Service (BCAS) and the Vital Statistics Agency.

The majority of health services are delivered by the province’s Six Health Authorities, which are accountable to the MHS. Five regional health authorities deliver health services to the populations within their geographical boundaries while a sixth, the Provincial Health Services Authority, manages specialized programs such as BC Cancer Agency, BC Centre for Disease Control, BC Children's Hospital and Sunny Hill Health Centre for Children and BC Mental Health and Addiction Services.

Quality

Annual Reports discuss the objectives of the MHS. Evaluation of specific targets details the progress toward key past objectives. The document outlines the current objectives as well as the deliverables that will demonstrate progress toward them.39

Access

Improvements in access to health care will be achieved, in part, through improvements in availability of health care and patient specific information. Three strategies support

this including HealthLink, a telehealth and internet system that provides health information and advice. HealthLink also operates a management system for acute care hospital beds and publishes an information magazine called BC HealthGuide.

BC has a comprehensive e-health strategy. The province is taking part in a federal initiative to create Electronic Health Records. The goal is to improve the efficiency of access to health information which will enhance the seamlessness of care and promote safer delivery of health care. EHR will reduce delays and errors and help to reduce costs. The project will be rolled out in several stages with the end result being a comprehensive, secure, internet based health record of each person in BC.

A final component of the eHealth strategy is the implementation of Electronic Medical Records in all family practice clinics. EMRs provide the conduit for access to EHR information. At the same time they increase the safety and efficiency of health care delivery within the family practice setting. The 2009/2010 Annual Service Plan Report indicated that the target for 2009 had been met with the integration of EMR into 41% of family practices.32

Health Expenditures and Efficiency

There is growing concern in BC at the rising costs of health care along with the increasing financial burden of chronic disease and an aging population. Strong measures have been put into place to address these issues now, stop rapid spending and ensure sustainability of the health care system. As such, MHS had a surplus budget of $232 million in 2009, but these funds were not available for spending as they were used to help reduce the overall rise in health care costs. A surplus was seen in the Regional Health Authorities, attributed to less than expected spending for pandemic flu activities. There was a decrease in the demand for Pharmacare funds; however, there was a deficit in the Medical Services Plan because of an increase in fee for service billing.18

The past decade in BC has also seen challenges to the restrictions on private-pay for medical care. Legal challenges in BC expanded on a ruling in Quebec which determined that a prohibition against people spending their own money on medical care was a violation of the Quebec Charter of Rights and Freedoms. The result has been the development of a wide range of private pay clinics.

Public Health

Public Health in BC covers similar areas as in the other provinces such as environmental health protection, health promotion and prevention strategies including immunization programs. Public Health is involved in evaluating, reporting and conducting research related to population health. The Public Health Act includes emergency powers. This clause links with the priority that the BC Ministry of Health Services has made to emergency preparedness. The Emergency Management Unit’s responsibility is to ensure that the province will plan for, respond to and recover from extreme natural, accidental or intentional events. Efforts to plan for the influenza pandemic in 2010 enhanced the level of preparedness of the province to major threats to health.18

Long-term Care

BC offers Nursing Homes or Residential Homes that provide 24 hour health care coverage for those who are no longer able to care for themselves. The Ministry of Health Services establishes legislation and policies for the safe operation of nursing homes and
has a monitoring system. Nursing homes in BC are either privately or publicly owned. Privately owned nursing homes can set their own fees within some limits. Eligibility for government subsidy is determined by the regional health authorities. Even with subsidy there is an expectation of a basic level monthly fee. Private nursing homes have some government-subsidized beds for those who qualify. There is an application and assessment process to enter into a nursing home and there are waiting lists to get in.

**Home Care and Community Care**

British Columbia offers a wide range of health care and supportive services in the community. There is public funding for some community services which is determined by the regional health authority. The patient must meet specific eligibility criteria to receive these services. Examples of available services include Assisted Living, Home Support and Choice in Supports for Independent Living, Residential Care and Hospice Palliative End-of-Life Care, as well as Home Care Nursing and Community Rehabilitation, Adult Day Services and Case Management services. In addition, there are options for seniors to live in specially designed rental units known as supportive housing. There are several levels of housing support depending upon the needs of the senior ranging from those offering minimal assistance to Independent Living programs that provide assistance with daily living activities in a limited capacity.

**Primary Health Care**

In 2007, British Columbia created a Primary Health Care Charter. The purpose was to better position the primary health care sector to improve health care of the population and contribute to the sustainability of the health care system. Success of this movement will depend upon collaboration of all key partners in the health care system. Most important to this initiative is the voice of the consumer. The strategy focuses on increasing access to primary health care services and to health information. Efficiency, effectiveness and coordination of the system are important objectives.

Several key reforms in primary health care have been introduced in the past three years which reflect the principles in the Primary Health Care Charter. The first is the Integrated Health Networks. IHNs support patients in the identification, treatment and self-management of chronic diseases. Care is provided by an interdisciplinary team including nurse leader, primary health care nurse, registered dietician, social worker and administrator, but a key aspect of the model is the direct involvement and voice of the patient. The IHN focuses chronic disease specifically identifying patients at risk, assessing, educating, supporting and mentoring patients toward self-care and optimal wellness. There are currently five IHN.

A second major reform is the move away from solo family practice to the establishment of interdisciplinary primary health care teams. The teams will be created to serve the health care needs of people living in a specific geographical region. A physician is usually the leader of these teams which size ranges from 3 to 20 people and include a variety of health care providers. The teams will promote more coordinated health care through the involvement with Integrated Health Networks as well as Divisions of Family

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Practice. These divisions are groups of physicians who will work together to identify common issues, address gaps and promote and support family practice.

**Pathways for Change**
The government of British Columbia publishes an annual report that evaluates health system outcomes and performance measurements as well as sets direction for improvement in future. “Improved integration of health service providers, processes and systems to allow patients to move seamlessly through the system,” This objective was realized through the increased number of housing until with supports for people with mental disorders and/or substance addiction. This is particularly important in mental health and addictions services. People with mental illness or substance use disorders have complex needs and often must access various providers to receive care and support services. The Ministry is working to ensure services, from child and youth to adult programs, are integrated to provide seamless, appropriate care and supports to facilitate recovery and maintain quality of life.
Alberta

Alberta is the most populous of the three Prairie Provinces and only one of two provinces that is landlocked. Alberta's population is at approximately 3.7 million people with an estimated annual growth rate of over 90,000. Calgary is the provinces' largest city and transportation hub. Calgary is linked to Edmonton by a 400km corridor that is one of the most densely populated and fastest growing in Canada. The top three languages spoken in Alberta are English, Chinese languages and Native languages. Alberta's urban centres have considerable ethnic diversity.

The growth of the urban centres has been fueled by a strong economy which is driven by the petroleum industry, agriculture, technology and tourism. The per capita GDP in Canada was highest in Alberta, more than twice that of some other provinces. This province experiences the lowest taxation in the country. It is the only province without a provincial sales tax. Royalties from the natural resource industries supplements the personal, corporate and other taxes as well as federal grants.

Alberta Health Services (AHS) is the province-wide organization responsible for providing direct health care services to Albertans. Until May 2008 the health care in the province was administered by nine regional health authorities. Now under one organization, it is Alberta's largest employer. AHS separates services into acute hospital, smaller hospitals and community services. Community services are further categorized into smaller zones.

Governed under a ‘superboard’, the merger of previous 9 regional health authorities was completed to increase efficiency of the health care system. Interested parties submit applications to Alberta Health Services Board. The Alberta Health Services Board connects to the public through advisory council. There are twelve Health Advisory Councils, consisting of 10 to 15 members, represent a different geographical area. All Health Advisory Council members are appointed by the Alberta Health Services Board. The role of the Councils is to consult with the public and report on the status of health care delivery in the various regions.41

The AHS has created a five year provincial strategic plan. Of note, the Alberta government has given the AHS a five-year funding agreement, 2010 through 2015, which is the first of its kind in Canada. The funding helped to eliminate an accumulated deficit, and to plan, implement the strategies in the long-term plan.20

Quality

The government of Alberta set up an independent body to review quality in health care. The Health Quality Council of Alberta has a mandate to monitor and evaluate the performance of the health care system, review patient satisfaction and make recommendations for improved delivery of care.

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The HQCA Annual report identifies specific health issues that the organization was asked to report on such as Alberta’s pandemic planning preparedness. Recommendations for improved service delivery are detailed in each report.

Access
AHS monitors wait times and patient satisfaction and posts performance reports on the public website. Although numbers remain below the province’s target and Canadian average for such things as wait times for hip fracture surgery and having a regular family doctor, there is improvement noted in Alberta and the province has very high patient satisfaction ratings. Available comparative statistics are from prior to the merger of the health authorities to the AHS. Future comparisons will serve as an evaluation for the effectiveness of this new organization.

Funding Components
Along with the creation of the AHS, there has been an evaluation of the way health care has been funded. Some innovative changes are being implemented. One example is a move from global funding for hospitals to an Activity Based Funding model. This model has been described as “fee for service payment for hospital care”. Hospitals will be paid a fee for specific services such as angiograms or hip replacement surgery. The impact of ABF is not yet known. Concerns have been raised that this will lead to a focus on quantity rather than quality in the hospital system. In this case, there will be a ripple effect into the community where patients may be discharged faster and sicker from hospital care. Safeguards are required to avoid the potential pitfalls.42

Provision of Services
Information Technology and Information Management are key areas of development and integration in the Alberta health system. The merger of the AHS was accompanied by a consolidation of IT systems and the creation of a centralized operating system. Systems include HR/Payroll for the entire organization.

Alberta Netcare represents a number of projects underway to achieve an Electronic Health Record for all people in the province. Netcare boasts that Alberta is the leading the country in the successful implementation of an EHR. The goal of an EHR record for each person in Alberta by 2008 has past; however, there are continuous advancements. For example, currently 90% of all diagnostic tests completed in Alberta are available on the Netcare EHR portal.

Electronic Medical Records are being implemented into family practices. This includes PCNs which are also linked together. Health care providers report improved access to diagnostic test results, templates and algorithms for chronic disease management. With the improvement in access to the patients’ information, they are able to see more patients in a day.

