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Canada

Health system review

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Canada

Health System Review 2020

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European Observatory on Health Systems and Policies



The North American Observatory on Health Systems and Policies (NAO) is a collaborative partnership of interested researchers, academic organizations, governments, and health organizations. Through its work, the NAO promotes evidence-informed health system policy decision-making in Canada, Mexico, and the United States of America at the national and the subnational levels of government. Academic partners include the Institute of Health Policy Management and Evaluation at the Dalla Lana School of Public Health, University of Toronto, the National Institute of Public Health, Mexico, and the UCLA Fielding School of Public Health.

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in Europe. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues. This HiT is the result of collaboration between the NAO and the European Observatory on Health Systems and Policies. The Observatory is a partnership, hosted by WHO/Europe, with a secretariat in Brussels and hubs in London (at LSE and LSHTM) and at the Berlin University of Technology

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PREFACE

The Health Systems in Transition (HiT) series consists of country-based reviews that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each review is produced by country experts in collaboration with staff at the North American Observatory on Health Systems and Policies and the European Observatory on Health Systems and Policies. In order to facilitate comparisons between countries, reviews are based on a template prepared by the European Observatory, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe and other countries. They are building blocks that can be used to:

- learn in detail about different approaches to the organization, financing and delivery of health services, and the role of the main actors in health systems;
- describe the institutional framework, process, content and implementation of health care reform programmes;
- highlight challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different

sources, including data from national statistical offices, the Organisation for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF), the World Bank's World Development Indicators and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situations. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to info@obs.euro.who.int.

HiTs and HiT summaries are available on the Observatory's website (<http://www.healthobservatory.eu>).

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The Health Systems in Transition (HiT) profile on Canada was co-produced by the European Observatory on Health Systems and Policies and the North American Observatory on Health Systems and Policies (NAO) in Canada, which is a member of the Health Systems and Policy Monitor (HSPM) network. The NAO is a collaborative partnership of interested researchers, governments and health organizations promoting evidence-informed health system decision-making with academic directors in Canada, the United States of America and Mexico. The NAO partnership secretariat is hosted by the Institute of Health Policy, Management & Evaluation at the University of Toronto. The HSPM is an international network that works with the Observatory on Country Monitoring. It is made up of national counterparts that are highly regarded at national and international level and have particular strengths in the areas of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

This 2020 edition was written by Gregory P Marchildon and Sara Allin (NAO, University of Toronto). It was edited by Sherry Merkur (European Observatory on Health Systems and Policies). The basis for this edition was the previous HiT on Canada, which was published in 2013, written by Gregory P Marchildon and edited by Anna Sagan. The European Observatory on Health Systems and Policies and NAO are grateful to Robert S Bell (former Deputy Minister of Health and Long-Term Care in Ontario), Colleen M Flood (Director, University of Ottawa Centre for Health Law, Policy and Ethics), Kathleen Morris (Vice President, Research and Analysis, Canadian Institute for Health Information) and her colleagues at the Canadian Institute for Health Information, and Anna Maresso (European Observatory on Health Systems and Policies) for reviewing the report. The authors are also grateful to Michael Sherar, University of Toronto, for research assistance, and to Stephen Lucas (Deputy Minister) and his

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The HiT uses data available in November 2019, unless otherwise indicated. The HiT reflects the organization of the health system, unless otherwise indicated, as it was in June 2020. The European Observatory on Health Systems and Policies is a partnership, hosted by WHO/Europe that includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy; the French National Union of Health Insurance Funds (UNCAM); the Health Foundation; the European Commission; the World Bank; the London School of Economics and Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is composed of a Steering Committee, core management team, research policy group and staff. Its Secretariat is based in Brussels and has offices in London at LSE, LSHTM and the Berlin University of Technology. The Observatory team working on HiTs is led by Josep Figueras, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); Ewout van Ginneken and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Anna Maresso. The production and copy-editing process was coordinated by Jonathan North.

LIST OF ABBREVIATIONS AND ACRONYMS

ALC	alternate level of care
ALOS	average length of stay
BC	British Columbia
BMI	body mass index
CADTH	Canadian Agency for Drugs and Technologies in Health
CHA	Canada Health Act
CHST	Canada Health and Social Transfer
CHW	Committee on Health Workforce
CIHI	Canadian Institute for Health Information
CIHR	Canadian Institutes of Health Research
CMA	Canadian Medical Association
COPD	chronic obstructive pulmonary disease
CPAC	Canadian Partnership Against Cancer
CPHA	Canadian Public Health Association
ED	emergency departments
EHR	electronic health records
EMR	electronic medical records
EPF	Established Programs Financing
FFS	fee-for-service
FPT	federal, provincial and territorial
GDP	gross domestic product
GP	general practitioner
GRF	general revenue funds
HALE	health-adjusted life expectancy
HHR	health human resource
ICT	information and communications technology
IHD	ischaemic heart disease

IMG	international medical graduates
LHIN	Local Health Integration Networks
LTC	long-term care
NGO	nongovernmental organizations
NIHB	non-insured health benefits
OECD	Organisation for Economic Co-operation and Development
OOP	out of pocket
PAHO	Pan American Health Organization
PCHO	pan-Canadian health organizations
PHA	provincial health authorities
PHAC	Public Health Agency of Canada
PMPRB	Patent Medicine Prices Review Board
PT	provincial and territorial
RCPSC	Royal College of Physicians and Surgeons of Canada
RHA	regional health authorities
RN	registered nurse
UHC	universal health coverage
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

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ABSTRACT

This analysis of the Canadian health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance. Life expectancy is high, but it plateaued between 2016 and 2017 due to the opioid crisis. Socioeconomic inequalities in health are significant, and the large and persistent gaps in health outcomes between Indigenous peoples and the rest of Canadians represent a major challenge facing the health system, and society more generally. Canada is a federation: the provinces and territories administer health coverage systems for their residents (referred to as “medicare”), while the federal government sets national standards, such as through the Canada Health Act, and is responsible for health coverage for specific subpopulations. Health care is predominantly publicly financed, with approximately 70% of health expenditures financed through the general tax revenues. Yet there are major gaps in medicare, such as prescription drugs outside hospital, long-term care, mental health care, dental and vision care, which explains the significant role of employer-based private health insurance and out-of-pocket payments. The supply of physicians and nurses is uneven across the country with chronic shortages in rural and remote areas. Recent reforms include a move towards consolidating health regions into more centralized governance structures at the provincial/territorial level, and gradually moving towards Indigenous self-governance in health care. There has also been some momentum towards introducing a national programme of prescription drug coverage (Pharmacare), though the COVID-19 pandemic of 2020 may shift priorities towards addressing other major health system challenges such as the poor quality and regulatory oversight of the long-term care sector. Health system performance has improved in recent years as measured by in-hospital mortality rates, cancer survival and avoidable hospitalizations. Yet major challenges such as access to non-medicare services, wait times for specialist and elective surgical care, and fragmented and poorly coordinated care will continue to preoccupy governments in pursuit of improved health system performance.

EXECUTIVE SUMMARY

■ Life expectancy in Canada is high but is beginning to plateau while health inequalities persist

Canada is a high-income country with an advanced industrial economy and is the second largest country in the world by area. Canada is a federation with two constitutionally recognized orders of government: the federal government and the 10 provincial governments where the latter bear the principal responsibility for a broad range of social policy programmes and services including the bulk of publicly financed and administered health services. During the last 10 years, Canada's economic performance has been relatively solid despite the 2008–2009 recession.

Canada's population was more than 37.5 million in 2019 with most of the population concentrated in southern urban centres that are close to the United States border. A relatively small number of Canadians live in the immense rural and remote regions of the country, including the three territories in the far north of Canada. Life expectancy in Canada increased steadily until 2016, and is relatively high compared with most OECD countries at 81.9 years. Since 1995, life expectancy at birth in Canada increased by 4 years but it plateaued between 2016 and 2017 due in large part to the opioid crisis. Although the infant mortality rate has decreased since 1995, at 4.5 deaths per 1 000 births, it is higher than in Australia, France and Sweden.

Numerous factors adversely influence the health of Canadians, including the consumption of alcohol and tobacco, while major public health challenges include increasing obesity rates, and increasing rates of opioid addiction and deaths. Cancer (malignant neoplasms) and cardiovascular disease are the two main causes of death, both of which have occupied the top positions since 2000. Among the cancers, lung cancer is the

largest killer while ischaemic heart disease remains the most important contributor to death among the cardiovascular diseases. As is the case in other countries where Europeans colonized and sought to replace the Indigenous peoples, the descendants of Canada's original inhabitants suffer significant health disparities relative to the descendants of the Europeans.

- **The provinces and territories administer health coverage systems for their residents, while the federal government sets national standards and is responsible for health coverage for specific subpopulations**

Canada has a predominantly publicly financed health system with approximately 70% of health expenditures financed through the general tax revenues of the federal, provincial and territorial (FPT) governments. The provinces and territories (PTs) have primary responsibility for financing, regulating and administering universal health coverage (medicare) for their residents. They also provide partial coverage for other health goods and services (non-medicare services), including prescription medicines coverage and long-term care, for some segments of the population. The term medicare refers to these publicly funded universal health coverage (UHC) systems that fall under the federal standards and oversight through the Canada Health Act. Provincial governments delegated significant responsibilities for administration and delivery of publicly funded health services to arm's-length agencies within defined geographical areas but, in recent years, there has been a trend towards greater administrative centralization by single provincial agencies. In addition to setting and administering national standards, the federal government is responsible for health coverage for specific subpopulations including military and prison inmates, and for funding non-medicare services for some Indigenous populations. It also has a strategic role in terms of setting national standards for medicare, funding and facilitating data gathering and research, and regulating prescription medicines and medical devices.

■ Health expenditure has grown, while out-of-pocket spending has been stable

Over the decade 2008–2017, health expenditures grew at a slower rate than the national economy, but there are signs of emerging growth in health spending since 2017. In 2018, there was a 70–30% split between public and private sources of funding, which has been a constant ratio since the late 1990s.

Canada is ranked seventh in the share of GDP spent on health among OECD countries and Canada's recent experience in terms of the growth of health spending as a share of the economy is similar to other OECD countries. Almost all revenues for publicly funded health spending come from the general tax revenues of FPT governments, a considerable portion of which is used to provide universal medicare. The remaining amount is used to subsidize other types of health care (non-UHC/medicare) including long-term care and prescription medicines. Over 20% of PT health financing is from the Canada Health Transfer, a cash transfer from the federal governments to the PTs. Since 2014, the Canada Health Transfer is provided on a purely per capita basis and does not account for differences in population needs or costs of delivering health care.

Canada's share of private health expenditures has been stable over the past 20 years but is high when compared with some other OECD countries due to the narrowness of UHC that excludes major health goods and services such as prescription medications. The role of private finance has seen a slight shift away from out-of-pocket (OOP) spending toward private health insurance, in part because of the importance of employment-based private insurance for non-medicare goods and services including prescription medicines, dental care and vision care.

■ Fee-for-service, salaries and global budgets are the dominant payment methods

Physicians, particularly specialists, are mostly paid on a fee-for-service basis, although there is some variation across provinces. Provincial ministries of health have considered the advantages and disadvantages of fee-for-service, capitation, salary and mixed payment systems for general practitioners (GPs),

generally called family physicians in Canada. Most non-physician health care personnel (e.g. nurses) are paid a salary to work within hierarchically directed health organizations. Most hospitals are funded through global budgets, either directly (by ministries of health), or indirectly through budget allocations to provincial or regional health authorities. There has been some limited adoption of activity-based payments for hospitals in some provinces.

- **There is uneven distribution of human resources across the country and comparatively low supply of hospital beds and advanced diagnostics**

The health workforce has grown steadily since the mid-1990s, to some extent due to expansions in medical school enrollment and increased investment in medicare. However, the supply of physicians and nurses is uneven across the country, with chronic shortages in rural and remote areas, and on average, remains relatively low compared with other countries.

Capital investment in hospitals has declined over the past 35 years with the closure of small hospitals and the consolidation of acute care services. The number of acute care beds per capita has continued to decrease, in part as a result of the increase in day surgeries. Compared with other countries, the supply of hospital beds and medical imaging, and adoption of ICT in health care is low in Canada, despite PT governments' investments in these areas. From 2010 to 2017, the hospitalization rate increased by 4% in Canada, even though most of the smaller PTs experienced a decline in hospitalization rates. Concurrently, the average length of stay in acute care hospitals increased from the mid-1990s to the mid-2000s, but has since been stable at 7.5 days, which is similar to Germany, but higher than in many other OECD countries.

As with any jurisdiction covering a large land mass, the population of Canada is very unevenly distributed. At the same time, all PT medicare plans are expected to provide access to hospital services on uniform terms and conditions. This is achieved through extensive referral patterns involving medical transportation and evacuation from rural and remote areas to tertiary care hospitals located in urban areas (using emergency medical services) and the use of virtual care systems in rural and remote regions. In spite of these efforts, geographical inequalities in access to care remain.

- **GPs act as gatekeepers to specialist care which is mainly provided in public or not-for-profit private hospitals**

Public health and health promotion is part of the remit of PT governments, which also conduct health surveillance and manage epidemic response. Although on the federal level, the Public Health Agency of Canada develops and manages programmes supporting public health throughout the country, most of the day-to-day public health activities and supporting infrastructure remains with the PT governments and regional/subprovincial public health offices.

Private fee-for-service physician practices remain the dominant model of primary care in Canada, with the exception of Ontario which is the only province that has shifted the majority of GP payments away from FFS towards alternative payment mechanisms including capitation. Also, all PTs have made some move towards team-based primary care that brings GPs together with other health professions. GPs act as gatekeepers such that they decide whether their patients should obtain diagnostic tests, prescription drug therapies or be referred to medical specialists. In contrast, nurse-led primary care is the dominant model of care in northern regions and in Indigenous communities.

Primary care performance in Canada has been consistently weak as measured by timely access to care and the use of electronic medical records. Another persistent challenge concerns the integration of primary care with other sectors. This challenge relates in part to the limited interoperability of information systems that challenge the sharing of patient information across providers, and in part due to the fact that provincial ministries of health have delegated responsibility for hospital and long-term care to arm's-length health authorities but retained responsibility for funding physicians.

Almost all acute care is provided in public or not-for-profit, private hospitals. Surgical procedures performed in non-hospital facilities vary across the provinces but are generally limited to high volume, low complexity procedures that do not require an overnight stay (e.g. cataracts); however, this has not yet become the dominant mode of delivery.

Outpatient prescription medicines fall outside of the PT universal health coverage programmes (medicare), thus they are only covered for designated populations (e.g. adults aged 65 years and older in some provinces, and social assistance recipients) by PT governments. The federal government provides

drug coverage for eligible First Nations and Inuit peoples. There is renewed federal interest in the implementation of a pan-Canadian drug coverage programme (see below).

Rehabilitation and long-term care policies and services, including home and community care, palliative care and support for informal carers, and mental health and addictions services vary considerably among PTs.

For dental care, there is a very low level of public subsidy such that more than half (54%) is funded through private health insurance, the majority of which is through employment-based benefit plans, 40% is funded by OOP payments, and only 6% through public funds. This degree of dependence on private funding has produced high levels of inequalities in accessing dental care.