Long-term Care
Long-term care is residential care for people who have complex health care needs and are no longer able to live independently. Rates are quoted per month and per day and

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are among the lowest in Canada. Alberta Seniors Benefit provides several hundred dollars per month to seniors to ensure they can purchase necessities such as clothing, toiletries and such. Assured Income for the Severely Handicapped ensures this vulnerable population also has a minimum of disposable income.

**Home Care and Community Care**
Includes Supportive Living programs which include a number of programs including assistance in the home to help people remain independent in their homes, care in a personal care home. Enhanced Living provides access to a Health Care Aide, 24-hours a day, for personal care and support as well as continued professional care through your local Home Care Program. Designated Assisted Living live in privacy in their own home but have a high level of personal care and health care services available.

The province of Alberta is promoting a primary health care team approach. The 2010–2015 strategic plan identifies key actions that are meant to ensure a more patient-centred, comprehensive and coordinated primary health care system. Rather than promising large investments into new programming, the province is focusing on redistribution of resources to achieve the goals. These key areas include:

- Every Albertan has a responsible primary care physician and health care team.
- People are seen by a primary care team member within 2 days hours of their request.
- People have access to appropriate 24/7 primary care services when required.
- People receive timely access to more specialized levels of care including mental health coordinated by the primary care team.
- People with medically complex conditions and chronic diseases including addictions and mental health will be supported in the self management of their condition by a strong primary care team.
- People have access to high quality coordinated and holistic care and resources to manage and improve their overall health status.
- People experience a reduced reliance on the acute care system as a result of improvements in primary care

One step taken to achieve these goals is the creation of primary care networks or PCNs. A PCN is a collaboration of family physicians and Alberta Health Services to provide primary care services to patients. There are currently 33 PCNs and more under development and approximately two-thirds of Albertans have access to a doctor in a

PCN. Another focus is the implementation of primary health care teams. These teams include doctors, nurses, pharmacists, dieticians and others. The team approach ensures that patients receive the right care, from the right person, at the right time. Care is better coordinated and accessible which will reduce the burden of emergency services.

Improvements to chronic disease management are being addressed through Complex Care Teams. These are specialty teams created by PCNs to meet the specific needs of patients with complex conditions. The multi-disciplinary team approach ensures that all members of the health care team work together, creating more seamless and effective health care services.

Other targeted areas in the AHS strategic plan are to improve treatment for addiction and mental health and focus on specific health promotion and disease prevention through such things as smoking cessation. The new model of coordinated primary health care will not be successful without the cooperation and partnership of key services such as Health Link Alberta, Urgent Care Centres and acute care services which will ensure 24/7 access to health care information and services.

Enhancing the role of Health Link Alberta, primary care services, Urgent Care Centres and other alternatives in order to improve 24/7 access to appropriate services, in the appropriate time and place

Alberta is a dynamic province that is currently economically very strong. Despite these strengths, there are vulnerabilities such as an ever-expanding population that will threaten the health care system in the future. The government has made some innovative changes in the past few years meant to ensure stability and improvements in health care. The most notable is the creation of the AHS. Evaluation in upcoming years will help to determine the extent to which these changes have met their overall goal of improving efficiency and effectiveness of the health care system.
Saskatchewan

Saskatchewan is a landlocked province, bordered by Alberta on the west and Manitoba on the East. Saskatchewan covers 6.5% of Canada, an area of 651,036 square kilometres. Population estimates for 2020 were 1,041,729. Saskatchewan has the highest proportion of inhabitants over the age of 65 in Canada (15.4%).

Description of Health System

The Saskatchewan health care system is made up of many provincial, regional and local organizations that work together to provide services. At the turn of the century 32 health districts were merged into 12 regional health authorities (RHAs) which have the responsibility of delivery of health services. Most health services in Saskatchewan are provided through the RHAs and the Saskatchewan Cancer Agency. These services are either provided directly or through associated health care organizations. Health care organizations are those organizations receiving funding from a regional health authority to provide health services and includes both for profit and non-profit organizations.

Saskatchewan is the birthplace of the Canadian Medicare system. The province has a publicly-funded, publicly-administered health care system that has been in place since 1962. This program provides full or partial coverage for a wide range of health care services. For some services, individuals are responsible for part or the full cost of services. All individuals who reside in Saskatchewan on a permanent basis are eligible to apply for provincial health benefits.

Along with the publicly funded portion of the health care system, Saskatchewan is moving towards a system of Third-Party Delivery for certain surgical and diagnostic imaging services including MRI and CT scans. Although the province is committed to a publicly funded and publicly administered health care, it recognizes that the current system includes private-pay/out-of-pocket for some diagnostic testing and health care services. The government is exploring the need for more alternative services which will increase accessibility to them. There are restrictions around these services in order to keep them within the guidelines of the Canada Health Act, including the use of one wait list for all individuals waiting for procedures. A local booking office will assign individuals to third party of government services as they become available. This will prevent individuals from being served faster in the private clinics. In addition, these third party clinics are prohibited from allowing individuals to privately pay for publicly administered health services in order to get preferential treatment.

The province is currently working towards an electronic health record (EHR) system which will provide authorized health care providers rapid access to relevant and up-to-date patient information. This will allow for increased quality in decision-making and case management. Saskatchewan EHR will provide information such as:

- prescribed drugs
- immunizations

Toward Seamless Patient Care

- chronic disease management
- laboratory test results
- diagnostic reports and images, and
- visit information

Saskatchewan also has a free, confidential 24-hour health advice telephone line, staffed by registered nurses that are able to provide immediate professional information about medical issues and direct the individual to seek the most appropriate level of care.

Provision of Services
Hospital/Acute Care
In their health care action plan, the Saskatchewan government indicated the need for a strong network of hospitals to be available to residents in all areas of the province. This includes five provincial hospitals in Regina and Saskatoon, six regional hospitals, six district hospitals, four northern hospitals and 44 community hospitals. Community hospitals will offer 24 hour emergency services, general medicine, basic lab and x-ray services, and observation, assessment, convalescent and palliative care. 45

The province established the Patient Experience Survey which posts the percentage of patients who have rated their recent hospital stay (among other variables) as 10/10. Monthly tracking since November 2008 demonstrates the target vs. actual results which have been just below or just meeting the target since the inception of the program.

Public Health
In Saskatchewan, the public health program is run with the partnership of the province’s health regions and Saskatchewan Health. Saskatchewan Health is responsible for the policy, legislation, and programs of the public health surveillance. Saskatchewan currently has programs geared towards education and support for adopting healthy lifestyles. Childhood obesity and nutritional health are two main focuses of the provincial health promotion strategy.

Home Care and Community Care
Saskatchewan’s home care program is aimed to assist people to remain at home for as long as possible. It also prevents unnecessary hospital admissions and facilitates earlier discharge. Funding is provided directly to individuals or their guardians by the health region. The individual then arranges and manages their support services. Services are provided on the basis of assessed need and are available for individuals with acute, palliative and supportive care needs. Home care fees are established based on income.

Personal care homes, another care option, are privately owned and operated, but are government licensed and monitored. The type of care provided in personal care homes varies based on the home, but generally accommodates individuals with lighter care needs. There are homes organized to provide care for persons with heavier needs, such as palliative care. Residential fees for accommodation in personal care homes are not subsidized with government funding.

Primary Health Care

Saskatchewan's primary health care functions on the concept of four pillars: teams, access, healthy living and information. Primary health care functions with an interdisciplinary team focus. Access is provided through the system of primary health care programs and services, which work to address the broader community needs and to create ties with all stakeholders.

In the Action Plan for Saskatchewan Health Care, the province outlines plans for reforms in primary health care, including the establishment of health care networks. These networks will exist within all 12 of the RHAs, and will offer a full range of primary health care services. They are also moving towards an interdisciplinary team focus, including the inclusion of family doctors on primary health teams on a voluntary basis. In February 2006, there were 37 interprofessional primary health care teams, addressing the needs of 23 percent of the population. The 10 year strategic plan had outlined plans to have the entire population having access to quality primary care services by 2010.

Quality

In 2002, Saskatchewan developed the first provincial Health Quality Council. It is an independent organization with a mandate to monitor, evaluate and provide recommendations about health care issues in the province. The HQC has implemented an innovative patient satisfaction tool that posts results of the rating of a variety of patient experiences each month. In response to a provincial-wide public consultation process, the HQC developed a strategic plan for 2011 through to 2014. There is an overwhelming desire for more ‘quality’ in health care including such things as better navigation through the system. One key strategy for improving quality in health care is the continued development of a Quality Improvement training program. The HQC has created a program to develop ‘Champions’ of quality care methods. This plan includes a clinical practice initiative with physicians and establishment of a Chair of Quality Improvement Science and Interprofessional Health Education, at the University of Saskatchewan. In addition, HQC targets an increase the number of ‘improvement leaders’ who apply to take advanced training in quality methods and to achieve a goal of 1,000 workers in the health care industry who have completed basic training in quality methods. The HQC plans to provide funding annually and on a limited basis to enable health care organizations to access training programs for improvement in quality care. The HQC Strategic plan also includes strategies for improved job satisfaction in health care settings.
Manitoba

Manitoba is a prairie province 649,950 square kilometres and a population of 1.2 million people. The predominant ethnic groups are English, French and Aboriginal. The province is bilingual.

Manitoba Health, a department of the provincial government, oversees health care in the province. Service delivery, however, is the responsibility of eleven Regional Health Authorities. RHAs were implemented in 1997. Legislation determines the responsibilities of Manitoba Health as well as the RHAs.

Manitoba eHealth
The Manitoba eHealth is an organization, reporting to Manitoba eHealth Program Council that coordinates the work toward integration of health services through communication technology. Projects include eChart Manitoba and the EMR Adoption Program. The eChart Manitoba program represents EHR development in this province. To date, such things as medications dispensed at pharmacies in the program, immunization records, patient demographic and personal health information and diagnostic tests are available to authorized health care providers. The EMR Adoption program facilitates the implementation of EMR in primary health care by providing physicians with up to 70% of the cost of adding EMRs in their practices.

The Physician Integrated Network (PIN) is an organization focusing on fee-for-service physician groups with the goal of facilitating ‘systemic’ improvements to primary health care. Remuneration as a PIN member includes both fee-for-service as well as Quality Based Incentive Funding (QBIF) which are payments made based on the achievement of clinical targets. PIN recruited physician groups to be demonstration sites in 2008 and has had a program of recruitment since that date.

Collaborative Practice
The Primary Care Branch is working with partners with Manitoba Health and Healthy Living, along with other stakeholders to support the development of collaborative practice in Manitoba.
Quebec

The province of Quebec is in central-east Canada. It is the only province with a single official language and predominantly French culture. Quebec is Canada’s largest province by land mass with the second largest population of 7.8 million. The province has long relied upon natural resources as the backbone of the economy, however, growth of aerospace, biotechnology and pharmaceuticals have contributed to diversity.

Description of Health System

Health and social services were brought together under the same program in 1971. This allows the province to respond to all the health and social needs of an individual. This feature sets Quebec apart from any other Canadian province.

The health and social services system is managed at three levels: the central (or provincial), regional and local levels. The ministere de la Sante et des Services sociaux (MSSS) is responsible for establishing policy and evaluating performance of the health and social systems. At the regional level, the health and social services agencies are responsible for coordinating the establishment of services in their areas. Local health and social services networks work to create partnerships within the local environment. The health and social services centres strive to achieve integrated provision of services ensuring access, case management, coordination of services for a community.

Health and social services centres (CSSSs) were created from the merging of local community services centres (CLSCs), residential and long-term care centres (CHSLDs) and, in most cases, a hospital centre (CH). These centres:

- provide the population of a local territory with services of a preventive, evaluative, diagnostic and curative nature, rehabilitation, support and public institutional residential services;
- coordinate the services offered by all providers working in the local territory;
- offer general and specialized hospital services (emergency, outpatient services, local medical specialties and basic diagnostic facilities). Residential and long-term care centres

Long-term care and Hospital services are incorporated under this umbrella. So too are Rehabilitative services which include a wide range of care from:

- specialized health services and social services to persons suffering from a physical impairment (hearing, vision, language and speech or motor function);
- mental health services or those with pervasive developmental disorder
- alcoholism and addiction.

Toward Seamless Patient Care

**Access**
Quebec has two significant programs that relate to access to health care services. In 1997, the province introduced a universal prescription plan. This plan is a partnership between the provincial government and private insurers that offers drug coverage to all residents of Quebec regardless of age, income or health status. It is the only province that offers a universal prescription plan.

The success of a legal challenge led to the establishment of private medical clinics, including private pay family practices. Regardless of this option, the majority of specialists and GPs continue to work exclusively in the public health care system.

Quebec is currently trialing the Quebec Electronic Health Record. This is a pilot project including eight pharmacies and three medical clinics, where the EHR will be used to help health care providers and citizens navigate the health care system. Based on the results of this trial, the EHR will gradually spread to other regions of Quebec. Once it is fully functioning, the Quebec EHR will serve all 7.5 million Quebeckers and all authorized health care professionals will be able to access it accordingly.

**Health Expenditures and Efficiency**
The health and social services sector is the main budget priority of the Quebec government: 43% of the 2006/2007 budget, or $22.1 billion, was allocated to health and social services. As a reminder, the budget includes the cost of both the health and social services sector.

**Primary Health Care**
The adult population in Quebec is served by primary care clinics that have adopted different organizational forms—professional or community models. Professional models are privately governed, and their objective is to respond to the medical needs of the individual who comes into the clinic, or the needs of the regular users of said clinic. The community model includes organizations integrated into public health care institutions and their goal is to improve the health of the population in a given region. Patients may also benefit through care from a GMF. This is a group of physicians collaborating with nurses and public network to provide better access to after-hours care, benefit the care of an interprofessional team and reduce fragmentation through the partnership with the public health/social network.
Nova Scotia

Description of Health System

Nova Scotia’s health services are delivered by nine District Health Authorities (DHAs) and the Izaak Walton Killam (IWK). The Department of Health provides funding for the health care system to the DHAs and IWK, who are responsible for service delivery and resource management. These health authorities deliver health care services to residents and are responsible for all hospitals, mental health services, community health services and public health programs in their district. The Department of Health is responsible for Physician Services, Pharmaceutical Programs, and Emergency Health Services. The Nova Scotia Department of Health, the district health authorities and the IWK have a shared mission to work together to “empower individuals, families, partners and communities to promote, improve and maintain the health of Nova Scotians through a proactive and sustainable health system.

The Department of Health and Wellness sets strategic direction for the health system through:

- Direction and support of health transformation initiatives
- Funding to district health authorities and provincial programs, including ground and air ambulance programs
- Development and support of provincial programs and initiatives
- Administration of continuing care services, the Senior’s Pharmacare Program and the Family Pharmacare Program
- Policy, legislation and standards

Quality

In 2007, Nova Scotia conducted a comprehensive, Province-wide operational review. This review was to confirm that resource allocation is reflective of the health needs of Nova Scotians; to enable greater integration and consolidation of services and programs; and to make recommendations for change that ensures a sustainable health care system. This review resulted in a final report which listed 103 recommendations and included an implementation roadmap for change—incorporating these recommendations for increased quality of health care.

In the 2010/2011 Department of Health Statement of Mandate, the Nova Scotia Minister of Health stated that they have a robust and responsive health care system, but at the same time, there is much more to be done to keep up with the demands and needs of the population. The mandate outlined the government commitment to improve the health care system through provincial policy. The mandate outlined three overarching goals: timely access and high quality safe care, value for money and improved health of Nova Scotians. The goals for improvement, along with outcomes, performance measures,

targets and strategies to achieve those targets for each goal were listed. Some of these goals and one corresponding strategy include:\(^{48}\)

- Reduced surgical wait times; development of the Surgical Care Network.
- Timely access to radiation therapy: MOU with Atlantic Provinces for provincial transfer of patients
- Improve quality of health care: establish Quality Advisory Council
- Comprehensive patient information available to health care providers: Support EMR implementation and collaborate with Canada Health Infoway.
- Enhance mental health services: Host Atlantic Mental Health Summit

**Long-term Care**

Seniors are the fastest-growing segment of the Nova Scotia population, with 8100 Nova Scotians celebrating their 65\(^{th}\) birthday in 2005. Nova Scotia has the oldest population in Atlantic Canada and the third oldest in Canada. By 2021, the life expectancy in Nova Scotia is projected to increase to 78.2 years for men and 83.9 years for women.

Currently, Nova Scotia’s continuing care system provides home care, self-managed care, long-term care, adult protection, care coordination and ongoing care management for people with physical and mental health needs. The Nova Scotia government has created a Continuing Care strategy to reorganize existing and create new services to provide programs and services such as home care, respite and palliative care, in homes and communities. The focus of this strategy is to focus care into the home and the community, as it is the most economical, has the greatest flexibility to diverse needs and offers the highest level of independence and quality of life.

Nova Scotia has three types of long-term care homes available, depending on the level of support required. Nursing homes (high level of nursing care), residential care facilities (supervisory or personal care) and community based options (similar to RCFs but they serve a maximum of three individuals per housing unit). CBOs and RCFs are owned and operated by private individuals or organizations, but operate under the jurisdiction of the Department of Health or the Department of Community Services. All homes operating under the Department of Health are inspected by departmental staff to ensure they are operating in compliance with the *Homes for Special Care Act* and Regulations.

All forms of long-term care are paid for jointly by the Nova Scotia government and the long-term care residence. The resident is expected to pay for accommodation charges and personal expenses, while the government pays for health care costs, some transportation fees and specialized equipment.

Home Care and Community Care
The Continuing Care Branch of the Department of Health provides access to home care to support individuals with identified health and supportive care needs. Although most care and support is for the longer term, the program is also able to address short-term needs. Home care programs provide support to approximately 23,000 Nova Scotians. The Continuing Care branch has offices in each health district in the province, and home care services are coordinated through a single phone number. The initial client data and assessment information allows staff to prioritize the service request. In Nova Scotia, the DOH has arrangements with a number of external service providers to deliver home care services to clients.

Primary Health Care
Primary Health Care in Nova Scotia has focused on the importance of collaborative interdisciplinary teams within local communities. The Department of health and wellness encourages the development, integration, and support of interdisciplinary teams through the use of a series of continuing education modules for health care providers entitled ‘Building a Better Tomorrow Together’. Primary health care in Nova Scotia also includes collaborative teams—dynamic teams of providers that bring separate and shared knowledge together to support a comprehensive range of high quality, effective health-care service.

Primary health care teams in Nova Scotia are typically comprised of a family physician and either a nurse practitioner or a family practice nurse. The teams may include other disciplines such as a dietician, social worker, community mental health nurse, physiotherapist, occupational therapist of pharmacists. Remote clinics may be comprised of a nurse practitioner with an off-site collaborating physician. There has also been the implementation of ‘Telecare’ which provides Nova Scotians with 24/7 telephone access to Registered Nurse. Nova Scotia Health set a target of 21% of the population to have access to a Primary Health Care Team in 2011. This will be accomplished through establishment of additional PHC Teams and augmenting numbers of interprofessional health care providers including family practice nurses and nurse practitioners.

Midwifery is also being gradually introduced into Nova Scotia. Three DHAs are taking part in the use of model sites where midwifes will be working within the primary health care team to their full scope of practice. This is with the plan to have midwifes functioning in all DHAs in the near future.

To address health disparities, targeted funding has been allocated to teams working with specific populations such as Aboriginal, homeless, and gay, lesbian and transgendered people. Different programs are being established to support individuals with chronic disease. There is currently a program entitled ‘Your Way to Wellness’ which is offered to individuals with chronic conditions. It allows individuals to attend a workshop with a support person of their choice. These workshops aim to assist those living with chronic conditions to develop skills to maintain and active and fulfilling life.
New Brunswick

Description of Health System
In 2008, New Brunswick transitioned from eight Regional Health Authorities (RHAs) to two. This change is in order to ensure that clinical care is delivered uniformly, effectively and efficiently. The two new RHAs have a broad mandate to deliver health services within New Brunswick. Each RHA has a Board of Directors appointed by the Minister of Health. The chairs and other members of the boards are compensated.

Access
The New Brunswick Prescription Drug Program (NBPDP) is a provincial program which promotes optimal drug therapy by developing and managing programs for eligible residents to gain assistance with the cost of drugs. Select groups including seniors, nursing home residents, clients of the Department of Social Development, and persons with specific illnesses.