■ Reforms point towards consolidated health authorities, primary care reform and Indigenous self-governance

In consideration of reforms over the past decade, PT ministries of health have concentrated on the administrative structure of their health systems, with a number of governments now having a single delegated health authority responsible for coordinating most health services in their jurisdiction. Since the early 2000s, primary care reform has been an important focus, including changes in payment and delivery systems toward team-based care. Furthermore, Indigenous self-determination and self-governance in health administration and delivery has moved forward; for example, with the establishment of the province-wide First Nations Health Authority in British Columbia in 2013 – a unique tripartite agreement between the federal, provincial and Indigenous governments. These new governance arrangements are consistent with the Truth and Reconciliation Commission of Canada's call for changes in the way that FPT governments interact with Indigenous peoples, including recognizing and implementing the health care rights of Indigenous peoples in Canada.

Although there have been few health reforms at the federal level over the past decade, there have been signs of renewed interest in a pan-Canadian system of outpatient pharmaceutical coverage. In 2018, an Advisory Council on the Implementation of National Pharmacare was established, and in 2019 they recommended a medicare-style model in which PTs would administer

single-payer coverage plans under national standards. If pursued, this reform would mark the most significant health reform since the implementation of universal medical care coverage.

In Canada, the role of patients and the public in health system governance has strengthened over the past decade, although there is still limited comparable data on patient-reported experience or outcomes measures. The UHC system is narrowly defined by the Canada Health Act to ensure all eligible residents have reasonable access to medically necessary hospital and physician services free at the point of use. However, there are important gaps in coverage, such as for outpatient prescription medicines, dental care, vision care and non-physician mental health care. Since the majority of funding for health care comes from general tax revenues of the FPT governments, the revenue sources range from progressive (income taxes) to more regressive sources (consumption taxes).

There are disparities in access to health care but, outside a few areas such as prescription drugs, dental and vision care and mental health care, they do not appear to be large relative to other countries. While Canadians do not face financial barriers to accessing UHC (medicare) services, there are barriers to access such as with wait times to see a specialist or for elective surgery.

Canadian health system performance has improved in recent years as measured by in-hospital mortality rates, cancer survival and avoidable hospitalizations, though relative to other countries Canada's performance is usually about close to the average. Furthermore, health outcomes have improved in recent years, though the rate of improvement in amenable mortality has been slower in Canada than some other comparable countries. Moreover, the large gaps in health outcomes between income groups and between Indigenous peoples and the rest of Canadians have persisted and represent a major challenge facing the health system, and society more generally.

There are numerous sources of health system inefficiencies in Canada that signal room for improvement in the effective use of health resources, including the potentially inappropriate use of medications and institutional care, high prices for pharmaceuticals and poorly integrated care.

Compared with other countries, Canada achieves good outcomes on average in terms of health and quality of care, though the persistent challenges with access to non-medicare services, wait times for specialist and

elective surgical care, fragmented and poorly coordinated care will continue to preoccupy governments in pursuit of improved health system performance. The COVID-19 pandemic in 2020 had a devastating impact on Canadians, disproportionately affecting residents of long-term care facilities in the two largest provinces – Ontario and Quebec – and may lead to major and lasting health reforms in that sector.

Introduction

■ Chapter summary

- The second largest country in the world as measured by area, Canada is a high-income country with an advanced industrial economy. During the last 10 years, Canada's economic performance has been relatively solid despite the 2008–2009 recession.
- In terms of the form of government, Canada is a constitutional monarchy based on a British-style parliamentary system. It is also a federation with two constitutionally recognized orders of government. The first order is the central or “federal” government. The second but constitutionally equal order of government consists of the 10 provincial governments, which bear the principal responsibility for a broad range of social policy programmes and services including the bulk of publicly financed and administered health services. The municipal level of government plays an important role in public health in Ontario.
- Life expectancy in Canada has increased steadily until 2017 when it appears to have plateaued, and is relatively high compared with most OECD countries. Infant mortality in Canada is higher than the average across OECD countries. The two main causes of death in Canada are cancer (malignant neoplasms) and cardiovascular disease, both of which have occupied the top positions since 2000.
- As is the case in other settler countries where Europeans colonized and sought to replace Indigenous peoples, the descendants of the

original inhabitants suffer significant health disparities relative to the descendants of the Europeans.

1.1 Geography and sociodemography

Canada is a large country with a landmass of 9 093 507 km². The country is bounded by the United States of America (USA) to the south and the north-west (Alaska), the Pacific Ocean in the west, the Atlantic Ocean in the east, and the Arctic Ocean in the far north (Fig. 1.1). The terrain of the country ranges from extensive mountain ranges to large continental plains, from huge inland lakes and boreal forests to the vast tundra of the Arctic. The climate is northern in nature with a long and cold winter season experienced in almost all parts of the country.

FIG. 1.1 Map of Canada (with federal, provincial and territorial capital cities)



Source: Drawn for the authors by the European Observatory

The USA, a country with almost 10 times the population of Canada and a higher level of per capita income, exerts considerable cultural and economic influence on the daily life of Canadians. Although there are major, even fundamental, differences in how health care is funded and organized in the two countries, domestic debates concerning access and quality as well as health system reform are highly influenced by Canadian perceptions of the state of health care in the USA. There are also several notable commonalities between health care in Canada and the United States, such as the heavy reliance on private insurance for non-UHC (medicare) services like prescription drugs, and the predominance of fee-for-service payments for physicians.

Although it has a large land mass, Canada's population was just over 37.5 million in 2019, up from 36.5 million in 2017 (Statistics Canada, 2019a). The two largest cities are Toronto and Montreal, with 6.3 million and 4.1 million inhabitants, respectively, living in the cities and surrounding areas, and are defined as "census metropolitan areas" (Statistics Canada, 2019b) (see Table 1.1). In contrast, the country's capital city, Ottawa, and its surrounding area, has a population of 1.4 million. Although Canada has one of the lowest human population densities in the world (approximately 4.0 persons per km²) (Table 1.2), most of the population is concentrated in southern urban centres that are close to the USA border. A relatively small number of Canadians live in the immense rural and more northern regions of the country. Most new immigrants live in Canada's largest cities and international immigration is the main driver of population growth in cities, accounting for nearly 80% of population growth in 2016/17 (Statistics Canada, 2018a). In 2016, about 6% of the population identified as Indigenous (Statistics Canada, 2018b), though this is an undercount because: some First Nations communities refused to participate in the census; there are some mobile and sometimes poorly housed populations that are missed by the census; and some people may choose not to self-identify as Indigenous in the census (Smylie & Firestone, 2016; Rotondi et al., 2017).

Four factors influence the health system: (1) demographic ageing; (2) rural and remote communities and populations; (3) cultural and linguistic diversity resulting in part from high rates of immigration; and (4) unique rights and claims pertaining to Indigenous peoples and their historic displacement and marginalization relative to the majority of Canadians. Each of these issues is summarized below.

TABLE 1.1 Population and percentage of the Canadian provinces and territories (capital cities in parentheses), 2019

PROVINCE/TERRITORY	POPULATION	% OF TOTAL
British Columbia (Victoria)	5 071 336	13.49
Alberta (Edmonton)	4 371 316	11.63
Saskatchewan (Regina)	1 174 462	3.12
Manitoba (Winnipeg)	1 369 465	3.64
Ontario (Toronto)	14 566 547	38.75
Quebec (Quebec City)	8 484 965	22.57
New Brunswick (Fredericton)	776 827	2.07
Nova Scotia (Halifax)	971 395	2.58
Prince Edward Island (Charlottetown)	156 947	0.42
Newfoundland and Labrador (St. John's)	521 542	1.39
Yukon (Whitehorse)	40 854	0.11
Northwest Territories (Yellowknife)	44 826	0.12
Nunavut (Iqaluit)	38 780	0.10
Canada (Ottawa)	37 589 262	100

Source: Statistics Canada (2019a)

TABLE 1.2 Trends in population/demographic indicators in Canada, selected years

	1995	2000	2005	2010	2015	2018
Total population (thousands)	29 302	30 686	32 244	34 005	35 703	37 059
Population aged 0–14 (% of total)	20.4	19.2	17.7	16.5	16.0	15.9
Population aged 65 and above (% of total)	12.0	12.6	13.1	14.2	16.1	17.2
Population density (people per km²)	3.2	3.4	3.5	3.7	3.9	4.1
Population growth (average annual growth rate, %)	1.0	0.9	0.9	1.1	0.7	1.4
Fertility rate, total (births per woman)^a	1.6	1.5	1.5	1.6	1.6	1.5
Distribution of population (% urban)	77.7	79.5	80.1	80.9	81.3	81.4

^aLatest data for 2017

Source: World Bank (2019) World Development Indicators

Despite the demographic ageing of its population since 1970, Canada has a smaller proportion of older citizens than most western European countries. Moreover, Canada's age-dependency ratio (63.8) – defined as the ratio of children (1–14 years) and older adults (≥ 65 years) to the working-age population – is higher than in Australia and the USA but lower than in France, the Netherlands, and the United Kingdom (UK) (OECD, 2018). Older adults made up 17.2% of the population in 2018 compared with 9% in 1980 (Statistics Canada, 2019a) (Table 1.2). The decrease in family size over time has served to cushion the age-dependency ratio somewhat, with the birth rate declining from 15 per 1 000 population in 1980 to 11 per 1 000 population in 2005 (but has been stable since then). The proportion of seniors (aged 65 and over) now exceeds the number of children under 15 (Statistics Canada, 2019a).

The proportion of the population defined as rural has been steadily falling since 1980, and rural populations are very unevenly distributed among Canadian provinces and territories. More than 30% of the residents in Saskatchewan, Yukon, Northwest Territories, Nova Scotia and Newfoundland and Labrador live in rural areas, while more than 50% of residents in Prince Edward Island, New Brunswick and Nunavut live in rural areas.*

As for population make-up, almost 20% of Canadian residents were born outside the country. The 2016 census reported more than 200 different ethnic origins and an estimated 41% of the population reported multiple ethnic ancestries (Statistics Canada, 2016). While the majority of Canadians have British, French or other European ancestry, most recent immigrants come from outside Europe and have neither English nor French as their first language.

Indigenous peoples in Canada are made up of three distinct groupings: First Nations; Inuit; and Métis. The terms “status Indians” and “registered Indians” are legal terms used by the Government of Canada to describe First Nations citizens who are officially registered under the terms of the Indian Act and therefore qualify for specified entitlements and benefits, including coverage for a range of services (pharmaceuticals, dentistry, devices, health professional services) that fall outside the core of the provincial/territorial UHC programmes known as medicare. This

* Rural areas include all those outside of population centres; a population centre has a population of at least 1 000 people and a population density of 400 persons or more per square kilometre (Statistics Canada 2016 Census of Population).

programme is financed and administered by the federal government and called the “non-insured health benefits” programme. “Registered Indians” can live on or off reserves as long as the latter retain an ongoing connection with their respective reserve communities. Many of the reserves are located in rural and remote areas of Canada. Most Inuit live in the Arctic regions of Canada. The Métis, the majority of whom are the descendants of Euro-Canadian and Indigenous fur traders, are concentrated in Western Canada.

As is the case in other settler countries where Europeans colonized and sought to replace Indigenous peoples, the descendants of the original inhabitants suffer significant health disparities relative to the descendants of the Europeans (Mitrou et al., 2014) (see section 1.4).

■ 1.2 Economic context

Canada is an advanced industrial economy with a substantial natural resource base. Measured in terms of per capita wealth, the country ranks among the richest nations in the world. In terms of inequality as measured by the Gini coefficient in 2017, Canada (0.31) is more equal than the USA (0.39) and Australia (0.325) but less equal than France (0.292), Germany (0.289), the Netherlands (0.285), and Sweden (0.282) and its Nordic neighbours (OECD, 2020). On the overall human development index (HDI) for 2019 calculated by the United Nations Development Programme (UNDP, 2020), Canada (13) along with Germany (4), Australia (6), Sweden (8), the Netherlands (10), the USA (15), and the UK (15) were ranked in the top 15 countries in the world as measured by HDI.

Canada suffered less than most western European nations and the USA from the global recession in 2008–2009, in part due to being a major exporter of oil and gas during this period. Over the period 2014 to 2017, Canada’s growth in gross domestic product (GDP) per capita slightly exceeded growth in Australia and France but was lower than GDP per capita growth in Germany, Netherlands, Sweden, the UK and the USA (World Bank, 2018). While health care costs continue to grow at rates that exceed government revenue growth, the growth rate has slowed considerably in the last 5 years (see section 3.1).

TABLE 1.3 Macroeconomic indicators, selected years

	1995	2000	2005	2010	2015	2018 OR LATEST
GDP per capita (current LCU)	28 290	35 925	43 947	48 879	55 621	59 879
GDP per capita, PPP (current international \$)	23 402	29 265	36 211	40 012	44 568	48 107
GDP annual growth rate	2.7	5.2	3.2	3.1	0.7	1.9
General government final consumption expenditure (% of GDP)	21.7	19.2	19.1	21.5	20.9	20.8
Government deficit / surplus (% of GDP)^a	-4	2.2	0.7	-2.2	1.0	0.8
Unemployment, total (% of labour force)	6.3	3.5	4.4	3.5	4.3	3.8
Income inequality (Gini coefficient of disposable income)^a	0.293	0.315	0.315	0.316	0.318	0.310

PPP: purchasing power parity

^aOECD (2020)

Source: World Bank (2019) World Development Indicators

1.3 Political context

Canada has two constitutionally recognized orders of government, the central or “federal” government and 10 provincial governments. While they do not enjoy the constitutional status of the provinces, the three northern territories exercise many of the same policy and programme responsibilities including those for health care.

As measured by a number of criteria, including provincial control of revenues and expenditure relative to the central government, the country has become a more decentralized federation since the early 1960s (Watts, 2008). This trend has, in part, been driven by the struggle of successive administrations in Quebec seeking greater autonomy for their province from the federal government (Requejo, 2010). In recent years, other provincial governments have also demanded some redress of what they perceive as a fiscal imbalance between the ever-growing spending responsibilities of the provinces, especially for health care, relative to the much greater revenue generating capacity of the central government. Following a pattern set by Quebec, other provincial governments have occasionally demanded less federal conditionality and greater flexibility in terms of the Canada Health Act.

Unlike the provinces and territories, local, municipal and county governments are not constitutionally recognized. Instead, they are political units created under provincial government law. Local, municipal and county governments are delegated authority and responsibility by the provinces for the delivery of local public services and infrastructure. Historically, these subprovincial governments played a role, albeit modest, in the administration and delivery of health services, and municipalities continue to play a role in the financing and delivery of public health services in the province of Ontario. However, the Saskatchewan model, of single-payer hospital and medical care services with a centralized payment system administered by provincial governments, was eventually adopted by other provinces and territories (Taylor, 1987; Tuohy, 2009), thereby minimizing the role of local governments in the financing and administration of medicare.

Elections take place on average every 4 years for the federal House of Commons as well as provincial and territorial (PT) legislatures under a “first-past-the-post” electoral system* based on federal, provincial and territorial (FPT) constituencies and largely with the context of competitive and adversarial political parties.