Wait times in New Brunswick show a gap in service when compared to the Canadian benchmarks. For January to March 2009, the closest to these benchmarks were Coronary Artery Bypass Graft (CABG) surgery for Level 1 individuals, having 77% of the surgeries completed by the benchmark time of 2 weeks and High-Risk Cataract Surgery, also at 77% by the benchmark time of 16 weeks. The lowest rate is CABG surgery for level 2 individuals. The benchmark for this surgery is two to six weeks, and New Brunswick was at 39%.

New Brunswick is working towards an Interoperable Electronic Health Record (iEHR) which will link patient information across the entire health care system, including hospitals, doctors’ offices, public health, mental health, allied health, pharmacies, laboratories and diagnostic imaging. It will allow health care providers access to timely, accurate, comprehensive province wide patient information at anytime and from anywhere.

Hospital/Acute Care
The Hospital Services Branch is responsible for ensuring the availability of appropriate, quality hospital services for the residents of New Brunswick. Acute care is comprised of primary, secondary and tertiary care services delivered by the two Regional Health Authorities. Services are delivered in 51 facilities throughout the province. Hospital Services are delivered in collaboration with other health care services within the region and inter-regionally, and function as an integral component of health care.

Home Care and Community Care
The New Brunswick Extra-Mural Program provides comprehensive home health care services to New Brunswickers in their homes and in their communities. This program provides a comprehensive range of services for individuals of all ages for the purpose of promoting, maintaining, or restoring health within the context of their daily lives. This program also provides palliative care services. This program requires an application and the ability to meet certain program criteria.
Toward Seamless Patient Care

Primary Health Care
New Brunswick’s Primary Health Care Framework is based on four pillars:49

- Teams: teams of health care providers working with individuals to improve care;
- Information: information is coordinated between health care providers;
- Access: access is provided to the right care at the right time;
- Health Living: a focus on prevention and self-care to assist New Brunswickers in maintaining wellness through healthy living.

The Primary Health Care Branch provides ongoing support for the provincial development and implementation of community health centres, health service centres, a collaborative practice site, and a primary health care network. The unit is also responsible for providing a professional training model for primary health care providers as well as developing and leading the province’s Chronic Disease Prevention and Management Strategy, maintaining the provincial Tele-Care Service and developing a provincial injury prevention framework.

Tele-Care is a toll-free, province wide, 24 hours a day, seven days a week toll line which includes symptom triage and a poison information line. It also includes a Rabies information line, a West Nile virus information line, a Gambling information line, Organ and tissue donor screening line for health care professionals, a Sexually transmitted disease information line, and an Avian influenza line. Tele-Care uses the telephone to improve accessibility to health services and promote self-care.

Flavour of health care in PEI is different than most other provinces because PEI is very small compared to the other provinces both geographically and in population. In 2009 the population was 140,985 and the land mass is 5660 square kilometres. This smallest province is an island on the east coast of Canada, linked to the mainland by the Confederation Bridge. The capital is Charlottetown with a population of just over 32,000.

Description of Health System
In 2009, PEI created a separate legislative body known as Health PEI. This new entity responsible for the delivery of health services and is governed by an appointment board of directors. The goal in the creation of Health PEI is to allow for the development of more consistent standards, practices, and will improve access to health services to ensure that care is provided in the right place, at the right time, by the right person.

Access
Health PEI offers an ‘integrated community-based health system’. This encompasses a number of services including acute care, home care, public health, addictions and mental health. The PEI hospital network is made up of eight hospitals in total. There are two main referring hospitals that provide an increased range of in-patient, out-patient, community and specialty services. There are five community hospitals that provide acute care and community based services to rural areas. There is also a provincial in-patient psychiatric facility.

Health PEI: Hospital and Medical Services Insurance on Prince Edward Island
In 2006, the province announced a partnership between the Hospital Foundations and Canada Health Infoway to develop an Electronic Health Record. The EHR will allow health care providers in PEI hospitals and family health centres to have access to a patient’s complete medical record including medication history and medical test results. There is little information on progress to date in provincial data.

Public Health
Health PEI appears to take a nursing focus on public health—offering Public Health Nursing services and webpages—but no general public health information. Public Health Nursing provides services to individuals of all ages, with a health promotion, disease prevention, and disease detection and treatment focus. Services provided include:

- prenatal, postnatal and child health
- pre-school health
- school health
- family life education
- communicable diseases
- immunization

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Toward Seamless Patient Care

There are seven medical centres that provide public health nursing services within the province.

**Long-term Care**
The province of PEI has nine public nursing facilities and eight private nursing homes. This totals 997 long-term care nursing beds. The admission to a long-term nursing care facility is based on an assessment of needs and the requirement of services not provided through community care facilities.

**Home Care and Community Care**
PEI utilizes a Home Care program, which provides home care and support services to individuals living in the community. These services include assessment, care coordination, nursing and personal care, respite care, occupational and physical therapies, palliative care, community dialysis and adult protection services. Home care and support services are provided based on assessed need. These services are intended to maximize independence and allow the individual to remain in their home. There are six Home Care Offices which coordinate assessment and provision of services.

Community care facilities are licensed, privately owned and operated establishments. These types of facilities provide services such as housekeeping, meals, and assistance with grooming and hygiene. These facilities do not provide 24 hour nursing services. There are 38 licensed community care facilities in the province.

**Primary Health Care**
PEI utilized Family Health Centres, multidisciplinary teams that work to deliver primary care services to PEI residents. The individuals served by each family health centre must reside within a specific geographical area and be registered with a centre for primary care services. These centres provide a full range of services for chronic and acute illness. There are nine Family Health Centres in the province.

Patient Registry Program: The registry puts people new to PEI in touch with a family physician. As of Feb 2011, Health Jobs PEI advertised for four family physician positions and four medical specialist positions and 34 nursing positions which include registered nurses and licensed practical nurses which are predominantly based in hospital and long-term care. The PEI government launched the Medical Residency Program to promote recruitment of physicians to PEI as well as the Nurse Recruitment and Retention Strategy, the Nursing Student Summer Employment and Bachelor of Nursing Student Sponsorship programs to enhance nursing recruitment. Finally, there is sponsorship some allied health care providers on a limited basis.

Most recent, publically available Department of Health Annual report is for the year ending March 31, 2008. Thus, evaluation the new structure, Health PEI, is not yet available.
Newfoundland and Labrador

Newfoundland and Labrador is Canada’s was the last province to join Canada in 1949. In 2010 the population was 509,739. It is the largest Maritime province at 405,720km$^2$.

Description of Health System
Fourteen health boards govern the health services in Newfoundland and Labrador. Four are community based boards, known as Health Authorities, eight are hospital boards and two are a combination of hospital/community boards. The community boards are responsible for the delivery of community-based programs that address health promotion; disease prevention; child, youth and family services; community corrections; family and rehabilitative services; addictions; mental health; and continuing care. Hospital boards are responsible for hospital and long-term residential services.

Quality
The provincial government appoints members to the regional health boards who serve in a volunteer capacity and are accountable to the Minister of Health and Community Services. Most boards are responsible for health services in a specific region. Mechanisms are in place for public input into the health care needs and response.

Access
Several initiatives in the province address the issue of access to health care services and are targeted to vulnerable populations. The Health Aging Policy Framework commenced in 2007 with the mandate to enable seniors to live independently with optimal health. The ‘Age-Friendly Newfoundland and Labrador Grants Program’, starting in 2010, provides funding to incorporated municipalities, Inuit Community Governments and First Nations reserves and seniors’ organizations to support them in planning for an aging population and to help create age friendly communities. Finally, The Special Assistance program covers basic medical supplies and equipment for qualifying individuals living in the community.

The majority of individuals in the province are receiving timely access to radiation treatment, and cardiac bypass surgery. However, wait times for hip and knee replacements, high risk cataract surgery and breast screening fall significantly below the national benchmarks for certain health authorities within the province.

Health Expenditures and Efficiency
A range of health services are provided by the private sector. In Newfoundland and Labrador, about 21 per cent of health expenditures are in the private sector, the lowest of any Canadian province.

Hospital/Acute Care
Acute care services are provided in hospitals and health centres across the province. All facilities provide 24 hour emergency services, outpatient clinics, laboratory and x-ray services. Additional services provided vary according to location. These services range from general surgery, internal medicine and obstetrics, and specialized services such as cardiology and neurology. These services are publicly funded.
Public Health
Public health is primarily responsible for health protection of the population of Newfoundland and Labrador through the prevention and control of communicable diseases. This involves surveillance and reporting of disease, disease control programs including immunization, infection prevention and control and disease control recommendations.

The province has also introduced HealthLine, a dedicated phone line where residents can speak to an experienced, registered nurse 24 hours a day, 365 days a year.

Long-term Care
Long-term care services are delivered in both long-term care homes and in some hospital/health centres with combined long term and acute care services. All facilities provide 24 hour nursing care plus varying degrees of allied health services. Some facilities offer specialized programs and units for groups with special needs such as Alzheimer’s. Admission to a long-term-care bed is based on an assessment conducted by staff of the regional health authorities. A financial assessment is completed to determine if and how much the individual must pay. Individuals also have the option to be cared for in privately owned and operated personal care homes. These exist for individuals not requiring constant medical supervision, but instead may be served by visiting health professionals.

There are a variety of options for seniors including nursing homes, personal care homes and protective community residences. In order to be admitted to any of these homes, you much be assessed by the appropriate regional health authority staff. Protective community residences are specially designed and staffed homes that provide specialized care and accommodation for individuals with mild to moderate dementia.

Home Care and Community Care
In 2009, a record investment of $2.6 billion was allocated for health and community services. This was to enhance the quality of programs and services offered by the province and to reflect the changing needs of the population. This includes enhancing mental health and addictions, and improving long-term care and community supports. A new financial assessment process for home support was implemented and has eased the financial burden for individuals by reducing their contribution amount.

The Provincial government does offer a Provincial Home Support Program. This program provides personal and behavioural supports, household management and respite at the minimum level to maintain individual independence. These services are non-professional in nature and are delivered by an approved home support agency or by a home support worker hired by the individual or family. These home support services may be either purchased privately by an individual or subsidized from public funds.

Primary Health Care
In 2003, Newfoundland and Labrador made primary health care practice a focus of the delivery of health and community services. The level at which the most significant reform was to occur was in the health and community service system. Efficiency, access and integration of services were the overarching goals. This strategic plan set a target of 95 per cent of people within 60 minutes of 24/7 primary health care by 2007. The goal was to be achieved through a number of options, such as day clinics, visiting providers, telehealth, enhanced ambulance services, and selfcare/telecare.
Newfoundland and Labrador partnered with New Brunswick to create a self-care/telecare system that includes 24/7 access to a nurse who provides health information and advice. Improvements to emergency transportation were made.

Traditional physician family practice in Newfoundland and Labrador is being replaced by the primary health team. Primary health care teams are essentially a model of a medical home and provide an array of health care services. The teams are multidisciplinary and the health care providers are added as needed and available to ensure the right provider for each health care concern. The size of teams varies depending on demand and the size of the community served. Some teams in smaller communities have as few as four providers.

In Newfoundland and Labrador, health care teams are geographically defined; they serve all people within their given area. When an individual with a particular chronic condition requires care, collaborative are in place to allow providers to receive external support in order to adopt best practices and improve patient outcomes. The Department of Health and Community Services identifies five strategic priorities in their 2008–2011 Strategic Plan for Primary Health Care:

- long-term care and community support
- health and wellness (including mental health promotion)
- prevention and early intervention for children and youth
- chronic disease management, including mental health
- quality and safety within the health and community health services system

In 2006 the provincial government had a pilot project underway for an Electronic Health Record system and was also piloting an Electronic Medical Record System in two family practices. By 2008 the integration of an EHR and increasing the use of EMRs were priorities for the government in their efforts to promote the efficiency in accessing health care information. These electronic tools are part of the strategy of the provincial government in addressing the priority for appropriate chronic disease management. The government of Newfoundland and Labrador has created strategic plans to better integrate the health care system. There is progress with respect to primary health care reform and the use of information technology; however, there is little evaluative data of the health care systems and their ability to meet the needs of the population.

Comparison of Provinces with Ontario

Although there are differences in geographical size and populations, there are many similarities between the health care systems in Ontario and the remaining nine Canadian provinces. Review of provincial and territorial systems reveals that there are similar priorities across the country. Each jurisdiction is concerned about the sustainability of its health care system in the context of rising health care demands, particularly related to the aging population and chronic disease. All are concerned about accessibility to health care and the need to focus on prevention and improved health of the Canadian people. The priorities and strategic directions of the health care system in each jurisdiction are ultimately related to key elements that promote the seamless delivery of care in a system: strong linkages between community, hospital and long-term care that include appropriate and adequate numbers of health care providers and a comprehensive electronic health record system.

Most jurisdictions in Canada manage health care using a regionalized approach. In contrast, Alberta has created a provincial organization, Alberta Health Services (AHS), which provides health care services directly to Albertans. This one organization is Alberta's largest employer. AHS separates services into acute hospital, smaller hospitals and community services. The AHS has a five-year strategic plan and a five-year funding agreement with the Alberta government—2010 through 2015—that is the first of its kind in Canada. The funding helped eliminate an accumulated deficit, finance development of the long-term plan and begin implementing the strategies in the plan. Priority needs were determined after a comprehensive review of health indicators from existing data sets, recent internal and external reports, and qualitative studies. It is too soon to decide whether Alberta’s reorganization of health care delivery and administration will result in better integration of health care services and more seamless movement through health care in the province.

Electronic health records increase the seamless movement of patients through a health care system. Increasing the number of practices with electronic medical records is one step toward a virtual system. Ideally, each patient will have an electronic health record that can be easily accessed by multiple health care facilities, resulting in time savings and fewer medical and pharmaceutical errors. All provinces are implementing electronic record systems with varying success. Some provinces are expanding their e-health systems to include broader functions.

British Columbia implemented PharmaNet, a network that links all B.C. pharmacies to a central set of data systems. Every prescription dispensed in British Columbia is entered into PharmaNet, which is accessible to community pharmacies, hospital pharmacies, emergency departments and medical practices.

Manitoba e-Health is moving toward an electronic health record that will be a lifetime record for each person and can be accessed by health care providers from across the province through a secure code. Manitoba has also implemented the Picture Archiving and Communication System, which will allow the sharing of diagnostic images and reports (x-rays, ultrasounds, CT, MRIs) between health care organizations and the Provincial Home Care Scheduling Program. Monitoring of health human resources in the community sector will be enhanced with a standardized staff scheduling system and related payroll export for the home care program in all regional health authorities.
Ontario is not as advanced as other provinces in the implementation of EHR and EMR services, potentially as a result of recent political difficulties.

Integration of health care services is a common goal among Canadian provinces. Silos of care that do not provide patients and service providers with timely and seamless access to the information they require cause delays, unnecessary duplication and are a waste of taxpayer’s dollars.\footnote{British Columbia Ministry of Health Services (2010). \textit{2009-2010 Annual Service Plan Report}. \url{http://www.bcbudget.gov.bc.ca/Annual_Reports/2009_2010/hs/hs.pdf}} To improve the seamless delivery of health care stemming from primary health care, the coordination of all services in the health care system needs to be reviewed.

One concern in Ontario, as per the Ontario Health Council Report 2010, is the Alternate Level of Care (ALC) crisis. Seamless delivery of care across all sectors is impeded by the large number of people in hospital who are designated ALC. Ontario fares the worst (along with Newfoundland and Labrador) across the country for the percentage of hospital beds taken up by ALC patients (see Figure 14). Strikingly, in Ontario the statistics for 2007/2008 indicate that 27% of all ALC patients who were discharged home visited an emergency department within 30 days.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|c|}
\hline
\hline
\# of hospital beds used for ALC & 910 & 520 & 150 & 2,590 & 340 & 460 & 30 & 180 \\
\hline
% of hospitalizations ALC related & 5\% & 3\% & 2\% & 7\% & 5\% & 3\% & 2\% & 7\% \\
\hline
\end{tabular}
\caption{Figure 14. Scope of Alternative Level of Care by Province, 2007/2008}
\end{table}


The ALC bed crisis is a complex phenomenon related to the accessibility, affordability and level of home care services, among other factors. The health system’s inability to meet the needs of the aging population and the increasing number patients with chronic disease in the home environment will force an ever growing number of patients into the acute care sector and that this increasing patient load will jeopardize the sustainability of Ontario’s health care system.

One measure of the stability of the home care system is a stable workforce. The Canadian Home Care Association (2008) noted that there is a crisis across Canada in human health resources in home care. The structure of the home care system in Ontario has contributed to the HHR crisis. Ontario moved to a managed competition model for home care services in the late 1990s. “In the earlier cooperative model, not-for-profit organizations worked together to provide home health care in a shared market-funding agreement. In the managed competition model, these organizations and the new entrants (who are primarily for-profit health care organizations) compete in a bidding process for multi-year contracts.”\footnote{Denton, M., Zeytinoglu, I.U., Davies, S., & Hunter, D. (2006). The Impact of Implementing Managed Competition on Home Care Workers’ Turnover Decisions. In C.M. Beach, R.C. Chaykowski, S. Shortt, F. St-} Research has demonstrated that there was a strong
association between the implementation of managed competition and the turnover rate of workers in home care agencies. Approximately 53% of the subjects in the study had left their workplace in a five-year period. Only one quarter of the nurses stayed in home care while others found work in other health care sectors and 36% of the Personal Support Workers left the health care field altogether. The reasons for leaving were related to marketization of the home care sector, such as dissatisfaction with pay, hours of work, benefits, heavy workload and lack of support from their supervisors.46

The Canadian Home Care Association (2008) explored the integration of home care with other health care sectors. Initiatives integrating home care and primary care are occurring across the country, with Ontario leading the way. Examples include The Flo Project, which is meant to expedite moving acute care patients back into the community, and the Community Referrals by Emergency Medical Services (CREMS) program, which focuses on how emergency departments are used and preventing inappropriate hospital admissions. Ontario also boasts programs that coordinate services for chronic care patients, cancer treatment programs and pediatric home care programs.54

A number of seemingly simple issues, that are in fact complex to resolve, make integrating home care with primary health care difficult. The following challenges have been identified: 47

- Reimbursement models that support management of symptoms and do not support prevention
- Regulations that prescribe how care is to be provided (i.e., in person-visits only)
- Ownership of the patient record—there are organizational and professional guidelines that need to be reconciled to eliminate duplication
- Technology—the absence of technology to support the timely sharing of information; and/or the presence of poorly developed information technology systems that simply reflect a paper process
- Professional resistance
- Physical space in which to work and meet
- Geography
- Assumptions about others that are based on misinformation
- Absence of a framework—sometimes integration occurs because colleagues make it work but it is not sustainable or transferable

Hilaire, and A. Sweetman, Eds. Health Services Restructuring: New Evidence and New Directions, Kingston: John Deutsch Institute, Queen’s University.

With the exception of Canadian territories, there are similar health outlooks for people across the provinces:

**Life expectancy at birth, by region, 2005 (years)**

- CAN: 80.4
- NL: 79.2
- NB: 79.8
- NS: 79.3
- PE: 78.8
- QC: 79.8
- ON: 80.4
- AB: 69.7
- SK: 78.0
- MB: 79.3
- BC: 80.0
- YT/NU: 75.3

**Excellent or very good self-rated health, by region, 2005 (age-standardized percent)**

- CAN: 66
- NL: 67
- PE: 63
- NS: 64
- NB: 62
- QC: 65
- ON: 66
- AB: 66
- SK: 65
- MB: 67
- BC: 54
- YT: 59
- NT: 66
- NU: 48
Mortality from leading circulatory diseases and cancers combined, by region, 2004
(per 100,000 people)

<table>
<thead>
<tr>
<th>Region</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>248</td>
</tr>
<tr>
<td>NL</td>
<td>276</td>
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<tr>
<td>PE</td>
<td>272</td>
</tr>
<tr>
<td>NS</td>
<td>280</td>
</tr>
<tr>
<td>NB</td>
<td>260</td>
</tr>
<tr>
<td>QC</td>
<td>263</td>
</tr>
<tr>
<td>ON</td>
<td>241</td>
</tr>
<tr>
<td>MB</td>
<td>258</td>
</tr>
<tr>
<td>SK</td>
<td>230</td>
</tr>
<tr>
<td>AB</td>
<td>235</td>
</tr>
<tr>
<td>BC</td>
<td>231</td>
</tr>
<tr>
<td>YT</td>
<td>276</td>
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<tr>
<td>NT</td>
<td>263</td>
</tr>
<tr>
<td>NU</td>
<td>476</td>
</tr>
</tbody>
</table>

Excellent or very good self-rated mental health, by region, 2005
(percent)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>73</td>
</tr>
<tr>
<td>NL</td>
<td>75</td>
</tr>
<tr>
<td>PE</td>
<td>75</td>
</tr>
<tr>
<td>NS</td>
<td>71</td>
</tr>
<tr>
<td>MB</td>
<td>68</td>
</tr>
<tr>
<td>QC</td>
<td>75</td>
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<tr>
<td>ON</td>
<td>73</td>
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<td>MB</td>
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<tr>
<td>SK</td>
<td>71</td>
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<td>AB</td>
<td>73</td>
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<tr>
<td>BC</td>
<td>71</td>
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<tr>
<td>YT</td>
<td>74</td>
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<tr>
<td>NT</td>
<td>72</td>
</tr>
<tr>
<td>NU</td>
<td>64</td>
</tr>
</tbody>
</table>

Ottawa: Statistics Canada, 2008
Phase Two—Expert Panel Interviews

The second phase of this project included obtaining feedback about the report from a variety of academics, policy-makers, administrators, economists, researchers and health care providers in Ontario. Efforts were made to invite experts from a variety of geographical, cultural and sectoral backgrounds. The intent was to draw on the professional and personal experiences of the panellists to allow for comment on the international and provincial information as it could relate to the delivery of seamless health care in Ontario.