Except for the social democratic New Democratic Party (NDP), provincial parties are organizationally separate from political parties at the federal level. The Prime Minister is the leader of the majority party in the House of Commons and appoints the cabinet of ministers from among the elected members, a system that is replicated in the provinces and one territory – Yukon. The Northwest Territories and Nunavut operate without political parties and have consensus governments, the members of which are selected by the members making up the legislative assemblies following each election. Five national political parties ran candidates in all constituencies in Canada in the 2019 federal election – the Conservative Party of Canada (CPC), the NDP, the Liberal Party of Canada, the Green Party of Canada and the People’s Party of Canada (PPC). There is also a federal party operating in Quebec – the Bloc Québécois (BQ). Established in 1991 to advance Quebec’s independence from the Canadian federation, the BQ regularly defends what it defines as Quebec’s interests in the Parliament of Canada, and supports a progressive decentralization of power and authority

* Each voter selects one candidate. All votes are counted and the candidate with the most votes in a defined geographical constituency is the winner irrespective of the votes garnered by the candidate’s political party on a national, provincial or territorial basis.

from the central government to the provinces. In the federal election of 2019, the Liberal Party of Canada under leader Justin Trudeau obtained a minority government after governing the country with a majority government from 2015–2019.

Internationally, Canada is a founding member of the United Nations and, because of its long history as a self-governing colony within the British Empire, an influential member of the Commonwealth. Due to its status as a French-speaking jurisdiction, Canada is also a member of the Organisation Internationale de la Francophonie, as are the provinces of Quebec and New Brunswick, with Ontario as an observer.

Global health forms part of Canadian foreign policy and international development assistance (Nixon et al., 2018). Canada is signatory to several international treaties that recognize the right to health, the most important of which are the Universal Declaration of Human Rights (1948) and the International Covenant on Economic, Social and Cultural Rights (1976). The Canadian government played an important role in establishing the globally influential Ottawa Charter for Health Promotion in 1986, a declaration highlighting the impact of the social determinants of health, strongly influenced by the earlier Lalonde report of 1974 (Kickbusch, 2003). In 1991, Canada ratified the United Nations Convention on the Rights of the Child and its provisions concerning the health and health care rights of children. In 1997, Canada became a member of the World Intellectual Property Organization Copyright Treaty, which has significant implications for prescription drug patenting as well as research and development in the medical sector generally.

Canada is also an active participant in the World Health Organization (WHO) and its regional office in the Americas – the Pan American Health Organization (PAHO). Under the auspices of WHO, the Framework Convention on Tobacco Control (2003) attempts to widen and strengthen public health measures to reduce tobacco consumption and thereby reduce its deleterious health consequences throughout the world. As a country that has succeeded in reducing its smoking rate dramatically over the past few decades, Canada has played a constructive role in the negotiation of this landmark convention and in facilitating a global effort to reduce tobacco consumption (Kapur, 2003; Roemer, Taylor & Lariviere, 2005).

Additionally, Canada is a member of the World Trade Organization (WTO) and, with the USA and Mexico, a member of the Agreement between the USA, the United Mexican State, and Canada, commonly

known as the Canada-United States-Mexico Agreement on trade in Canada. The USMCA and the General Agreement on Trade in Services (GATS) under the WTO are very broad in their scope but both contain provisions that ostensibly protect public health care services from coming under their respective free trade rules. Nevertheless, there remains some anxiety about public health care being subject to trade laws, particularly hospital and medical services, fuelled by the apprehension that foreign corporations may eventually demand “national treatment” with the private or eventually privatized sectors of Canada’s public health care system (Grishaber-Otto & Sinclair, 2004; Johnson, 2004a).

According to the World Bank’s evaluation of democratic governance, Canada is among the best-governed countries in the world based on numerous indicators in six broad categories, including control of corruption, effectiveness, accountability and political stability (World Bank, 2019).

■ 1.4 Health status

As Table 1.4 indicates, life expectancy has improved and mortality rates have declined significantly between 1995 and 2015. However, life expectancy did not increase between 2016 and 2017 according to the 2019 estimates produced by Statistics Canada, this stagnating life expectancy was largely due to the increase in opioid-related deaths (Statistics Canada, 2019c). Accidents (unintentional injuries) were the third leading cause of death in Canada in 2017, and the fourth leading cause of death in 2018 (Statistics Canada, 2019d). Mortality data for 2018 onward are not available (as of May 2020).

Relative to the OECD comparators, Canada’s life expectancy is at the higher end of the scale even though infant mortality and maternal mortality rates tend to be worse than those in most of the comparator countries.* When comparing on the basis of health-adjusted life expectancy (HALE), Canada’s rate is comparable to Australia and France, and higher than the other selected countries in Table 1.5.

* The higher than average infant mortality in Canada may be due, in part, to differences in measurement. Canada, like the United States, has a higher proportion of babies weighing less than 500g, contributing to higher reported infant mortality than in other countries (OECD, 2019).

TABLE 1.4 Mortality and health indicators, selected years

	2000	2005	2010	2015	2017 OR LATEST
Life expectancy (years)					
Life expectancy at birth, total	79.0	80.0	81.1	81.9	82.0
Life expectancy at birth, male	76.3	77.6	78.8	79.8	79.9
Life expectancy at birth, female	81.6	82.3	83.3	83.9	84.0
Life expectancy at 65, male	16.5	17.5	18.4	19.2	19.3
Life expectancy at 65, female	20.1	20.7	21.5	22.0	22.1
Mortality, SDR per 100 000 population^a					
Circulatory diseases	307	249.2	197.4	178.4	—
Malignant neoplasms	238.8	226.9	210.6	196.8	—
Communicable diseases	11.6	13.9	15.5	12.7	—
External causes of death	45.9	46.8	46.6	46.3	—
All causes	852.7	787.2	701.3	675.4	—
Infant mortality rate (deaths per 1 000 live births)	5.3	5.4	5.0	4.5	4.5
Maternal mortality rate (deaths per 100 000 live births, modelled estimate)	3.4	8.8	6.4	7.1	6.6

SDR: standardized death rate

Source: OECD (2019)

TABLE 1.5 Health status, Canada and selected countries, latest available year

	CANADA	AUSTRALIA	FRANCE	GERMANY	NETHERLANDS	SWEDEN	UK	USA
Life expectancy at birth	82	82.6	82.6	81.1	81.8	82.5	81.3	78.6
Infant mortality rate per 1 000 births^a	4.5	3.3	3.8 (2018)	3.3	3.6	2.4	5.8	13.2
Perinatal mortality rate per 1 000 births	5.8	8.1	10.8 (2016)	5.6	4.8	4.6	6.3	5.9
Maternal mortality per 100 000 live births	6.6	1.6	8.7 (2012)	2.9 (2016)	1.8	3.5	14.6	6.5
HALE^b	73.2	73.0	73.4	71.6	72.1	72.4	71.9	68.5

HALE: health-adjusted life expectancy

^aNo minimum threshold of gestation of birthweight^bWHO (2019b)

Source: OECD (2019)

Heart disease and cancer (malignant neoplasms) have alternated as the main cause of death in Canada, and improved survival from these diseases are key drivers of recent increases in life expectancy. Among the cancers, lung cancer is the largest killer. Ischaemic heart disease (IHD) remains the most important contributor to death among the cardiovascular diseases, which includes cerebrovascular stroke; IHD mortality rates in Canada are in the middle of the group of eight OECD countries for both males and females (Table 1.6).

TABLE 1.6 Main causes of death in Canada and selected countries by sex, latest available year

CAUSE OF MORTALITY ^a	CANADA	AUSTRALIA	FRANCE	GERMANY	NETHERLANDS	SWEDEN	UK	USA
	2015	2016	2015	2016	2016	2016	2016	2016
Ischaemic heart disease, males	116.2	102.2	62.4	141.9	61.3	121.5	120	149.4
Ischaemic heart disease, females	61.7	55.3	22.5	71.9	29.9	63.1	55.2	78.3
Cerebrovascular disease, males	36.2	40.7	41.2	49.5	49.7	50.9	48.9	43.6
Cerebrovascular disease, females	33.9	42.2	30.6	42.7	46.0	42.4	45.4	42.2
Malignant neoplasms, males	233.9	231.3	276.7	252.7	277.8	212.5	259.5	216.2
Malignant neoplasms, females	170.3	148.3	144.2	162.7	188.1	157.3	184.7	154.5
Malignant neoplasms of trachea, bronchus, lung, males	60.7	44.9	67.0	58.0	69.3	32.3	56.0	54.9
Malignant neoplasms of trachea, bronchus, lung, females	44.3	26.1	21.3	27.1	40.4	27.5	38.9	37.2
Malignant neoplasms of female breast	24.1	22.8	27.1	29.5	29.2	21.3	27.9	22.8
Malignant neoplasms of prostate	25.1	30.9	27.7	30.2	34.1	43.5	35.2	22.6
Transport accidents, male	9.3	9.4	7.6	6.1	6.0	4.5	4.4	19.6
Transport accidents, female	3.3	3.0	2.2	1.9	1.9	1.2	1.3	7.4
Intentional self-harm, males	17.8	18.2	21.8	16.3	14.6	15.4	11.4	22.2
Intentional self-harm, females	6.1	5.8	5.8	4.9	6.6	6.8	3.3	6.2

^aStandardized rates per 100 000 people

Source: OECD (2019) Health Statistics

Overall cancer mortality for Canadian men is also in the middle of the range among comparator countries (Table 1.6). Female cancer mortality in Canada is higher than other countries except the Netherlands and the UK. The most striking difference between Canada and other countries is seen with lung cancer mortality for women which is twice as high in Canada as in France and is higher than all other comparator countries in spite of the considerable efforts taken in recent decades in Canada to reduce the rate of smoking in the population. The most common types of cancer diagnosed in Canada are lung (14% of all new diagnoses in 2017), colorectal cancer (13%), breast cancer (13%), and prostate cancer (10%) (Canadian Cancer Society, 2018). Deaths from transport accidents are higher in Canada than all other comparable countries, except the USA which has significantly higher mortality rates for both males and females from transport accidents.

Numerous factors adversely influence the health of Canadians, including the consumption of alcohol and tobacco. There has been a major drop in cigarette smoking in Canada during the past two decades although the legacy of past consumption continues to be reflected in high rates of mortality from lung cancer especially for women (Table 1.6). While there has been a decline in smoking overall, the smoking rate among lower-income groups was stable throughout the early 2000s (CIHI, 2015). Also, the increase in vaping (e-cigarettes) presents new health risks that are disproportionately affecting younger people and may reverse previous successes with anti-tobacco campaigns (Hammond et al., 2019). Next to smoking, alcohol consumption is a major risk factor for morbidity and mortality in Canada. There was a decline in alcohol consumption in the early 1990s, although consumption has grown marginally since 1995 and has been relatively stable since 2010 (Canadian Centre on Substance Use and Addiction, 2017). At the same time, deaths from alcohol have increased over the past 20 years, especially for women for whom the death rate increased by 26% from 2001 to 2017 compared with 5% for men (PHAC, 2018). A study from Ontario estimated the impact of smoking, physical inactivity, poor diet and unhealthy alcohol consumption on mortality and found these four risk factors accounted for 50% of all deaths, or 6 years of life expectancy lost, of which smoking was the most significant contributor (Manuel et al., 2016).

Opioid use disorders have emerged as a major public health crisis in Canada with particularly high rates of apparent opioid-related deaths in British Columbia, Alberta and Ontario. Overall in Canada, there were 8.4

apparent opioid-related deaths per 100 000 population in 2016 compared with 12.4 in 2018 and 11.5 from January to June 2019 (Canada, 2019). The sharp increase in opioid-related deaths in Canada have been the main cause of stagnating life expectancy between 2016 and 2017 for both males and females (Statistics Canada, 2019c). While opioid addiction originated with prescription drugs, the addition of fentanyl into the illicit drug supply has fuelled an opioid crisis.

Vaccine hesitancy is another emerging public health challenge in Canada. The 2017 Childhood National Immunization Coverage Survey found that while the majority of Canadian parents agree that childhood vaccines are safe (94%) and effective (96%), they still have concerns and knowledge gaps related to vaccines (e.g. 52% express concerns around vaccine side-effects and 13% agree that alternative practices can replace vaccines). The survey also showed that while vaccination coverage in Canada is relatively high, Canada is not currently reaching the national coverage goals of 95% coverage for routine childhood vaccines established in 2017.*

Obesity rates have also increased rapidly in Canada lowering overall health status and increasing the cost of health care as well as broader economic costs arising from lost productivity (Janssen, 2013; Goettler et al., 2017). Childhood obesity has also elevated the risk of cardiovascular disease and diabetes (Ball & McCargar, 2003). The country's obesity rate is similar to the UK and substantially below the rate in the USA (Table 1.7).

TABLE 1.7 Percentage of the population with measured body weight as overweight and obese, aged 15 and older, Canada and selected countries, latest available years

	CANADA 2017	AUSTRALIA 2017	FRANCE 2015	UK 2017	USA 2016
Overweight population ($25 \leq \text{BMI} < 30 \text{ kg/m}^2$)	32.8	34.8	32	35.6	31
Obese population ($\text{BMI} \geq 30 \text{ kg/m}^2$)	26.3	30.4	17	28.7	40
Overweight and obese population ($\text{BMI} \geq 25 \text{ kg/m}^2$)	59.1	65.2	49	64.3	71

Note: Data from Germany, the Netherlands and Sweden are not available

Source: OECD (2019)

* The authors would like to thank Health Canada for providing these survey results.

TABLE 1.8 Obesity, based on self-reported height and weight (% of population)

	2005	2015	2016	2017
British Columbia	13.4	20.3	22.3	21.0
Alberta	16.2	28.1	27.2	29.0
Saskatchewan	21.2	29.6	33.0	35.0
Manitoba	18.5	30.5	30.2	29.0
Ontario	15.5	26.3	26.2	25.7
Quebec	14.5	23.9	24.9	26.8
New Brunswick	23.1	38.6	38.8	37.5
Nova Scotia	21.3	33.7	34.7	34.6
Prince Edward Island	23.0	32.0	29.7	30.0
Newfoundland and Labrador	24.5	44.7	37.6	38.0
Canada	15.8	26.1	26.5	26.9

Note: Obesity is defined as BMI of 30 kg/m² or more

Source: Statistics Canada (2019e)

Table 1.8 illustrates the large variations in obesity based on self-reported height and weight among provinces.* Less rural and more urbanized provinces such as British Columbia, Ontario and Quebec tend to have lower rates of obesity than more rural and sparsely populated provinces. At the same time, however, obesity has increased in all provinces since 2005.