Individuals were sent an email that outlined the purpose of the project and an invitation to participate in an audiotaped interview. On acceptance of this invitation, the participant was emailed a copy of the draft report for Phase One along with a list of sample questions and a consent form. Copies of the documents were also mailed. Individual interviews were scheduled and then conducted by telephone or face-to-face as time allowed. The methodology of the interview portion of the project received ethical approval from Laurentian University’s Research Ethics Board.

Expert Panel

Michel Bédard, PhD
Canada Research Chair in Aging and Health
Director, Centre for Research on Safe Driving
Professor, Master of Public Health Program and Northern Ontario School of Medicine, Lakehead University
Scientific Director, St. Joseph's Care Group

Ben Chan, BSc, MD, MPH, MPA
Inaugural Chief Executive Officer, Health Quality Ontario

Sheila Cote-Meek, PhD
Associate Vice-President, Indigenous Programs, Laurentian University

Richard Glazier, MD, MPH, CCFP, FCFP, ABMP
Senior Scientist, Primary Care Program Leader, Institute for Clinical Evaluative Studies
Associate Professor and Research Scholar, Department of Family and Community Medicine, University of Toronto

Valerie Jaeger, MD, PhD, CCFP
Acting Associate Medical Officer of Health, Niagara Region Public Health

K.V. Nagarajan, PhD
Investigator, Centre for Rural and Northern Research
Associate Professor, Department of Economics, Laurentian University

Ellen Rukholm, PhD, RN, FCAHS
Senior Research Fellow, Centre for Rural and Northern Health Research
Professor Emeritus, School of Nursing, Laurentian University
Along with a copy of the report for Phase One, the expert panellists were sent the following:

**Sample Questions:**
**Toward Seamless Patient Care Assessment of Health Systems:**
**International and Provincial Perspective**

The purpose of the interview is to compile recommendations about how to develop a more seamless health care system in Ontario. There is particular interest in recommendations that link primary health care to the other health care sectors. The questions are simply a guide for the interview; a prompt for your review and discussion.

1. Is there anything from the report that caught your attention?

2. In your mind, is there any aspect of these health care system models that seems to work well? What is your rationale?

3. Considering the health care systems and models internationally and across Canada, do you have any recommendations as to how primary health care in Ontario can be more aligned with other health care sectors (acute care, home care, public health, etc.)?

4. Is there anything that you would have liked to see in the review that would have helped you in responding to these questions?
Summary of Expert Panel Interviews

There are limitations in a report of this nature. The available data about health systems does not always reflect the quality of the health care being provided. At the same time, there is a wealth of information about specific areas within health systems. Data for this report was summarized and edited in order to maintain consistency of the data as much as possible for each jurisdiction. It is difficult to determine the extent to which a jurisdiction has achieved seamlessness in their health system. Despite the drawbacks, the snapshot provided about health care in each of the targeted jurisdictions, along with the professional experiences of the expert panellists, provides a framework for preliminary discussions about potential changes in health policy in Ontario.

The main concepts and recommendations from each interview were reviewed with respect to the reports from each targeted jurisdiction in phase one and summarized into a list of themes. Discussion related to specific areas of interest follows.

Themes

- Seamless health care delivery requires that the health care system be reorganized around the experiences of patients rather than the perspectives of health care providers.

- A comprehensive Electronic Health Record (EHR) system in Ontario is essential to providing seamless care across all health sectors.

- Seamless health care delivery requires real time, patient-focused, evaluative data.

- Considerations for restructuring health care governance in Ontario to promote seamless health care delivery could include integrating health and social services.

- Creating a department within the Ontario government that has authority over primary health care activities would provide a single entity that could issue directives (such as pandemic flu directives). It would also create a mechanism for accountability and evaluation in the primary health care sector.

- Multi-year funding commitments are essential for stability in health care programming.

- Addressing the unintended outcomes of physician funding models in primary health care will encourage stronger interprofessional health care teams.

- A strong commitment to the resuscitation of community health and long-term care is vital not only to seamless health care delivery, but also to the sustainability of the health care system as a whole.
Communication

There was a common belief among those interviewed that Ontario needs to build systems dedicated to aligning all health care sectors to achieve more seamless delivery of services. One vital component of this process is communication and there is currently no forum for communication between professionals in the various health care sectors. Interprofessional teams or physician practices provide primary health care. If a person is admitted to hospital, they are most likely cared for by a specialist or hospitalist. If that same patient requires home care or long-term care services, they are directed to other separate agencies. Often, there is little or no communication among these sectors. One panellist described a situation that occurs often. A person is referred to a specialist who does not have access to the results of diagnostic tests ordered by the primary health care provider. The consequence is long delays while the test results are located and the appointment is rescheduled, or the test may even need to be repeated. Another panellist described an admission to hospital and follow-up with the primary health care facility that had no information or even knowledge about the hospital admission.

A second theme that arose from the interviews was the need for a comprehensive system of electronic health records. Full and effective use of such records will provide a baseline of communication among the health care sectors about an individual’s health history. Records from hospitals, diagnostics, pharmacies, home care services and more will easily be viewed by a health care provider and patient alike. An EHR is a fundamental step in bridging health care services. This system will create efficiencies, decrease costs and, ultimately, create a more seamless and inclusive health care experience for the patient.

Evaluation

Another issue that the panellists noted is that our current system does not allow for easy access to real-time information. Evaluation data that is not included in the OHIP pool is extremely difficult to obtain, and OHIP only provides data about visits to physicians. Evaluative data from community health centres, public health units, nurse practitioner clinics, home care and care from any other member of a health care team is not easily accessible. Importantly, there is little evaluation data about the outcomes of patient care. Patient-centered, real time, evaluative data should be an essential element of any review of policy and programming. A seamless health care experience will not be realized until gaps can be identified and addressed in a timely manner.

Primary Health Care Governance

Several of the panellists felt that fragmentation in our current health care system is, in part, a reflection of the governance of the delivery of health care services. We discussed the organizational structure of the Local Health Integration Networks (LHIN). Each LHIN governs a large geographical territory with a large diversity of rural, remote and urban areas and immigrant, vulnerable and aging populations with various needs. Further, not all health care services are within the jurisdiction of the LHINs, so that they do not have full authority over the health system and interactions of the health sectors within their boundaries. To be truly effective in creating a seamless health care system, the LHINs may need to be restructured or given greater authority. There may be cost savings in a province-wide organizational structure, such as in Alberta; however, the needs of smaller and vulnerable populations may be lost. Restructuring could realign networks not along
geographical lines, but by specific populations and/or needs. For example, separate entities within a larger organization that address key strategic concerns, such as communities without hospital services, populations with less than 10,000 people, populations of new immigrants and English as second language.

A second idea was to take the Quebec concept and create a combined Ministry of Health and Community Services. It is well understood that socio-economic status strongly affects health and that there can be struggles in the coordination of services that overlap between health care and social ministries. The panellists had one strong caution regarding this concept. It was noted that historical areas of discrimination in either sector (health care or social services) must be addressed in policy and procedure prior to moving forward with such a fundamental change.

A gap in the system was identified—there is currently no one entity providing direction to primary health care services. For example, during the pandemic flu there was no one authority directing the primary health care sector. The panellists recommended the creation of a Primary Health Care Secretariat or a link of some kind between primary health care and government. Creating a department within the Ontario government that has authority over primary health care activities would provide a single entity that could issue directives (such as pandemic flu directives). It would also create a mechanism for accountability and evaluation in the primary health care sector.

Regardless of whether there is any change in the organizational system of health care delivery in the province, one tremendous advantage of Alberta Health Services that was identified by the panellists is the five-year funding model. A multi-year funding commitment will ensure continuity in programs and services over a period of time that will allow for appropriate and comprehensive evaluation and review.

**Funding Models and Remuneration**

The debate about private versus public health care has swayed strongly toward that of a public funding model. The general population staunchly supports publicly funded health care in all circumstances where there is a private/public option. This is true internationally and in the provinces that have won the right, through the courts, to allow an expansion of private health care services. For these reasons, the panellists did not explore the expansion of private health care options in Ontario as a means of increasing the seamlessness of health care delivery.

The effects of funding models on health care in Ontario arose in all interviews. Billions of dollars have been spent on primary health care in Ontario in the past decade. While there continue to be issues related to remuneration of health care providers, the opinion is that this investment in primary health care has created stability in human resources in health care in this province that was not present in the 1990s. This investment has created the foundation for a system that can truly work toward seamless delivery of care.

Although many physicians continue to work on a fee-for-service basis, the majority in primary health care are now remunerated by other means, such as capitation. Though incentives embedded within physician remuneration have had unintended and inefficient consequences, work is being done to address these issues. The trend toward alternative payment models for physicians is necessary. Panellists who discussed physician funding
models agreed that seamless care will be more easily realized if physicians are no longer paid based on a fee-for-service model.

A review of perverse incentives in physician funding is necessary. An example is primary health care incentives that are paid to physicians regardless of the fact that much of the work reflected in these incentives may now be completed by various members of an interprofessional team. This disparity creates divides among team members and does not promote seamless care. Removal or revision of primary health care incentives for physicians is recommended. If primary health care incentives are to remain a part of remuneration strategies in Ontario, then a team-based incentive program is preferable.

The community health and long-term care sectors are weak links in the health care system. Two outstanding issues are instability in human health resources in community health and inadequate resources for placements in long-term care. The effects of these issues are very high numbers of ALC patients filling emergency departments and hospital beds. Waiting times in ERs and for surgeries are affected. Also, those entering long-term care are often placed in facilities far from family and friends, thus losing important support systems. Nothing in the Ontario health care system will become seamless and efficient without a strong commitment on behalf of the government to address the challenges in these failing sectors.

Access to Health Care

Even with the new models of primary health care in Ontario and the enhancement of existing models, access to primary health care continues to be a key problem. Wait times to see a health care provider have not gone down. Only 53% of people say that they can see a doctor or a nurse the same day. The health care system is organized for the convenience of the health care provider instead of meeting the needs of the patient. Rather than creating new funding models, reorganization of existing practices will help increase access to health care services in a timely manner. Such things as open access, self-scheduling for appointments and extended hours of operation give the patient choices that will allow for greater availability and increase access. This in turn, will create a more seamless and less fragmented system.

The panellists were concerned about the health care experience of vulnerable people in Ontario. The current system often does not address their basic needs let alone offer seamless care. Given that many of the challenges experienced in primary health care are related to a patient’s economic standing, there is further value in a system that incorporates/integrates health care and social services. A primary health care system that functions in collaboration with social services will bridge the gap between the two and create more seamless delivery of care. However, there are certain pitfalls to this strategy, particularly with populations such as indigenous peoples, immigrants and mental health patients who have not always been served well by social services in the past. For the system to work, policies and procedures will need to be developed.

Patient Care Trusts

In Patient Care Trusts people receive a pocket of money for their health care needs and can choose where to spend it. Concerns arose related to health literacy. It is not clear whether the people of Ontario have the necessary understanding of the health care system to appropriately utilize funds from a Primary Care Trust. Situations may arise
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where people have spent money early in the year leaving them without service for the remainder of the year. This has the potential to widen the service gap rather than narrow it. Patient Care Trusts have the potential to move the health care system toward a patient-focus but will require careful planning and execution.

**Activity-Based Funding**

Activity based funding in acute care is essentially “fee-for-service” for the hospital sector. The funding model strives to create motivation for excellent care in hospital, with good outcomes and timely discharge. This type of funding relies heavily on a strong community, long-term care and primary health care sector. Ontario has a strengthened primary health care sector, but community health and long-term care are in crisis. As such, activity-based funding may not be feasible in Ontario at this time.

**Summary**

The expert panellists offer comprehensive reflections on the health system reviews they were provided and on possibilities for Ontario’s health care system. The commentary does not resolve to the challenges to seamless health care in Ontario. Rather it is a starting point for discussion about potential policy change to guide the province toward more seamless delivery of health care.
Operational Definitions

Access
Access is a reflection of people’s ability to utilize health services.

Activity Based Funding
Specified payment for individual services. An example is a hospital that receives a payment for each type of surgery performed rather than receiving a pocket of funding to deliver all surgeries in a given timeframe.

Availability
Availability is the physical presence or delivery of services that meet a minimum standard.

Capacity-Building
Capacity-building is ensuring that the tools, skills, staff and support systems are available to facilitate improvements in the health care system.

Client-Centred
Client-centred care is health care that is determined by the client’s needs and goals. This care may be delivered by individual health care providers, but is often a collaborative effort among those on interprofessional health care teams.

Continuity of Care
Ongoing care that is coordinated and seamless rather than care delivered through a series of fragmented episodes.

Coverage
Coverage is the proportion of people who need a specific intervention or service that receive it.

Electronic Health Record
A systematic collection of information about a person’s health that is stored in an electronic format and is accessible by authorized individuals across the health care system.

Electronic Medical Record
A computer-based patient chart used in an individual health organization.

Health
Health is not merely the absence of disease, but a state of complete physical, mental and social well-being. Health is not only a state of being of an individual, but can also be used to describe families, communities and countries.

Health Systems
A health system includes all the activities whose primary purpose is to promote, restore or maintain health. They identify three fundamental objectives of a health system:
- Improving the health of the population they serve
- Responding to people’s expectations
- Providing financial protection against the costs of ill-health (WHO, 2000)
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- Health Workforce
  The health workforce is “all people engaged in actions whose primary intent is to enhance health.” These human resources include those who provide direct clinical care such as physicians, nurses, pharmacists and dentists, as well as management and support staff. (WHO, 2000)

Managed Care
Any program that strives to contain health care expenditures in a competitive marketplace.

Managed Competition
A system of competitive bidding by independent groups for contracts to deliver of health care services in a market controlled by government.

Medical Home
A model of comprehensive primary health care that is patient-centred, well coordinated, continuous and incorporates an interprofessional team approach.

Out-of-Pocket Expenses
The calculation of out-of-pocket payments covers all household payments for health, including fees for outpatient visits and medicine, co-payments for hospitalization, other official fees for laboratory tests and diagnostics, and informal payments to providers for medicine and supplies.

Personal Health Budget
A health care program that gives individuals control over the allocation of funds used toward the health care services they require.

Self-Management
Self-management occurs when patients have the skills and are responsible and effective partners in their own health.

Stewardship
Stewardship has recently been defined as a “function of a government responsible for the welfare of the population, and concerned about the trust and legitimacy with which its activities are viewed by the citizenry.” (WHO, 2000)

Utilization
Utilization is often defined as the quantity of health care services used.
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**APPENDICES: Summary Points: Health System Review**

<table>
<thead>
<tr>
<th>Country</th>
<th>Pop. Density Per km²</th>
<th>Life expectancy in years</th>
<th>Key Points from Health System Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>3.7</td>
<td>81.4</td>
<td>Federal legislation (Canada Health Act) and some federal responsibility for health care, but, with a few exceptions, the provinces are responsible for the delivery of health care services.</td>
</tr>
<tr>
<td>Australia</td>
<td>2.9</td>
<td>81.4</td>
<td>Complex private/public system. Split responsibility for health care between federal government and states. Health care reform between all but one state and federal government: National Health and Hospitals Network. In 2008 implemented a national program of Activity Based Funding for hospitals.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>400</td>
<td>79.7</td>
<td>2006 Health Insurance Act: all people have at least basic health coverage.</td>
</tr>
<tr>
<td>Singapore</td>
<td>7,126</td>
<td>81.4</td>
<td>Medisave: A national savings scheme whereby individuals put aside part of their income to meet hospitalization expenses. Medishield: catastrophic illness insurance scheme. Medifund: government funded ‘safety net’ to ensure that no one is denied access to healthcare.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>385</td>
<td>77.7</td>
<td>National Health Service funded through taxation. Piloting Primary Care Trusts. Primary Care Groups established to provide primary health care.</td>
</tr>
<tr>
<td>United States</td>
<td>33.7</td>
<td>78.7</td>
<td>Health care system funded predominantly through private insurance. More than 90% of health insurance is purchased through employer. 50 million Americans do not have health insurance. Copayments are common practice. “Obama care”, the Affordable Care Act, is meant to ensure increased access to basic health care.</td>
</tr>
<tr>
<td>Ontario</td>
<td>14.29</td>
<td>80.7</td>
<td>Health care delivery through 14 regional authorities (LHINs) and MOHLTC. Primary health care models include CHCs, FHTs, AHACs, NPLCs. The Excellent Care For All Act, 2010, intended to improve the quality of care for Ontarians. ALC and community care crisis.</td>
</tr>
<tr>
<td>British Columbia</td>
<td>4.84</td>
<td>81.2</td>
<td>Ministry of Health Services governs the delivery of care by 6 Regional Health Authorities. Comprehensive e-health strategy. Private clinics. 2007 Primary Health Care Charter has led to the development of Integrated Health Networks.</td>
</tr>
<tr>
<td>Alberta</td>
<td>5.76</td>
<td>80.3</td>
<td>Alberta Health Services (AHS), established in 2008, province-wide organization manages and delivers all health care. AHS created a five-year strategic plan and a 5 year funding agreement for health care.</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Province</th>
<th>Score</th>
<th>Status</th>
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<tbody>
<tr>
<td>Alberta Netcare</td>
<td></td>
<td>Moving forward with implementation of EHR in the province.</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>1.75</td>
<td>12 Regional Health Authorities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘Birthplace of Canadian Medicare’. Moving towards a third-Party delivery for certain surgical and diagnostic imaging.</td>
</tr>
<tr>
<td>Manitoba</td>
<td>2.21</td>
<td>Manitoba Health oversees health care which is delivered through Regional Health Authorities.</td>
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<tr>
<td></td>
<td></td>
<td>Manitoba e-Health moving toward comprehensive EHR/EMR system.</td>
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<td>Physician Integrated Network (PIN) moving toward quality improvements in primary health care.</td>
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<tr>
<td>Quebec</td>
<td>5.76</td>
<td>Combined MOH and Ministry of Social Services.</td>
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<td></td>
<td></td>
<td>Private clinics legalized (although vast majority of physicians continue to work in public sector).</td>
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<td></td>
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<td>Universal prescription coverage.</td>
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<td></td>
<td></td>
<td>Health and Social Service Centres merge local community social services, residential and long-term care centres and hospital centre.</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>10.5</td>
<td>In 2008, transition from 8 Regional Health Authorities to 2. Ensures that clinical care is delivered uniformly, effectively and efficiently.</td>
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<tr>
<td></td>
<td></td>
<td>Primary Health Care Branch provides support for CHCs, health service centres, collaborative practice site and PHC Network.</td>
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<tr>
<td></td>
<td></td>
<td>NB has a Chronic Disease Prevention and Management Strategy.</td>
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<tr>
<td>Nova Scotia</td>
<td>17.63</td>
<td>Department of Health oversees health care and health services are delivered by nine District Health Authorities and the Izaak Walton Killiam (IWK).</td>
</tr>
<tr>
<td></td>
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<td>2010-2011 Department of Health Statement of Mandate outlined three goals: timely access and high quality safe care, value for money and improved health of Nova Scotians.</td>
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<td>Health PEI (2009) responsible for development of consistent standards, practices and appropriate provision of care.</td>
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<tr>
<td>Newfoundland</td>
<td>1.36</td>
<td>14 boards (Health Authorities, Hospital and Community Boards) govern and deliver health services.</td>
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<td>Primary Health Care strategic plan “95% of people within 60 minutes of 24/7 primary health care by 2007”</td>
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Canadian Perspective and International Comparisons

WHAT PARTICIPANTS VALUE:

International comparisons on what participants value can help to highlight the areas where we can learn from other countries, and where others can learn from Canada. Data has been provided from what participants value from four perspectives: how Canadians rate the health care system, safer care, the importance of patient-provider interactions, and helping patients help themselves.