Multiple indicators demonstrate that the health status of Indigenous peoples in Canada is well below the Canadian average in spite of some improvements in recent years. A significant gap in life expectancy remains between First Nations, Inuit and Métis peoples, and non-Indigenous Canadians, and the gap has persisted between 1996 and 2011 (Tjepkema et al., 2019). In 2011, the gap in life expectancy at age 1 year was highest between Inuit and non-Indigenous Canadians (11 years), followed by First Nations (9–10 years), and Métis peoples (4.5–5 year gap). Suicide rates among First Nations people, Métis and Inuit were significantly higher than the rate for non-Indigenous Canadians between 2011 and 2016, with the highest

* While estimates of obesity based on measured height and weight are more accurate, and on average are higher, than those based on self-reported height and weight, the only provincial-level estimates are based on self-reported data.

rates seen among Inuit and in particular among young people (Kumar & Tjepkema, 2019). First Nations people living on reserves also experience a much higher incidence of physical injuries than the Canadian average. For example, Guèvremont et al. (2017) analysed national data (excluding Quebec) that linked the census to hospital records and found significantly higher acute care hospitalization rates among Indigenous children and youth compared with non-Indigenous children and youth, with highest rates among First Nations children living on reserves and Inuit youth. There are some signs of a reduction in inequality in hospitalizations, with a steeper decline in the rate of injury hospitalization among Indigenous peoples in British Columbia compared with the total population in that province (George et al., 2015). Although Inuit populations are less affected by some chronic conditions, due in part to more traditional and less sedentary lives (Garner et al., 2015), they face significantly higher rates of tuberculosis, infant mortality, food insecurity and suicide than the general population (Inuit Tapirit Kanatami, 2018). As with Indigenous populations in other OECD countries such as Australia and the USA, the causes of these health disparities have long historical roots in colonization that has resulted in economic and social marginalization, intergenerational trauma, along with enormous long-lasting negative health impacts (Waldrum, Herring & Young, 2006; Mitrou et al., 2014).

Organization and governance

■ Chapter summary

- Canada has a predominantly publicly financed health system with approximately 70% of health expenditures financed through the general tax revenues of the federal, provincial and territorial governments.
- The Canadian provinces and territories are responsible for administering their own tax-funded and universal hospital and medical care plans; they also provide some targeted safety net coverage by subsidizing or directly providing other health goods and services excluded from these UHC programmes such as prescription drug coverage and long-term care (LTC) including home care.
- Saskatchewan was the first province to implement a universal hospital services plan in 1947, closely followed by British Columbia and Alberta. The federal government passed the Hospital Insurance and Diagnostic Services Act in Parliament in 1957. In 1962, Saskatchewan extended coverage to include physician services and, in 1966, the federal government introduced the Medical Care Act to cost-share single-payer insurance for physician costs with provincial governments. By 1971, all provinces had universal coverage for hospital and physician services, a system commonly known as medicare.

- In 1984, the federal government replaced the two previous acts with the Canada Health Act, legislation that set pan-Canadian standards for hospital, physician and surgical-dental services.
- Throughout the 1990s, provinces introduced regional planning bodies (regional health authorities; RHAs) responsible for funding and planning hospital and LTC services for local populations. In recent years, there has been a trend towards greater administrative centralization as RHAs have been replaced by single provincial agencies.
- Although the provinces and territories have assumed primary responsibility for financing, delivering and administering universal health coverage, the federal government has a strategic role in terms of setting national standards for medicare, funding and facilitating data gathering and research, and regulating prescription drugs and medical devices.

■ 2.1 Historical background

Provincial governments have a long history of providing subsidies to hospitals to admit and treat all patients irrespective of their ability to pay. The government of Ontario set the template through the Charity Aid Act of 1874. Then, in 1914, the provincial government introduced worker's compensation legislation that provided care for all entitled workers in the event of any work-related accident or injury; less than two decades later, Ontario would also be the first jurisdiction to establish a province-wide medical service plan for all social assistance recipients.

While most provinces followed Ontario's lead in terms of targeted or categorical public health services and coverage, the provinces in Western Canada laid the groundwork for universal hospital and medical care coverage that would eventually become known as medicare starting in 1947 in Saskatchewan.

In the 1940s, key provinces opposed the federal government proposals on health and fiscal changes were rejected, which forced a more piecemeal approach to the introduction of UHC in the postwar years. In 1947, the Saskatchewan government implemented a universal hospital services plan. British Columbia (1948) and Alberta (1950) followed with their own "hospitalization" schemes. In 1957, the Government of Canada passed the Hospital

Insurance and Diagnostic Services Act: this law set out the common conditions that provincial governments would have to satisfy in order to receive shared-cost financing through federal transfers. One year later in 1958, the provinces of Saskatchewan, BC, Alberta, Manitoba and Newfoundland agreed to work within the federal framework. By 1959, Ontario, Nova Scotia, New Brunswick and Prince Edward Island had also joined. Quebec did not agree until 1961, shortly after the election of a government dedicated to modernizing the provincial welfare state.

For a summary account of the history of medicare, see Table 2.1.

TABLE 2.1 Chronology of the evolution of universal health coverage in Canada, 1946–1984

1946	Federal health insurance proposals rejected by provinces in Dominion–Provincial Reconstruction Conference
1947	Saskatchewan implements universal hospital insurance
1948	Federal health minister introduces Hospital Grants Program and British Columbia implements universal hospital insurance (British Columbia Hospital Insurance Services)
1950	Alberta introduces a provincially subsidized but municipally administered and financed hospital insurance
1955	Canadian Medical Association passes a resolution officially opposing universal health care
1957	Federal government enacts the Hospital Insurance and Diagnostic Services Act that cost-shares hospital insurance with provinces
1961	Federal government establishes the Royal Commission on Health Services (Hall Commission) to examine feasibility of national medical care insurance
1962	Saskatchewan implements universal medical care insurance after a province-wide, 23-day doctors' strike
1963	Alberta government introduces alternative to Saskatchewan's universal plan based on subsidizing purchase of private insurance plans
1964	Hall Commission (Royal Commission on Health Services) report recommends universal medical care insurance based on the Saskatchewan model
1965	British Columbia introduces multi-payer medical care insurance involving non-profit insurance carriers
1966	Federal government introduces the Medical Care Act to cost-share single-payer universal medical care insurance with provincial governments
1968	Implementation of universal medical care insurance on a national basis through federal cost-sharing: Saskatchewan and British Columbia qualify; followed by Alberta, Manitoba, Ontario, Nova Scotia and Newfoundland in 1969, Quebec and Prince Edward Island in 1970, and New Brunswick in 1971
1974	Government of Canada publishes Lalonde report on factors beyond medical care such as lifestyle, environment and biology that determine health outcomes
1977	Established Programs Financing (EPF) with block transfer replaces federal cost-sharing with provinces for medicare
1980	Hall's medicare check-up report on medicare to federal government concerning impact of user fees and extra billing
1984	Federal government, led by Health Minister Monique Bégin, introduces the Canada Health Act which discourages extra billing and user fees for physician and hospital services

Note: The timeline ends in 1984 as there has been no major change to universal health coverage in Canada since then

With the introduction of federal cost-sharing for universal hospitalization, the Saskatchewan government was financially able to proceed with universal coverage for physician services. However, the introduction of the prepaid, publicly administered medical care insurance plan triggered a bitter, province-wide, doctors' strike in 1962 that lasted for 23 days. The strike officially ended with a compromise known as the Saskatoon Agreement in which the nature and mechanism of payment emphasized the contractual autonomy of physicians from the provincial government, and fee-for-service as the dominant method of payment (Badgley & Wolfe, 1967; Marchildon & Schrijvers, 2011).

In 1964, the Royal Commission on Health Services, commonly known as the Hall Commission, delivered its report to the Prime Minister. This federal commission had been established in the wake of the polarized debate in Saskatchewan about the merits of single-payer, universal medical care insurance as compared with the alternative of the state providing targeted subsidies for the purchase of private insurance as championed by provincial governments in Alberta, Manitoba and Ontario as well as organized medicine (Marchildon, 2016a). Ultimately, the Hall Commission leaned in favour of the Saskatchewan model, and recommended the federal government to encourage other provinces to implement universal medical care insurance through conditional grants (Canada, 1964). In 1966, the federal government passed the Medical Care Act with federal cost-sharing transfers to begin flowing in 1968 to those provinces that conformed to the four conditions of universality, public administration, comprehensiveness and portability. By 1971, all the provinces had implemented universal coverage for medical care to complement their existing universal coverage for hospital care. This FPT system of narrow but deep UHC would become known as medicare (Marchildon, 2009).

The 1970s marked a period of rapid expansion of public coverage and subsidies for health services well beyond hospital and medical care by the provinces and territories, generally known as extended benefits (which excluded NIHB beneficiaries). These included prescription drug plans as well as subsidies for LTC. However, lacking any national principles or federal funding, these initiatives varied considerably across the country, depending on the fiscal capacity and policy ambitions of individual provinces and territories.

During the same period, the federal government initiated much new thinking concerning the basic determinants of health beyond medical care,

including biological factors, lifestyle choices as well as environmental, social and economic conditions. In 1974, the Canadian Minister of Health, Marc Lalonde, summarized this new approach in a report – *A New Perspective on the Health of Canadians* (Canada, 1974). Emphasizing the upstream determinants of health, the Lalonde report influenced subsequent studies and provided some of the intellectual foundation for the “wellness” reforms introduced by provincial governments by the early 1990s (Boychuk, 2009).

In 1984, the federal government replaced the Hospital Insurance and Diagnostic Services Act and the Medical Care Act with the Canada Health Act. The five criteria of the Canada Health Act (summarized in Table 2.2) started out as funding conditions but over time they have also come to represent the principles and values that underpin Canadian medicare. These national standards were drawn directly from the older pieces of legislation – the 1984 law was intended largely to shore up the status quo (Bégin, 1998; 2019; Marchildon & Tholl, 2017). However, the Canada Health Act added something new: the requirement that the federal government deduct (dollar-for-dollar) from a provincial government’s share of Established Programs Financing (EPF) the value of all extra billing and user fees permitted in that province (Taylor, 1987). The origins of the Canada Health Act can be traced to the federal government’s concern that, despite the stipulation in the Medical Care Act that provincial plans must not allow user fees to “impede or preclude” any “reasonable access to insured services”, some provincial governments had increasingly permitted the imposition of patient user fees by hospitals and physicians by the late 1970s. In addition to incorporating the four original funding criteria – public administration, comprehensiveness, universality and portability – from its earlier legislation, the federal government added a fifth criterion – accessibility – to reinforce the view that access should not be impeded by patient charges. At the same time, the federal government made it clear that provincial governments that eliminated all user fees within three years of the introduction of the new legislation would have their deductions reimbursed at the end of that period. By 1988, extra billing and user fees had been virtually eliminated for all insured services under the Canada Health Act (Bégin, 2019). The federal government has never made any transfer deductions for a PT government transgressing one or more of the five criteria giving the impression that the Act has not been properly enforced. However, in at least some of the instances where federal health ministers have sent formal letters to their provincial counterparts

threatening a deduction for a specified violation, this has been sufficient to end the practice (Flood & Choudhry, 2004; Marchildon & Tholl, 2017).

In addition to providing financial security, universal medicare appears to have had positive outcomes in reducing health disparities since it was first introduced. In a study covering 25 years following the introduction of universal medical care insurance in Canada, James et al. (2007) demonstrated a major reduction in disparity as measured by the rates of death amenable to medical care.

TABLE 2.2 Five funding criteria of the Canada Health Act (1984)

CRITERIA	EACH PROVINCIAL HEALTH CARE INSURANCE PLAN MUST:
Public Administration Section 8	Be administered and operated on a non-profit basis by a public authority
Comprehensiveness Section 9	Cover all insured health services provided by hospitals, physicians or dentists (surgical-dental services that require a hospital setting) and, where the law of a province permits, similar or additional services rendered by other health care practitioners
Universality Section 10	Ensure entitlement to all insured health services on uniform terms and conditions
Portability Section 11	Not impose a minimum period of residence, or waiting period, in excess of 3 months for new residents; pay for insured health services for its own residents if temporarily visiting another province (or country in the case of non-elective services) with reimbursement paid at the home rate of province or territory; and cover the waiting period for those residents moving to another province after which the new province of residence assumes responsibility for health care coverage
Accessibility Section 12	Not impede or preclude, either directly or indirectly, whether by charges made to insured persons or otherwise, reasonable access to insured health services

Source: Health Canada (2019)

Medicare highlighted some of the unique challenges of Indigenous peoples, many of whom lived, and to some extent still live, in the more northern, rural and remote parts of the country. Beginning in the 1920s, the federal government began to establish hospitals and clinics in many of the larger Indigenous communities in northern Canada. After the Second World War, the Directorate of Indian Health Services (IHS) was established in the reconfigured federal department of National Health and Welfare. By the end of the 1950s, IHS was operating 22 “Indian” hospitals, 38 remote nursing stations and more than 100 health centres (Lavoie, 2018). However, as part of its medicare negotiations with provincial governments, the federal

government insisted that all Indigenous residents be treated as eligible residents for provincial medicare coverage (Marchildon, 2014).

Over the following decades, most of the Government of Canada's Indigenous acute and primary care services and facilities would be transferred to provincial governments (Lux, 2016). At the same time, the federal government provided eligible First Nations and Inuit with coverage for prescription drugs, dental care, vision care and medical transportation under the NIHB programme. This was accompanied by targeted programmes addressing specific conditions and the social determinants of health. Under the 1989 Health Transfer Policy, the federal government began to transfer funding and responsibility for health and other services directly to selected Indigenous governments (Lavoie, 2018).

■ 2.2 Organization

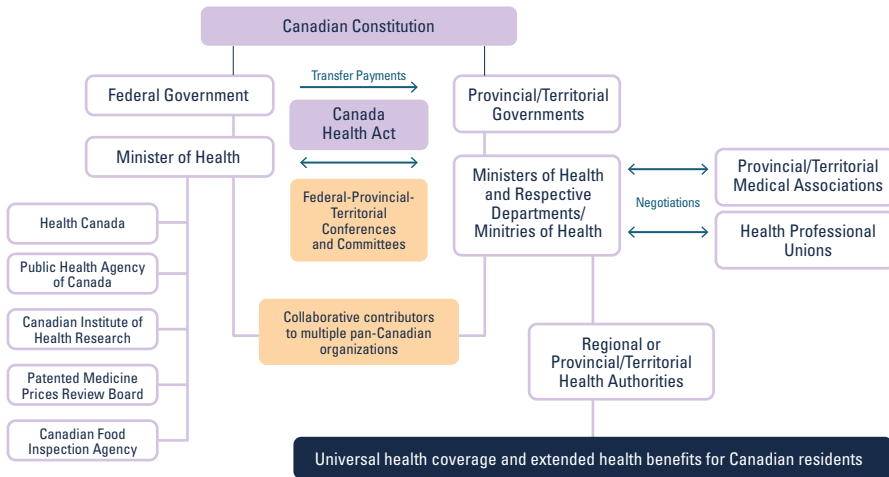
Canada is a constitutional federation with sovereignty, authorities and responsibilities divided between the federal government and the provincial governments. With the exception of jurisdiction over hospitals and psychiatric institutions, which the constitution assigns exclusively to the provinces, the authority over health or medical care was never explicitly addressed in the original document, which, in the 1860s, assigned powers to the central and provincial governments. As a consequence, authority can only be inferred from a number of other provisions in the constitution. Subsequent judicial decisions support the view that the provinces have primary, but not exclusive, jurisdiction over health care (Braën, 2004; Leeson, 2004). As stated by Justice Estey in the Supreme Court of Canada case *Schneider v. The Queen** “health is not a matter which is subject to specific constitutional assignment but instead is an amorphous topic which can be addressed by valid federal or provincial legislation, depending on the circumstances of each case on the nature or scope of the health problem in question”.