HOW CANADIANS RATE THE HEALTH CARE SYSTEM:

A recent document of the Health Council of Canada (November 2010) published selected results of the 2010 Commonwealth Fund International Health Policy survey which provides insights into the general public’s views of health system performance. They focused on the areas of access to care, affordability, timeliness and coordination of care.

They report the following:55

- Canadian confidence in the health care system has been improving but there are still gaps in important areas.
- Canadians are the biggest users of emergency departments for conditions that could have been treated by their regular care provider.
- Cost also is a barrier to access and treatment, especially for prescription drugs. There are also other costs, such as travel to medical appointments and services required to support the diagnosis or treatment that is not covered by provincial health-care insurance.
- Canada ranks lowest of all the countries when it comes to people’s ability to get an appointment on the same or next day.
- Canadians also fare poorly in how long they have to wait for an appointment with a specialist or to get a diagnosis.
- One out of five Canadians say their time has been wasted due to poorly organized or poorly coordinated care.
- More than one in 10 say medical records were not available for a scheduled appointment. Canadians report that their specialist was missing basic information from their regular doctor.
- About one-quarter of those who saw a specialist say their regular doctor did not seem informed or up-to-date on the care they had received from the specialist.

SAFER CARE FOR SICKER CANADIANS:

Results of a recent survey conducted by the Health Council of Canada (2009) on providing safer care for sicker Canadians are displayed below:56

At least half of Canadians felt that fundamental changes are needed to improve the health system, with 15% reporting that the health system needs to be completely rebuilt.

14% of Canadians rated their health care as poor to fair

Nearly one in seven (14%) of sicker Canadians surveyed said they had experienced a medical error in the past two years.

Those sicker Canadians who experienced errors in their care in the last two years rated the quality of their care significantly lower (average rating of 2.8 out of five, or in the `fair` to `good` range) than those who did not report experiencing an error (average 3.9, or `good very good`)

When asked if they had received incorrect test results or someone else’s results by mistake, 5% of Canadian participants indicated that this had happened to them.

Canadians who received the wrong test result rated the quality of their health care as significantly lower (average of 2.6 out of five) than those who did not experience this mistake (average 3.8)

When asked if they had received the wrong medication or dosage, 9% of sicker Canadian respondents reported that they had.

Canadians who had experienced this error rated the quality of their health care significantly lower than those who had not experienced this error (averages of 3.2 vs. 3.8 out of five, respectively).

When sicker Canadians were asked about the consequences of the mistake they experienced, 53% reported it created no problem.

Among Canadians who had been hospitalized in the past two years, 6% reported developing an infection while in hospital.

Canadians who developed an infection while hospitalized rated the quality of their health care significantly lower (an average of 3.3 out of five) than those who did not acquire an infection (average rating of 3.9)

Among the sicker Canadians with chronic illness, 29% said they experienced a medical, medication, or test result error, and 83% of these errors happened outside of a hospital stay.

These survey results suggest that these fundamental changes would need to include effective policies around patient safety and specific strategies to reduce errors, both in hospitals and community care settings.

**IMPORTANCE OF PATIENT-PROVIDER INTERACTIONS IN CHRONIC ILLNESS CARE:**

The Health Council of Canada (2010) zeroed in on the responses from Canadians with a regular doctor or clinic, and with common chronic health conditions – diabetes, heart disease, high blood pressure, asthma, lung disease, cancer, and mental health problems such as depression, for their analysis of the survey data. Everyone included in the

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results had at least one of these conditions, and two out of every three respondents have two or more chronic illnesses.\textsuperscript{49}

- People whose primary care includes the two basic elements by which respondents were grouped for the analysis (their doctor knows their history and helps to coordinate their care) were more likely to report having a nurse or nurse practitioner regularly involved in their care. On the other hand, it is reported that it is much more common not to have this additional professional support.

- Canadians in poorer health who have a regular doctor or place of care – where their medical history is known and care is coordinated with specialists – report that their health care is safer, more supportive, more appropriate and better quality, compared to similar patients whose regular doctor does not provide one or both of those basic elements of good primary care.

- Canadians with chronic health conditions were more likely to rate their care as “excellent” if their regular doctor knows their history and helps to coordinate their care. These respondents were also more likely to report the following and other positive outcomes:
  - better monitoring of their chronic conditions,
  - more support to help them manage their chronic conditions at home,
  - well-organized care,
  - better access to care, and
  - fewer errors in their care

- Compared to Canadians with a regular doctor but without those basic elements of good care, people whose regular doctor knows their history and helps to coordinate their care were:
  - more likely to get recommended routine tests to monitor their conditions, such as – for diabetes patients – checks of their blood pressure, cholesterol, foot health, and hemoglobin A1C level,
  - more likely to receive support in caring for their chronic conditions, such as getting clear advice about symptoms to watch for (92\% vs. 50\%) and discussing their personal goals for their care (77\% vs. 51\%).
  - more likely to have all their medications reviewed by a doctor or pharmacist (69\% vs. 38\%), and more likely to have a nurse or nurse practitioner regularly involved in their care (25\% vs. 16\%),
  - more likely to not feel their time was wasted because their care is poorly organized (80\% vs. 51\%) or not receive conflicting instructions about their care (90\% vs. 81\%),
  - more likely to get a same-day or next-day appointment to see their regular doctor (45\% vs. 24\%), and to get after-hours care (48\% vs. 33\%),
  - less likely to have experienced a medication error (9\% vs. 17\%) or medical mistake (11\% vs. 25\%), and
  - more than three times as likely to rate the overall quality of their medical care as excellent (37\% vs. 11\%).

In regards to receiving continuity of care, the following results are reported:

- Nearly one-third (31\%) of the sample reports lacking one or both of the basic elements (knowledge of medical history and support for care coordination) in their interactions with their regular doctor.

- One in five (20\%) felt their time was “sometimes” or “often” wasted because their care was poorly organized

- One in 10 (10\%) received conflicting instructions about their care
Toward Seamless Patient Care

- Close to one-third (31%) had *not* had all their medications reviewed in the past two years
- Less than half found it easy to see a doctor after hours (48%) or get a same-day or next-day doctor’s appointment (45%).
- Also about one in 10 said a medical mistake was made in their care (11%) or they were given the wrong dose or wrong medication in the past two years (9%).
- Just 43% of Canadian doctors (a low ninth ranking of 11 countries) said they have arrangements for patients to be seen on evenings and weekends, beyond sending people to a hospital emergency department.

Also of interest, they found that being with the same doctor for a long time does not guarantee that he or she will know your medical history and support coordination of your care. Of respondents who said their doctor knows their medical history and helps to coordinate care, 72% had been with their doctor for five years or more. But among those who were missing one or both of these elements in their interactions with their regular doctor, 56% had been with that doctor five years or more.

Canada ranks poorly on the international stage – only 37% of family doctors use electronic medical records, putting us last among the 11 countries surveyed.

The analyses of this data supports a recent Canadian review of research about the benefits of high-quality primary health care which concluded that, with a regular provider, patients receive more accurate diagnoses and more preventive care, need fewer tests and prescriptions, and make fewer visits to their doctor, specialists, and hospital emergency departments, all resulting in lower costs.

**HELPING PATIENTS HELP THEMSELVES: ARE CANADIANS WITH CHRONIC CONDITIONS GETTING THE SUPPORT THEY NEED TO MANAGE THEIR HEALTH?**

Many Canadians with chronic conditions such as diabetes and heart disease say they don’t regularly receive some types of support recommended to help them better manage their health. The survey suggests gaps in the delivery of self-management support. This support includes such things as asking patients about their goals in caring for their chronic conditions and referring them to community services that might help them reach those goals.

- Nearly two in five Canadian adults (39%) have at least one of seven common chronic health conditions (arthritis, cancer, chronic obstructive pulmonary disease (COPD), diabetes, heart disease, high blood pressure, and mood disorders including depression.
- Close to three-quarters (72%) of Canadians aged 65 and up report having at least one of the seven select chronic conditions. Older Canadians are more likely than younger age groups to have multiple chronic health conditions.
- Older Canadians are less likely to receive some kinds of self-management support, although they are the group most likely to have chronic health conditions. On the other hand, people with multiple chronic conditions are, regardless of their age, more likely to receive each type of support compared to those with just one condition.

It is also noted in the report that the level of self-management support appears low:
- About half to two-thirds of Canadians with one or more of the select chronic conditions are asked to talk about their goals in caring for their chronic disease.
- About two-thirds are shown that what they do to care for themselves influences their health condition(s).
- About one-quarter to one-third receive a written list of things they can do to improve their health.
- At best, one-quarter are referred to a specific group or class to help them cope with their health problems. About the same percentage are encouraged to attend a community program (such as a support group or exercise class) that could help them.
- At best, one-quarter to under one-half are told how their visits to specialists or other doctors help their treatment.

In support of these findings, the authors note that their partner CIHI also found that:
- 40% of Canadians with one or more of the seven select chronic conditions did not make a treatment plan with their health care provider during the past 12 months.
- 40% of patients with three or more chronic conditions reported that, during the past year, they rarely or never talked to a health care professional about specific things they could do to improve their health.

**Public-Sector Health Expenditure Per Capita in US Dollars 2008, Figure 15**

[Bar chart showing health expenditure per capita for various countries, with data points indicating expenditures ranging from $400 to $4,213.]
Private-Sector Health Expenditure Per Capita in US Dollars 2008, Figure 16