Although the three northern territories have a constitutional status that is subsidiary to the federal government, they have been delegated responsibility for administering public health care by the federal government. The federal government retains important “steering” responsibilities in terms of

* *Schneider v The Queen* [1982] 2 S.C.R. 112.

key dimensions of medicare through the Canada Health Act, the principles of which are upheld by provinces wanting to receive their full share of the Canada Health Transfer (see Fig. 2.1). By not taxing health benefits through employment-based insurance, the federal government also provides an implicit subsidy to encourage private health insurance (PHI) coverage for non-medicare health services and pharmaceuticals. Figure 2.1 is a highly simplified overview of the governance of publicly financed health care in Canada.

FIG. 2.1 Overview of the health system: Canada



Note: Figure does not include federal financing and administration of the following: extended (non-UHC) health coverage for eligible Indigenous peoples through Indigenous Services Canada; all health services for active members of the Canadian Armed Forces through the Department of National Defence; all health services for inmates of federal prisons (sentences of ≥ 2 years) through the Correctional Service of Canada; extended health benefits and services (beyond UHC) for veterans of the Canadian Armed Forces through Veterans Affairs Canada

Source: Adapted from Martin et al. (2018)

■ 2.2.1 *The provincial and territorial level*

Each province and territory has legislation governing the administration of a single-payer system for universal hospital and physician services (both in hospitals as well as those in ambulatory settings). Collectively, the 13 provincial and territorial health care insurance plans form Canada's publicly funded health care system that has come to be known as medicare (Marchildon, 2009). In addition to paying for hospital care, either directly or through funding for health authorities (see Table 2.3), provinces also

TABLE 2.3 Arm's-length health administration and service agencies in Canada

PROVINCE OR TERRITORY	POPULATION IN 2019	NAMES USED FOR GEOGRAPHICALLY DEFINED REGIONS/AGENCIES	NUMBER IN 1997	NUMBER IN 2003	NUMBER IN 2015	NUMBER IN 2019
Ontario	14 566 547	Local Health Integration Networks/ Ontario Health	0	0	14	1
Quebec	8 484 965	Regional health agencies	18	18	18	18
British Columbia	5 071 336	Health authorities ^a	52	5	5	5
Alberta	4 371 316	Regional health authorities/ Alberta Health Services	17	9	0	1
Manitoba	1 369 465	Regional health authorities	11	11	5	5
Saskatchewan	1 174 462	Regional health authorities/ Saskatchewan Health Authority ^b	33	13	13	1
Nova Scotia	971 395	District health authorities/ Nova Scotia Health Authority	9	9	4	1
New Brunswick	776 827	Regional health authorities	8	8	2	2
Newfoundland and Labrador	521 542	Health regions	4	4	4	4
Prince Edward Island	156 947	Regional health authorities/Health PEI	6	5	1	1
Northwest Territories	44 826	Health authorities/ Northwest Territories Health and Social Services Authority ^c	6	6	6	1
Yukon	40 854	None	0	0	0	0
Nunavut	38 780	None	0	0	0	0

^a The First Nations Health Authority, established in British Columbia in 2013, is responsible for community health programmes and services for Indigenous Peoples in that province

^b Saskatchewan preserved the Athabasca Health Authority in the far north of the province in part due to the tripartite financing arrangements between the Saskatchewan government, the Athabasca Dene governments in the region and the Government of Canada

^c Northwest Territories has two additional authorities: Hay River Health and Social Services Authority (as an interim measure until it is consolidated within the territorial authority), and Tłı̄ch̄ Community Services Agency, a self-governing Indigenous-led authority responsible for non-medicare services

Note: Jurisdictions are listed in order of population size (largest to smallest)

Sources: Population estimates from Statistics Canada (2019a). All other information drawn from Axelsson, Marchildon & Repullo-Labrador (2007), Marchildon (2016b), Marchildon (2019) and PT government websites

set rates of remuneration for physicians that are negotiated with provincial medical associations (health authority budgets do not include physician services). Provincial governments also administer a variety of LTC subsidies and services as well as prescription drug plans that provide varying degrees of coverage to residents and mostly function as a safety net. These non-medicare services have grown over time relative to hospital and physician services.*

Provincial and territorial (PT) ministers of health are responsible for the legislation and regulations for the administration of universal coverage for medically necessary hospital and physician services. In some jurisdictions, there are two separate pieces of legislation, one pertaining to inpatient services and the other to medical services, while in other jurisdictions, both have been combined in a single piece of legislation. In provinces and territories with health authorities, some of the health minister's authority and responsibility for the health system is delegated to public administrative agencies responsible for allocating resources for a broad range of health services (see Table 2.3).

Regionalization combines devolution of funding from provincial ministries of health to the regional health authorities (RHAs) with a centralization of governance and administration from individual health care facilities and organizations to RHAs. In most provinces, RHAs act both as providers and purchasers of hospital care and LTC as well as other services delegated by provincial law. Between 2006 and 2018, LHINs (Local Health Integration Networks) in Ontario, unlike RHAs in the rest of Canada, did not provide services directly; instead, they allocated resources among hospitals and other independent health organizations. While in some cases RHAs facilitated horizontal integration, in particular the consolidation of hospitals, the main purpose of regionalization was to gain the benefits of vertical integration. By coordinating or integrating facilities and providers across a number of health sectors, RHAs were expected to improve the continuity of care and reduce costs by encouraging more upstream preventive care and, where appropriate, substituting potentially lower-cost home, community and institutional services for more expensive hospital care (Marchildon, 2016b). With funding from provincial ministries of health, RHAs and more centralized provincial and territorial health authorities (PTHAs) allocate health resources to serve

* Although medicare services cannot be calculated in a precise way, hospital and physician services can be used a rough proxy – forecast at 43% of all health expenditures in Canada in 2018 (CIHI, 2018a).

the needs of their respective populations. However, no provincial government has delegated physician remuneration,* including family doctors who are responsible for the majority of primary care provision, or the administration of public prescription drug plans, to RHAs and PTHAs (Marchildon, 2016b).

■ 2.2.2 *The federal level*

The federal government plays a key role in setting pan-Canadian standards for UHC services – hospital, diagnostic, medical care, designated surgical-dental services and inpatient drug therapies – through the Canada Health Act (see section 3.3.3). The federal department of Health – Health Canada – is responsible for ensuring that the PT governments are adhering to the five criteria of the Canada Health Act. Although conditional transfers are a common policy tool in most federations, the use of the federal spending power in health care has been more controversial in Canada in large part because of the desire of some provincial governments and policy advocates for an even greater degree of fiscal and administrative decentralization (Boessenkool, 2010; 2013).

While PT governments must provide universally insured services to all registered First Nations and recognized Inuit residents, the federal government provides these citizens supplemental coverage for “non-insured health benefits” (NIHB) such as prescription drugs, dental care and vision care as well as medical transportation in order to obtain medicare services not provided on-reserve or in the community of residence. NIHB provides last-dollar coverage for those services not covered under an existing private health insurance programme (generally employment-based), PT extended benefit plans or other FPT social programmes.† Previously administered by Health Canada, the NIHB programme is now administered in a newly established department known as Indigenous Services Canada. However, Health Canada and the Public Health Agency of Canada continue to fund a number of population health and community health programmes in First

* The one exception is the Northwest Territories where the Territorial Health and Social Services Authority is responsible for physician remuneration, almost all of which is received in a salary form.

† Government of Canada. About the Non-Insured Health Benefits program, <https://www.sac-isc.gc.ca/eng/1576790320164/1576790364553>.

Nation and Inuit communities (for example, the First Nations and Inuit Home and Community Care programme; and the Aboriginal Diabetes Initiative). Health Canada is also responsible for regulating the safety and efficacy of therapeutic products including medical devices, pharmaceuticals and natural health products and for ensuring food and consumer product safety. Data and patent protection for drug products is also administered by Health Canada under the Food and Drugs Act and the Patented Medicines (Notice of Compliance) Regulations under the Patent Act.

Since 2004, the Public Health Agency of Canada (PHAC) has performed a broad array of public health functions including infectious disease prevention and control, surveillance, emergency preparedness, as well as leading national immunization initiatives, and coordinating or administering programmes for health promotion, illness prevention and travel health. PHAC is also responsible for regionally distributed centres and laboratories including the biosafety facilities at the National Microbiology Laboratory. The Public Health Agency of Canada Act also established the position of Chief Public Health Officer (CPHO). The Act empowers the CPHO to communicate with PT governments and their public health agencies as well as nongovernmental organizations and the private sector on public health issues. During the COVID-19 crisis in 2020, Canada's CPHO Dr Theresa Tam worked with her PT counterparts to coordinate policy responses to the pandemic. During the pandemic, Dr Tam held daily live press conferences to give progress reports on the spread of COVID-19 and the responses recommended by her office to contain the contagion.

An arm's-length quasi-judicial body – the Patent Medicine Prices Review Board (PMPRB) – regulates the factory gate price (defined as the price at which pharmaceutical manufacturers sell to hospitals, pharmacies and other wholesalers) of patented drugs. Established in 1987, the PMPRB acts as the consumer protection pillar of a major set of reforms to the Patent Act, which were designed to encourage greater investment in pharmaceutical research and development (R&D) in Canada through stronger patent protection. It is important to note that the PMPRB does not have jurisdiction over the prices charged by wholesalers or pharmacies, or over the professional fees of pharmacists. Although the PMPRB has no mandate to regulate generic drug prices, it does report annually to parliament on the price trends of all drugs (see section 2.8.4). In response to escalating prices of brand name drugs in Canada, and relatively high prices compared with other countries,

in 2019 regulatory changes were made for the first time since the PMPRB was established (see Chapter 5).

In addition, the federal government plays a critical role in health research through the funding of the Canadian Institutes of Health Research (CIHR). CIHR is made up of 13 “virtual” institutes and provides research funding with the aim to improve health and strengthening the health system (Marchildon, 2013). While the majority of CIHR-sponsored research is investigator initiated, slightly more than 30% of CIHR-funded research is strategic, of which \$ 115.9 million (€ 78 million)* was allocated to Government of Canada priorities in 2017–2018 (CIHR, 2018). The federal Minister of Health is responsible for CIHR and maintaining the objective of making Canada one of the five leading health research nations in the world. The federal government also provides the majority of funding for major research initiatives that are governed independently, including Genome Canada whose objective is to make Canada a world leader in research capable of isolating disease predisposition and developing better diagnostic tools and prevention strategies.

This research activity is supported by an extensive infrastructure for health data provided by Statistics Canada through 5-year censuses as well as a number of health surveys. Recognized internationally, Statistics Canada was a pioneer in the gathering of health statistics as well as in the development of indicators of health status and the determinants of health. Data collection has been extended considerably through Statistics Canada’s partnership with the Canadian Institute for Health Information (see section 2.6).

■ 2.2.3 *The intergovernmental level*

As a decentralized state operating in an environment of increasing health policy interdependence, the federal, provincial and territorial (FPT) governments rely heavily on intergovernmental instruments to facilitate and coordinate policy and programme areas (Marchildon, 2010). Direct instruments include the (FPT) advisory councils and committees that report to the Conference of FPT Deputy Ministers of Health, which in turn report to the Conference of FPT Ministers of Health (O’Reilly, 2001).

* All dollar values are Canadian dollars unless otherwise stated. The average exchange rate used for 2018 is C\$ 1 = € 0.67.

The federal government also provides funding for a number of specialized pan-Canadian health organizations (PCHOs) which are summarized in Table 2.4. In 2018, an external review panel (Forest & Martin, 2018) suggested major changes to the PCHOs including some potential mergers among the organizations, but at the date of writing, there have not been major changes to these PCHOs with the exception of the amalgamation of the Canadian Patient Safety Initiative and the Canadian Foundation for Healthcare Improvement in 2020 (Canadian Foundation for Healthcare Improvement, 2020a).

TABLE 2.4 Pan-Canadian health organizations (PCHOs), in order of budgetary size in 2018

NAME OF PCHO	BUDGET (MILLION \$)	YEAR ESTABLISHED	FOCUS OF PCHO
Canada Health Infoway	116.8	2001	Uses funding to work with partners to accelerate the development, adoption and effective use of digital health solutions
Canadian Institute for Health Information (CIHI)	109.3	1993–1994	Collects, analyses and reports on health data, much of which is PT financial and administrative data
Canadian Partnership Against Cancer (CPAC)	39.9	2006–2007	Accelerates action on cancer control by working with PT cancer agencies and other stakeholders
Canadian Agency for Drugs and Technologies in Health (CADTH)	31.1	1989	Provides health technology assessment to allow FPT health system decision-makers to select clinically and cost-effective drugs, medical devices and other technologies
Mental Health Commission of Canada (MHCC)	19.5	2007	Facilitates the development and dissemination of tools and programmes to support improved mental health
Canadian Foundation for Healthcare Improvement (CFHI)	19.1	1996–1997	Accelerates improvement and innovation in health care through partnership with FPT governments and health system organizations
Canadian Patient Safety Institute (CPSI)	8.6	2003	Works with FPT partners and health system stakeholders to improve patient safety and the quality of care
Canadian Centre on Substance Use and Addiction (CCSA)	8.8	1988	Addresses issues of substance use (drugs and alcohol) through partnerships

Source: Derived from Forest and Martin (2018)

FPT governments collaborate extensively with civil society partners through the PCHOs (Table 2.4). Working on projects with the Canadian Foundation for Healthcare Improvement, for example, PT governments regularly examine, implement and scale-up innovations in health delivery in projects involving, for example, improving the health of LTC residents through more careful prescription of psychotics (Winnipeg Regional Health Authority), better self-management support for individuals with diabetes (Newfoundland), improving treatment for chronic care patients through telephone advice (Providence Health Care, Vancouver) (Canadian Foundation for Healthcare Improvement, 2020b). PT governments also work on projects involving mental health, cancer control and substance abuse on projects initiated or funded by the Mental Health Commission of Canada, the Canadian Partnership Against Cancer, and the Canadian Centre on Substance Use and Addiction.

Through the Council of the Federation, an intergovernmental organization established by the premiers of the 13 provinces and territories, PT governments created a Health Care Innovation Working Group made up of all PT ministers of health in 2012 (COF, 2016). In recent years, the Council has shifted its focus to cannabis legalization and regulation (COF, 2017).

■ **2.2.4** *Nongovernmental national agencies and associations*

Canadian health care programmes and policies are highly influenced by a number of nongovernmental organizations (NGOs). Many are organized as provincial associations and a number of these provincial bodies have national umbrella organizations that play an important role in facilitating and coordinating the memberships' pan-Canadian initiatives. A significant number of national health NGOs also have charitable status, and they form some of the largest – as measured by revenues and tax-deductible donations – NGOs in the country, mainly hospital foundations and disease-based charities.

It is worth noting that, unlike countries with government-based health facility accreditation, Canada has a system of voluntary accreditation conducted by an NGO (Shaw et al., 2013). Known as Accreditation Canada, this NGO accredits hospitals, health facilities and health authorities as well

as conducts reviews and assessments of health facilities and regional health systems with recommendations for improvements.

Health provider organizations have played a major role in shaping health care policy in Canada. For example, the Canadian Medical Association (CMA) is the umbrella national organization for physicians, specialists and general practitioners (GPs) – known as family doctors in Canada. In addition to lobbying for its members' interests, the CMA also conducts an active policy research agenda and publishes the biweekly *CMAJ* (*Canadian Medication Association Journal*) as well as six more specialized medical journals. The 12 PT medical associations (Nunavut is not represented) are self-governing divisions within the CMA. These PT bodies are responsible for negotiating physician remuneration and working conditions with PT ministries of health, except in Quebec where negotiations are carried out by two bodies representing specialists and GPs. While the CMA is not involved directly in such bargaining, it does – when called upon – provide advice and expertise to the PT associations.

The role of the CMA and, in particular, its provincial divisions, must be separated from the regulatory role of the provincial colleges of physicians and surgeons including licensing, setting standards of practice, investigation of patient complaints as well as enforcement. As is the case with most professions in Canada, physicians are responsible for regulating themselves within the framework of provincial legislation. A national body, the Royal College of Physicians and Surgeons of Canada (RCPSC), restricts its function to overseeing and regulating postgraduate medical education.

The Canadian Nurses Association (CNA) is a federation of 11 PT registered nurses' organizations with approximately 139 000 members as of 2018.* Some of the provincial organizations, such as the Registered Nurses Association of Ontario, have considerable policy and regulatory influence within their respective jurisdictions. Since nurses are highly unionized in Canada, their provincial and territorial union organizations exert considerable political influence. The unions are represented at the national level by the Canadian Federation of Nurses Unions.

There are numerous civil society groups at the pan-Canadian level the chief objective of which is to mobilize support and funding for both general

* The association of nurses of Quebec (Ordre des infirmières et infirmiers du Québec – OIIQ) is not a member of the CNA, while there is a single association for nurses in Nunavut and the Northwest Territories.

and specific health care causes. Other charitable organizations promote a greater public focus on particular diseases or health conditions through advocacy, information and advice for affected individuals and their caregivers. Many of these organizations have charitable status and provide funding for research in their respective areas.

Finally, there are industry associations that represent for-profit interests in health care. These include organizations such as the Canadian Generic Pharmaceuticals Association, Innovative Medicines Canada (the organization representing the patented, research-based pharmaceutical companies), and the Canadian Life and Health Insurance Association.

■ 2.3 Decentralization and centralization

Canada has a highly decentralized health system with PT governments mainly responsible for governing, regulating, financing and administering health care. In one recent study, provincial governments in Canada were found to have greater decision-making autonomy in terms of financing, service organization and delivery, human resource management, coverage access rules, and accountability-governance structures than the constituent units in seven other federations, including Switzerland (Marchildon & Bossert, 2018).

While Canada has a mixed model of public and private health delivery, the administration of health care has become more centralized as a result of large-scale administrative reforms enacted by PT governments during the past two decades. When regionalization first occurred, it involved both decentralization and centralization. While PT ministries of health delegated considerable administrative decision-making to RHAs, in many (but not all) cases this structural change also involved the abolishment of a number of more local health care organizations and their boards of directors, with these organizations folded into the RHAs (see section 2.3.1 and Table 2.4).

Since 2001, there has been a marked trend towards increased centralization in terms of reducing the number of health authorities or consolidating the health authorities into single PT health service agencies (see Table 2.4). The latter trend began in 2008 when Alberta disbanded its nine health authorities in favour of a single health authority in an

ambitious effort to gain economies of scale and scope by creating a single health management organization with some operational autonomy from the provincial ministry of health (Duckett, 2010; Donaldson, 2010). This model has since been adopted in Nova Scotia, Saskatchewan, the Northwest Territories and, in 2019, in Ontario (Marchildon, 2016b; 2019; Fierlbeck, 2018).

At the same time, primary care is decentralized. Although publicly financed, most primary care is privately delivered by GPs, almost all of whom are independent, for-profit professional contractors. While hospitals are divided in ownership – some are owned by health authorities while others remain private, largely non-profit, corporations – specialist physicians who provide acute services are also private, independent contractors. In most provinces, a significant number of specialists have been incorporated as professional corporations mainly to increase their after-tax income (Nielson & Sweetman, 2018). Most services supporting primary and acute care including ambulance, blood and laboratory services as well as the ancillary hospital services (e.g. laundry and food) are private. The ownership of LTC facilities is divided between public (PT and local government) and private (for-profit and non-profit), although the ratio between public and private varies considerably within the provinces. The majority of dental care, vision care, psychology and rehabilitation services are privately funded and delivered by independent professionals.

■ 2.4 Planning

There is no single agency responsible for system-wide national planning. Instead, pan-Canadian initiatives are often the product of intergovernmental agreements, committees and agencies that do a limited amount of high-level strategic planning, most often on a sector-by-sector basis such as health technology assessment, electronic health records (EHRs), and administrative data collection and dissemination.

FPT ministers or deputy ministers of health meet periodically to deal with policy and planning issues of interest to all. From time to time, the ministers or deputy ministers of health have established working groups on such issues (see section 2.6). However, most system-wide planning is actually done within the PT ministries of health who each have their own

policy and planning unit (Lazar et al., 2013). In regionalized provinces and territories, some planning has been delegated to health authorities but PT ministries continue to be responsible for major new capital (e.g. hospitals) as well as some infrastructure planning. Health human resource (HHR) planning is described in Chapter 4 (section 4.2.1). However, overall health system objectives are set by PT health ministries, and the planning needed to achieve those objectives is also largely done within PT health ministries (Abelson et al., 2017; Fierlbeck, 2018; Marchildon & Torgerson, 2013). Also, provincial auditors play an important role in reporting on government programmes and expenditures, thus informing health system reforms and performance improvements.

This high-level “steering” role of PT ministries is complemented by the more granular planning by the arm’s-length health authorities delegated by PT governments to administer the delivery of a broad range health services on behalf of the PT ministries of health. Operating at an intermediate level between health ministries and individual providers, health authorities have a legal mandate to plan the coordination and continuity of care among a host of health care organizations and providers within a defined geographical area (Denis, 2004; Marchildon, 2016b; 2019). Health authorities set their priorities through annual budgets (occasionally supplemented by multi-year plans) that are submitted to PT health ministries which nonetheless remain responsible for setting the overall planning objectives for the system (Martin et al., 2018; Abelson et al., 2017).

There is a limited role of patients and the public in the planning process (see section 7.1 for more details on public involvement in health system governance). At the time regionalization was introduced in Canada, one of the stated objectives was to extend public participation through elected health authority boards. For the most part, this objective was either not implemented or, when implemented in a few jurisdictions, was altered subsequently (Lewis & Kouri, 2004; Chessie, 2009). Today, the majority of board members are appointed without public consultation.

PHAC coordinates health-related response dimensions of any national emergency as outlined in the federal/provincial/territorial (FPT) Public Health Response Plan for Biological Events developed in 2017 (Pan-Canadian Public Health Network, 2018). This plan was developed following a series of reviews of previous pandemics, notably the H1N1 influenza pandemic in 2008–2009. It is to be activated when a biological hazard is

identified that may need coordination across FPT governments; it was last activated in January 2020 in response to the COVID-19 pandemic. The goals of this plan are outbreak control, outbreak prevention, risk mitigation, exposure control, and providing support and aid to the population, and it outlines the key responsibilities of the federal and the PT governments, as well as mechanisms for FPT coordination. The Canadian Food Inspection Agency is responsible for coordinating the response to any major outbreak of a food-related illness. Canadian Blood Services – and in Quebec, Héma Québec – are responsible for ensuring adequate inventories of fresh blood and frozen plasma.

Global Affairs Canada is responsible for most of Canada's health-related international development assistance, the majority of which flows to lower-income countries in sub-Saharan Africa and through the Global Fund for AIDS, Tuberculosis and Malaria, and Gavi, the Vaccine Alliance. As assessed by some of Canada's most prominent global health scholars, the quality of these contributions have, historically, been high (Nixon et al., 2018). However, the impact of these initiatives has been diluted due to the limited resources available and the diffuse nature of the Government of Canada's priorities.

■ 2.5 Intersectorality

Some provincial governments have experimented with intersectoral cabinet committees or committees of senior officials to address cross-cutting health issues and policies, in particular emphasizing the determinants of health and illness prevention. For example, in the past, Manitoba had a Healthy Child Committee of Cabinet and British Columbia pursued health promotion and chronic disease prevention.

While there have been a number of intersectoral health initiatives in Canada, few have set targets with clearly defined objectives within specified time frames and also generally lack a systematic evaluation of processes and outcomes. While these are features that the Canadian initiatives share with similar intersectoral initiatives in other countries (PHAC, 2008), there is an opportunity for more specific target setting and systematic evaluation in future intersectoral initiatives.

■ 2.6 Health information systems

To support system-wide planning, provincial governments have invested in health information and communication technology infrastructures with plans to create EHRs for all provincial residents. EHRs aim to capture all encounters with the health system and aspects of patient histories in a single record. Canada has a plurality of information systems in place for the collection, reporting and analysis of health data. While most physician practices and hospitals use their own electronic medical records (EMR) systems (College of Family Physicians of Canada, 2019), PT governments are making efforts to bring these together in more integrated information systems that would more closely resemble EHRs. To date such integrated information systems have not yet been fully achieved, though there is progress towards this goal. Alberta has made considerable progress towards integrating its 1 000+ information systems through its EHR initiative, Netcare, with full implementation planned for 2022 (Church & Smith, forthcoming). Also, Quebec has developed a provincial health record (the Dossier de santé du Québec (DSQ)) that compiles data from EMRs, laboratories and pharmacies.

Detailed administrative data is collected by PT governments, while Statistics Canada collects population health data through the national census (every 5 years) and large-sample health surveys. Statistics Canada is governed by the Statistics Act that makes the provision of basic census data compulsory while protecting individual privacy and confidentiality.

At the intergovernmental level, CIHI coordinates the collection and dissemination of health system data, much of which is administrative, clinical and financial data provided by the provinces and territories. CIHI works with FPT governments in establishing and maintaining data definitions and quality standards. The agency also works with provider organizations in maintaining databases including physician and hospital discharge databases. CIHI also reports on health system performance with both public and private reports on health system performance across PTs, and across subprovincial health regions, and facilities (hospitals, LTC facilities).

Since jurisdiction over health information is shared among FPT governments, the result is a patchwork of health information and privacy legislation in Canada. These laws sometimes address three issues – privacy, confidentiality and security – in the same legislation, or at other times, addresses these issues in separate pieces of legislation within the same jurisdiction.

At the federal level, four major pieces of legislation govern privacy. The Personal Information Protection and Electronic Documents Act (PIPEDA) applies to personal health data that are collected, used or disclosed in the course of commercial activities by private-sector businesses, including all information that cross PT and national borders. The Privacy Act requires informed consent before information is collected or used by the federal government and its Crown (publicly-owned) corporations. Within the limits of strict legal protection for individual confidentiality, the Statistics Act permits Statistics Canada to collect and disseminate health and other data. At the same time, the Access to Information Act requires that public information held by the federal government or its agencies be made publicly available unless it is specifically exempt.

At the PT level, most jurisdictions have general legislation in place to protect privacy and confidentiality although some have specific legislation to protect health information. This latter development is, in part, a response to the public backlash to initial efforts to establish electronic health information networks and EHRs, including patient records. While privacy concerns about health records pre-dated such efforts, the potential use of EHRs has highlighted these concerns.

There are a handful of university-based research centres focused on health services and policy research including the Manitoba Centre for Health Policy, the Institute of Health Policy, Management & Evaluation and its affiliated research institutes at the University of Toronto, the Centre for Health Economics and Policy Analysis (CHEPA) at McMaster University, the Centre for Health Services and Policy Research (CHSPR) at the University of British Columbia, and IRSPUM (Institut de recherche en santé publique) at the University of Montreal.

Researchers are funded through national and provincial health funding organizations. The CIHR Institute of Health Services and Policy Research is the single largest health services and policy research institute in Canada, although other CIHR institutes, including those for Indigenous People's Health, Gender and Health, and Population and Public Health, also invest in health services and policy research. A number of provincial governments have also established their own health research agencies and health research funding organizations and research agencies, the former of which include Ontario's Institute of Clinical Evaluative Sciences (now known only by its acronym ICES), Population Data BC and Alberta's

Institute of Health Economics. An alliance of provincial health research funding agencies, the National Alliance of Provincial Health Research Organizations (NAPHRO), was created in 2003 to promote collaboration across the provinces on common health research issues. In 2019 the Strategy for Patient-Oriented Research (SPOR) Canada Data Platform was launched, with 7 years of funding from CIHR, CIHI and provincial partners, with the aim of facilitating cross-provincial research by allowing researchers to request access from multiple provinces through a single portal.

■ 2.7 Regulation

While provincial governments have primary responsibility for the administration and delivery of publicly financed health care services, the delivery of health services is the responsibility of private or arm's-length public organizations, and their facilities – from independent hospitals and LTC establishments – and these are regulated by provincial governments. Health authorities are delegated public authorities and have no law-making capacity and operate under provincial legislation and regulations. The medical and financial coverage provided to employees under PT workers' compensation boards are regulated by PT governments.

Health organizations, including health authorities and independent health facilities are accredited on a voluntary basis through Accreditation Canada, a member-based NGO. Most health care providers are organized as self-governing professions under PT law.

■ 2.7.1 *Regulation and governance of third-party payers*

PT ministries of health are the principal third-party payers in Canada. All these governments administer their own single-payer medicare coverage systems under their own legislation and regulations. As the principal payers, provincial ministries and health authorities work through, and contract with, a range of independent health care organizations including hospitals, day surgeries, diagnostic clinics, medical laboratories, emergency transportation companies, LTC organizations and primary health clinics.

There is also a purchaser–provider split in all provinces between the health ministry and delegated health authorities, whether single provincial health agencies or multiple regional health authorities. Provincial governments have legislation that define, in very high-level directional terms, the division of responsibility and accountability between their respective ministries of health and RHAs.

Although a similar accountability relationship exists in Canada's three territories, these jurisdictions are constitutionally and fiscally dependent on the federal government. As such, they have been delegated the responsibility and accountability for the administration of public health care services as well as providing first-dollar coverage for medically necessary hospital and physician services. However, as a consequence of the territories having an inadequate tax base to fund such services – combined with the much higher cost of delivering services in the sparsely populated north – territorial governments are heavily reliant on federal fiscal transfers, such as the Territorial Formula Financing transfer, well beyond their per capita allocation under the Canada Health Transfer (Young & Chatwood, 2011; Marchildon & Chatwood, 2012).

As noted above, the federal government provides some extended (i.e. beyond medicare) health benefit coverage to eligible First Nations individuals and Inuit through the NIHB programme. In addition, federal government health services to First Nations communities has been turned over to at least some First Nations through self-governing agreements (Minore & Katt, 2007; Lavoie, 2018). However, it is the Government of Canada's position that the health programmes, services and insurance coverage it provides to First Nation and Inuit beneficiaries is on the basis of national policy and not due to any constitutional or Aboriginal treaty obligations, a position contested by a majority of First Nation and Inuit governments and organizations (Lavoie, 2013).

While there is an active market for private health insurance that is either complementary or supplementary to medicare, private health insurance for UHC (i.e. medicare) services is either prohibited or discouraged by PT legislation, regulations and long-established policy practices (Flood & Archibald, 2001) (see section 3.5). However, given the narrow scope of medicare, there is considerable private health insurance for non-medicare services such as prescription drugs, dental care and vision care. Both the federal and provincial governments are involved

in regulating private health insurance, the vast majority of which comes in the form of group insurance plans sponsored by employers, in which individual beneficiaries have limited or no choice of insurer (Hurley & Guindon, 2020; Gechert, 2010). The federal government is responsible for regulating the solvency of insurance carriers, while the PT governments are responsible for regulating the actual insurance product including the design and pricing of the health coverage package as well as consumer sale and service.

■ 2.7.2 *Regulation and governance of provision*

Providers can be organizations such as hospitals, LTC homes and medical clinics, health authorities or they can be individual health professionals. Historically, the vast majority of hospitals in Canada have been private, mainly non-profit, institutions that operated at arm's length from provincial governments, although some government regulation and supervision had long been accepted by those hospitals accepting subsidies for indigent patients. However, with the introduction of universal hospital coverage throughout Canada, the relationship between hospitals and provincial governments became much closer, with hospitals almost entirely reliant on public funding and governments ultimately accountable for the use of public funds. With regionalization, hospitals have been drawn into an even tighter relationship with provincial governments. Indeed, in many provinces, the majority of hospitals outside Ontario are now owned and operated by the health authorities, and the remaining independent hospitals are contractually obliged to provide provincial residents with acute care services (Maddelena, 2006; Philippon & Braithwaite, 2008; Marchildon, 2016b). Except for Alberta and Quebec, accreditation remains voluntary and nongovernmental in nature and is performed in all jurisdictions by Accreditation Canada (see section 2.2.4).

Redress for medical malpractice and similar negligence based on the common law of tort is pursued privately through the courts.* Both physicians and health organizations can be sued.

* In contrast to other provinces in Canada, Quebec has a civil code rather than common law, and medical malpractice is governed under the provision regarding general civil liability under its civil code.

Damage awards and therefore malpractice insurance costs are lower in Canada than the USA for a number of reasons including: the more restricted practice of contingency billing by lawyers; the lower damages awarded by Canadian courts in which judges rather than juries assess the quantum of damages; and the policy of physician associations to fight rather than settle “nuisance” claims (Mohr, 2000). Unfortunately, these differences have not produced an environment in which Canadian physicians are more prepared than their American colleagues to report medical errors to patients (Levinson & Gallagher, 2007).

There are three different approaches taken by provinces and territories to provider regulation in Canada, including licensure (granting members the exclusive right to provide a particular service), certification (allows both members and non-members of a profession to provide services, but only members can use the professional designation), and the controlled acts system (regulating a specific task or activity).

While the specific regulatory approach for provider groups can vary considerably across provinces and territories, there is remarkable consistency in approach among certain professions such as physicians, nurses and dentists across all jurisdictions. Moreover, there have been considerable intergovernmental efforts to address the issue of portability of qualifications among provinces.

In some provinces (British Columbia, Alberta, Saskatchewan, Ontario, Quebec and New Brunswick), governments have also established health quality councils to work with the health professionals and health care organizations to improve quality standards and outcomes as well as report quality outcomes to the general public (Milligan et al., 2018). However, none of these organizations has a mandate to enforce, much less regulate, quality standards.

■ 2.7.3 *Regulation of services and goods*

Insured (i.e. medicare) services are defined under the Canada Health Act as medically necessary hospital, diagnostic, medical and surgical-dental services (performed by a dentist in a hospital where a hospital is required for the proper performance of the procedure) provided to insured persons. However, PT governments have some discretion in determining what new

health services are medically necessary and included under their respective provincial medicare plans (see section 3.3.1).

Health technology assessment (HTA) organizations operate at provincial and at the pan-Canadian levels. Currently, there are three provincial HTA agencies: INESSS – l’Institut national d’excellence en santé et en services sociaux (Quebec), Health Quality Ontario and the Ontario Health Technology Advisory Committee (now part of Ontario Health), and the HTA unit at the Institute of Health Economics (IHE) in Alberta. In addition, there are numerous academic and hospital-based organizations that conduct HTAs (Battista et al., 2009).

The Canadian Agency for Drugs and Technologies in Health (CADTH) is the sole pan-Canadian HTA agency and the largest producer of HTAs in the country. Established and funded by FPT governments, CADTH’s mandate is to provide evidence-based evaluations of new health technologies including prescription drugs and medical devices, procedures and systems (see section 5.6) to all participating governments. These recommendations are advisory in nature and it is up to the governments to decide whether or not to introduce medical technologies or add prescription drugs to their respective health systems and public drug plans (Hailey, 2007).

CADTH’s Common Drug Review (CDR) streamlines the process for reviewing new pharmaceuticals and providing recommendations to all provinces and territories except Quebec. The CDR process has three stages: 1) CADTH does a systematic review of the clinical evidence and pharmacoeconomic data; 2) the Canadian Drug Expert Committee (CDEC) under CADTH makes a formulary listing recommendation; and 3) health ministries make their own formulary and benefit coverage decisions on the basis of their own drug formulary committees, policy environments and political pressures (Fierlbeck, Gardner & Levy, 2018). Provincial decisions can be influenced by the presence or absence of a significant pharmaceutical industry presence. In Canada, the majority of pharmaceutical production is concentrated in two cities – Toronto (Ontario) and Montreal (Quebec).

■ **2.7.4** *Regulation and governance of pharmaceuticals*

Only physicians are legally permitted to prescribe a full range of pharmaceutical therapies. However, in recent years nurse practitioners, pharmacists

and dentists have had limited authority to prescribe pharmaceutical therapies within their respective scopes of practice.

Through its Therapeutic Products Directorate and the Biologics and Genetics Therapies Directorate, Health Canada determines the initial approval and labelling of all prescription drugs. In 2004, the Natural and Non-Prescription Health Products Directorate was established, and Health Canada began to regulate traditional herbal medicines, vitamins and mineral supplements as well as homeopathic preparations in terms of initial approval and labelling. Health Canada also prohibits direct-to-consumer advertising (DTCA) of prescription drug products, a prohibition that has been challenged as contrary to the Charter of Rights and Freedoms by one of Canada's largest media chains (Flood, 2010). Despite the current prohibition, a large proportion of the Canadian public is influenced by DTCA through television from the USA where DTCA is permitted. Advertising of prescription drugs to health professionals is subject to federal legislation as well as advertising and ethical practices codes established by industry associations (Mintzes et al., 2002; Paris & Belloni, 2014).

The constitution confers exclusive jurisdiction over the patent of new inventions, including novel prescription drugs, to the federal government. The Patent Office is part of the Canadian Intellectual Property Office, a special operating agency associated with the Federal Department of Innovation, Science and Economic Development Canada. In the late 1980s and early 1990s, the federal government shifted policy direction by increasing patent protection to the OECD norm of 20 years in an effort to increase the level of investment, research and development by the international pharmaceutical industry in Canada (Anis, 2000). At the same time, the federal government established the PMPRB to regulate the factory gate prices of patented drugs (see section 5.6).

PT governments use a number of regulatory tools to contain the cost of their respective drug plans although these vary considerably across jurisdictions (see section 5.6). These regulatory tools include reference pricing (reimbursing on the basis of the lowest cost pharmaceutical in a given therapeutic category), licensing, bulk purchasing, tendering and discounting (Paris & Belloni, 2014; Grootendorst & Hollis, 2011). Likely the most important tool is the decision whether or not to include a drug on a PT drug plan formulary. These decisions are made by PT ministries of health based on

the recommendations of PT drug advisory committees (Rosenberg-Yunger & Bayoumi, 2014).

■ 2.7.5 Regulation of medical devices and aids

The federal government regulates medical devices through the Medical Devices Program in the Therapeutic Products Directorate of Health Canada. Diagnostic and therapeutic medical devices that fall under one of the four enumerated classes in the Medical Devices Regulations of the federal Food and Drugs Act (see Table 2.5). The Medical Devices Program assesses the safety, effectiveness and quality of medical devices by a combination of premarket review, post-approval surveillance and quality systems in the manufacturing process (Health Canada, 2007).

Canada is an active participant in the International Medical Device Regulators' Forum, which recently transitioned to a harmonized regulatory process for medical devices among participating countries. As of January 2019, Health Canada participates in the Medical Device Single Audit Program, which started as a pilot programme in 2014 including Canada, the USA, Australia and Brazil to develop, manage and oversee a single regulatory audit to satisfy the needs of multiple regulatory jurisdictions.

TABLE 2.5 Health Canada's medical device classification under the Food and Drugs Act

DEVICE CLASS	RISK	EXAMPLES	LICENCE REQUIREMENTS
I	Lowest	Reusable surgical instruments, bandages and laboratory culture media	Device licence not required but establishment where device is made or distributed must be licensed
II	Low	Contact lenses, pregnancy test kits, endoscopes, catheters	Manufacturers require a Health Canada licence before selling or advertising medical devices. Manufacturers are also required to renew licence annually.
III	Moderate	Orthopaedic implants, glucose monitors, dental implants, haemodialysis machines	
IV	High	Cardiac pacemaker, angiogram catheters, cranial shunts	

Source: Health Canada (2007)

■ 2.8 Person-centred care

There has been increasing interest in engaging with patients and the public in the past decade and PT health systems have embraced the goal of providing patient-centred care. A wide range of initiatives have been introduced to inform the public about their health system and their care options, to collect data from patients including on care experience and care outcomes, and to engage patients in system governance through consultations and ongoing involvement in advisory councils. Patient advisory councils or committees have become standard practice in hospitals and health authorities across the country. These are still relatively new, however, and there has been little research on their level of impact (see Chapter 7 for information on the role of patients and the public in system governance). At the national level, the Canadian Medical Association (CMA)'s Patient Voice advisory group was established in 2018 to highlight issues that matter to the public and provide insight on patient engagement strategies and campaigns. Also, the Choosing Wisely Canada campaign seeks to engage the public in making informed decisions and asking questions to their health care providers with the aim of reducing unnecessary care.

■ 2.8.1 *Patient information*

There has been considerable growth in the availability of information directed towards patients and the public with pan-Canadian reporting (e.g. by CIHI), PT-level reporting, such as by dedicated quality councils and ministries of health, and by health organizations (including regional and provincial health authorities, and hospitals). Also, almost all provinces and territories have patient navigation programmes; for example, for cancer care in Nova Scotia and Quebec (Wackinshaw, 2011; Pederson & Hack, 2011). The Choosing Wisely Canada campaign shares information with the public around potentially unnecessary tests and treatments.

Historically, Canadians received little direct information on hospital harms and critical incidents; however, the Canadian Patient Safety Institute has led a major initiative to produce guidelines for the disclosure of harms to patients with a revised version released in 2011 (CPSI, 2011). While each province and territory has its own patient safety reporting requirements,

and most provinces and territories requires hospitals to reporting patient harms in hospital, these data are only publicly reported in three provinces (Saskatchewan, Manitoba and Quebec) (Milligan et al., 2020; Boucaud & Dorschner, 2016).

TABLE 2.6 Patient information

TYPE OF INFORMATION	IS IT EASILY AVAILABLE?	COMMENTS
Information about statutory benefits	Y	PT ministries of health pages will explicit list insured services and specific uninsured examples
Information on hospital clinical outcomes	Y	CIHI reports publicly on a selection of hospital-level indicators of performance
Information on hospital waiting times	Y	CIHI reports regional (subprovincial) and provincial wait times for two interventions: hip replacement and knee replacement; it reports provincial-level wait times for additional services: hip fracture repair (emergency, and acute/Day surgery), cataract, by-pass surgery, radiation therapy, CT scan, MRI scan, bladder cancer surgery, breast cancer surgery, colorectal cancer surgery, lung cancer surgery, prostate cancer surgery. CIHI reports on hospital-level wait times, e.g. emergency department wait time for physician initial assessment; total time spent in emergency department for admitted patients
Comparative information about the quality of other providers (for example, GPs)	Y	There is no comparable information on physicians. CIHI reports comparative information on quality in LTC facilities
Patient access to own medical record	N	Patients do not have access to their own EMRs, but in most provinces there are a number of different patient portals through which patients can access some of their medical information. Notable province-wide initiatives include Alberta's MyHealth Records portal, and the Quebec Health Booklet
Interactive web or 24/7 telephone information	Y	Territories do not have healthlines; telemedicine services vary by province and territory
Information on patient experience collected (systematically or occasionally)	Y	CIHI developed the Canadian Patient Experiences Reporting System (CPERS), with public, aggregated, reporting as of 2019. CIHI reports on Commonwealth Fund International Health Policy Survey results for the country and the provinces
Information on medical errors	N	There is limited data on patient harms at the facility or provider level. CIHI and CPSI report on specific types of medical error in hospitals at the national level. Some provinces also publicly report patient safety incidents, but these are not standardized across the country.

A number of provincial governments has issued general statements and booklets concerning the public health care benefits to which residents are entitled. These statements are generally available on ministry of health websites. Similarly, the federal government has used its departmental websites to provide information on the health benefits provided to (for example) eligible First Nations, Inuit and veterans.

■ 2.8.2 Patient choice

TABLE 2.7 Patient choice for universal health coverage services

TYPE OF CHOICE	IS IT AVAILABLE?	DO PEOPLE EXERCISE CHOICE? ARE THERE ANY CONSTRAINTS (E.G. CHOICE IN THE REGION BUT NOT COUNTRYWIDE)? OTHER COMMENTS?
Choices around universal health coverage		
Choice of being covered or not	N	Coverage is based on PT residency
Choice of public or private coverage	N	
Choice of purchasing organization	N	
Choices of provider		
Choice of primary care practitioner	Y	There may be limits to choice of GP in some urban areas where doctors have “closed” lists and are not taking on new patients, and in some rural areas where there is limited supply
Direct access to specialists	N	In most PTs, specialists require referral from GP, but patients have some degree of choice of which specialist they are referred to
Choice of hospital	Y	In some cases choice may be restricted by availability (e.g. low population density areas or highly specialized service)
Choice to have treatment abroad	N	Coverage is only provided if medically necessary and is adjudicated on a case-by-case basis
Choices of treatment		
Participation in treatment decisions	Y	
Right to informed consent	Y	Excluding cases where the patient or substitute decision-maker is unable to consent and there is demonstrable suffering or imminent threat to life of health of the patient
Right to request a second opinion	Y	
Right to information about alternative treatment options	Y	

Within the limits imposed by geographical distance and isolation, PT residents are at liberty to choose the physician, hospital or LTC facility of their choice. Even residents living within a particular health authority can choose to access the services of a facility in another health authority in the same province. However, other than in an emergency, they cannot obtain medicare services in another province or country without a prior referral by an eligible authority in their own province.

In the last 15 years, a patient's choice of primary care provider has been constrained by the supply of GPs in some locations as well as the desire by some physicians to limit their roster to potentially less demanding patients (Asanin & Wilson, 2008; Reid et al., 2009; Rudoler et al., 2015). Since GPs act as gatekeepers in most provinces, patients are prevented or discouraged from approaching consulting physicians directly. However, at the point of referral, Canadians do have a choice of specialist.

■ 2.8.3 *Patient rights*

Two royal commission reports, one in 1964 and a second in 2002, have recommended a pan-Canadian patient charter of rights (Canada, 1964; Romanow, 2002). Despite this, there is no national patient charter of rights in Canada. In addition, no province or territory has implemented a patient charter of rights or other legislation defining specific individual patient rights (Smith, 2002).

The patient rights movement is relatively underdeveloped in Canada, at least compared with similar movements in the USA and western Europe. While there are civil society organizations (e.g. Canadian Cancer Society and the Canadian Mental Health Association) that advocate for the rights of patients with particular diseases, there are only a few individually oriented patient rights groups and these tend to be very weak in comparison to the specific disease-oriented organizations (Golding, 2005). While more general purpose organizations such as the Consumers' Association of Canada and the Canadian Association of Retired Persons (CARP) have engaged in some patient advocacy, these efforts remain limited compared with individually oriented patient rights organizations in other countries.

Historically, individual patient rights in Canada have largely been defined in terms of a perceived "right" of access to universally insured services

under the Canada Health Act. Since the introduction of the Charter of Rights and Freedoms in 1982, there have been a small number of cases in which patients have challenged provincial governments' interpretation of what the basket of universal health services includes. In addition, there have been a range of health care cases where patients have used section 7, the "right to life, liberty and security of the person" in the Charter of Rights and Freedoms to strike down laws perceived as restricting an individual's ability to access health care. There have been successful challenges that have struck laws which criminalized medical aid in dying and the use of cannabis for medical purposes. Section 7 has also been used in an effort to strike down laws limiting the opportunity for a parallel private tier to medicare's single public tier. A more recent challenge in British Columbia sought to expunge the provincial laws protecting single-tier medicare. Although unsuccessful at trial, it may take years for the appeal courts to make a final decision on the matter. (Flood & Thomas, 2018; Flood et al., 2005; 2007).

All FPT governments have general legislation to ensure that disabled residents have access to public facilities or to facilities that serve the general public. Since virtually all health care facilities come within this definition, disabled persons are ensured physical access to health services.

Historically, concerns about public health care were either expressed to PT ministries of health and their ministers or to members of opposition parties who would then question the governing party through the media and in the legislature. It is likely that only a tiny minority of patients ever used this highly political procedure and there has been growing pressure on governments to establish less difficult complaints procedures. As a consequence, some PT ministries of health (through external ombudsmen offices or a ministry office), health authorities and some independent hospitals have established internal complaints procedures, although the main remedy remains private – through complaints to private professional regulatory authorities at the PT level of government. These complaints can range from concerns about the poor bedside manners of some health professionals at one end of the spectrum to allegations of life-threatening medical errors (for a discussion of the possibility of obtaining redress through the tort system see section 2.8.2) at the other extreme.

TABLE 2.8 Patient rights

Y/N		COMMENTS
Protection of patient rights		
Does a formal definition of patient rights exist at national level?	N	Although commonly believed, federal legislation does not grant a right to health care. As of yet Canadian courts have not read in any free-standing right to health under the Charter of Rights and Freedoms but laws may be struck down for limiting rights of life, liberty or security of the person (s. 7) or failing to comply with the equality guarantee (s. 15)
Are patient rights included in legislation?	N	
Does the legislation conform with WHO's patient rights framework?	N/A	
Patient complaints avenues		
Are hospitals required to have a designated desk responsible for collecting and resolving patient complaints?	N	No legislation exists, but many hospitals will have such offices on a voluntary basis
Is a health-specific Ombudsman responsible for investigating and resolving patient complaints about health services?		This varies across provinces and territories
Are there other complaint avenues?	Y	Professional bodies all are required to receive complaints about their regulated practitioners, there are ministry-level offices of ombudsman, patient relations branches, etc.
Liability/compensation		
Is liability insurance required for physicians and/or other medical professionals?	Y	A national body, the Canadian Medical Protective Association (CMPA) provides medico-legal services, including liability insurance for physicians. CMPA fees are paid, in full or in part, by the PT ministries of health, as per their negotiated agreements with their respective physician bargaining agents
Can legal redress be sought through the courts in the case of medical error?	Y	Generally permitted, although there are few exceptions (e.g. GlaxoSmithKline's H1N1 vaccine in 2011 (Picard, 2011)). Courts are the typical venue for adverse events involving physicians
Is there a basis for no-fault compensation?	N	A comparative analysis by the CMPA in 2005 advocated for the continuation of the status quo tort system, there has been no significant action to introduce no-fault compensation. Note that Québec has had a Vaccine Injury Compensation Program in place since 1986. It is a no-fault compensation programme for vaccine injury relating to vaccines encouraged or mandated by public health
If a tort system exists, can patients obtain damage awards for economic and non-economic losses?	Y	There is a cap on settlements of medical malpractice in Canada. No such limit exists for claims against non-physicians, but they are seldom pursued. For a number of reasons, punitive damages in tort law for medical malpractice are relatively rare (Clarke, 2009; Flood & Thomas, 2011)
Can class action suites be taken against health care providers, pharmaceutical companies, etc.?	Y	

Sources: CMPA (2005); Picard (2011)

■ 2.8.4 *Patients and cross-border health care*

Under the portability provision of the Canada Health Act, PT governments are required to provide coverage for insured hospital and physician services for their residents when they are visiting other jurisdictions. Within Canada, residents are reimbursed at the rate approved by the PT plan in which the services are provided. To facilitate reimbursement, PTs have negotiated reciprocal billing arrangements with each other. Outside Canada, PT plans are expected to reimburse the amount that would have been paid in the home province or territory.

Provinces and territories are allowed to require patients to get consent from their home jurisdiction before seeking elective (non-emergency) insured services in another province or country. Within Canada, there are a series of bilateral billing agreements between the provinces and territories for hospital and physician services. All provinces and territories participate in hospital reciprocal billing and all, with the exception of Quebec, participate in reciprocal medical agreements (Flood & Choudhry, 2004).

Financing

■ Chapter summary

- The public sector in Canada is responsible for about 70% of total health expenditures, which is relatively low compared with other high-income countries.
- In the past decade, 2008–2018, health expenditures grew at about the same rate as the national economy, as provincial governments reigned in spending following the financial crisis. Prior to 2009 there was a prolonged period of rapid spending growth since the previous economic downturn in the mid-1990s.
- Almost all revenues for public health spending come from the general tax revenues of federal, provincial and territorial governments, a considerable portion of which is used to provide universal medicare – medically necessary hospital, diagnostic, medical care, designated surgical–dental services and inpatient drug therapies that are free from charges related to their provision. The remaining amount is used to subsidize other types of health care (non-medicare) including LTC and prescription drugs. Over 20% of PT health financing is from the Canada Health Transfer, a cash transfer from the federal government.
- Out-of-pocket (OOP) payments and private health insurance are responsible for most private health expenditures, in roughly equal parts. The vast majority of private health insurance comes in the

form of employment-based insurance for non-medicare goods and services including prescription drugs, dental care, vision care and preferred accommodation (e.g. private rooms) in hospitals. Private health insurance does not compete with the provincial and territorial “single-payer” systems for medicare.

- Global budgets and fee-for-service are dominant methods of paying hospitals and physicians, respectively, with some limited adoption of activity-based payments in hospitals and capitation funding for GPs.

3.1 Health expenditure

TABLE 3.1 Trends in health expenditure in Canada, 2000–2018 (selected years)

EXPENDITURE	2000	2005	2010	2015	2018 ^A
Current health expenditure per capita in US\$ (PPP)	2 451	3 292	4 167	4 551	4 974
Current health expenditure as % of GDP	8.2	9.0	10.7	10.6	10.7
Public expenditure on health as % of total health expenditure	70.0	69.9	70.3	70.8	69.7
Public expenditure on health per capita in US\$ (PPP)	1 715	2 300	2 928	3 223	3 466
Private expenditure on health as % of total health expenditure	30.0	30.1	29.7	29.2	30.3
Public expenditure on health as % of general government expenditure^b	14.8	17.1	17.8	19.1	
Government health spending as % of GDP	5.8	6.3	7.5	7.5	7.5
OOP payments as % of total health expenditure	16.6	15.4	15.1	14.3	15.1
OOP payments as % of private health expenditure	55.3	51.0	50.9	48.9	49.7
Voluntary health schemes as % of private health expenditure	44.7	49.0	49.1	51.1	50.3

PPP: purchasing power parity

^aProvisional data for 2018; total expenditure on health excludes capital expenditures; public expenditure is defined here to include government schemes plus social health insurance schemes (e.g. workers’ compensation boards); voluntary health schemes include private health insurance and non-consumption which includes hospital non-patient revenue and donations; total expenditures exclude capital expenditures for privately owned facilities and health research

^bWHO Global Health Expenditure Database 2019

Source: OECD (2019)

Of the total of \$ 255 billion (€ 154 billion) spent on health care in 2018, about 70% was from public sources, and 30% from private sources (CIHI, 2019a).^{*} This 70–30 split has been constant since the late 1990s, thus there has been little change in the role of private finance except for a slight shift away from out-of-pocket (OOP) spending towards private health insurance. Private health insurance has grown more rapidly than OOP payments in part because of the continuing centrality of private health insurance as part of employment-based benefit packages in unionized and professional workplaces.

Real annual growth in total health expenditure reached a peak in the late 1970s and the early 1980s, then declined precipitously in the early to mid-1990s only to rise again by the end of the 20th century. From the early 1990s until 1997, and then again from 2010–2014, health expenditure growth, particularly public sector health expenditure growth, was substantially below GDP growth as a consequence of major funding constraints by provincial health ministries, producing a real (inflation-adjusted) decline in public health care spending (Tuohy, 2002; CIHI, 2019a). Spending reductions in the 1990s were a direct result of the aggressive fiscal policy of provincial governments in eliminating their budgetary deficits and reducing debt loads that had accumulated over the previous two decades. Since health is the single largest spending category in provincial budgets, these governments capped or even reduced spending in the early to mid-1990s. This was followed by a major reduction in cash transfers from the federal government to the provinces, a large portion of which had historically been earmarked for health care (Tuohy, 2002).

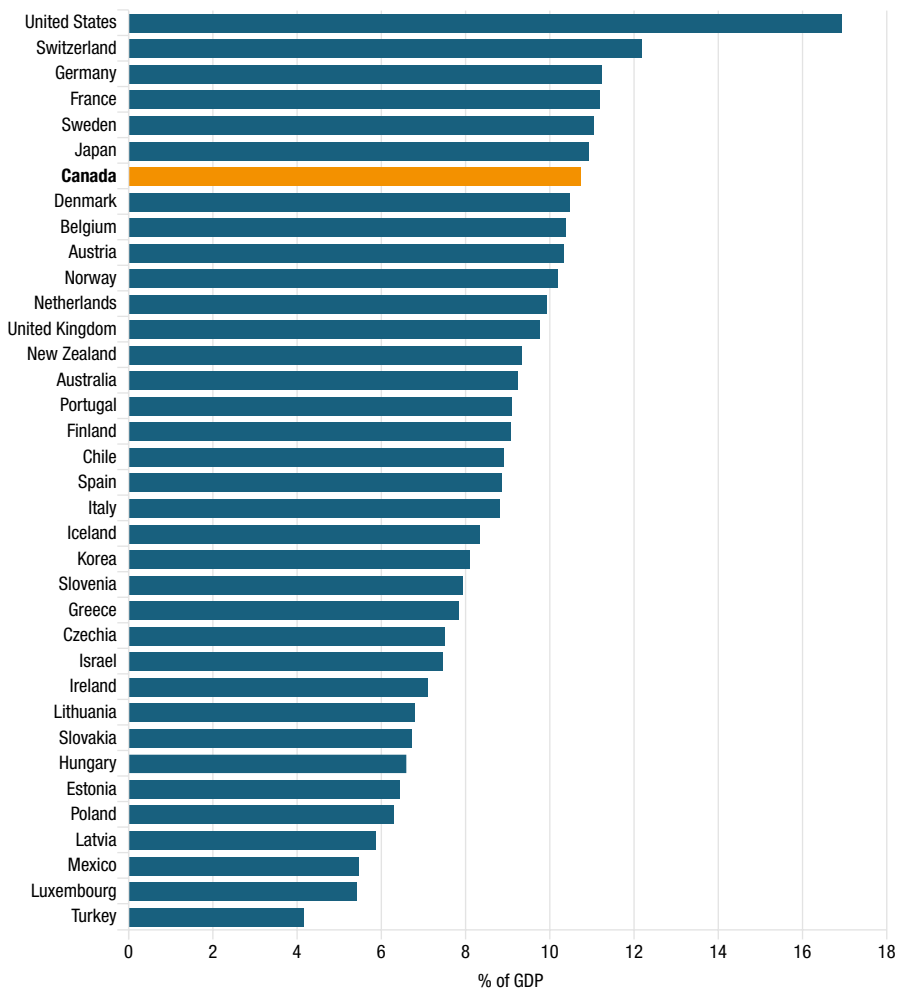
By the end of the 1990s, provincial governments had increased spending on health care largely in response to public perceptions about the deteriorating quality of medicare. By 2000, the federal government had begun to increase cash transfers to the provinces that culminated with a commitment in 2004 to apply an automatic rate of annual increase of 6% in the Canada Health Transfer for the following 10 years (CICS, 2004). These investments led to an increase in the health-to-GDP ratio which peaked at 10.7% in 2010. As shown in Table 3.1, per capita health expenditures then increased slightly from 2010–2018, and remained a stable percentage of GDP (10.7%). As of 2017, the annual increase in the federal cash transfer was reset in line with the growth rate of the economy, with a minimum increase of at least 3% per year and the federal government made a series of bilateral agreements with

^{*} The Actual Individual Consumption PPP rate is C\$ 1 = € 0.60284301 in 2018.

the provinces for an additional \$ 11.0 billion (€ 6.6 billion) over 10 years targeted to improved home and community care and mental health and addiction services (Marchildon, 2016c; Canada, 2019a; see also section 3.3.3).

Although economic growth fell to 2% in 2018 from 3.2% in 2017 (Statistics Canada, 2020), the rate of health spending growth was increased, as indicated by the average annual growth in total per capita health spending, in current dollars, of 2.9% from 2018 to 2019 (up from 2.3% and 2.5% in the previous two years) (CIHI, 2019a). Thus, the period 2014–2019 appears to be one of emerging growth in health spending which follows a period of restraint after the economic recession of 2008–2009 (CIHI, 2019a).

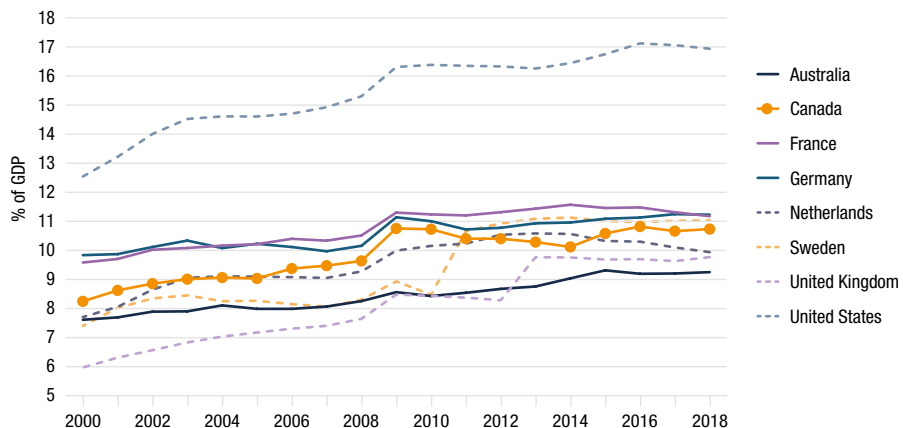
FIG. 3.1 Current health expenditure as a share (%) of GDP in OECD countries, 2018



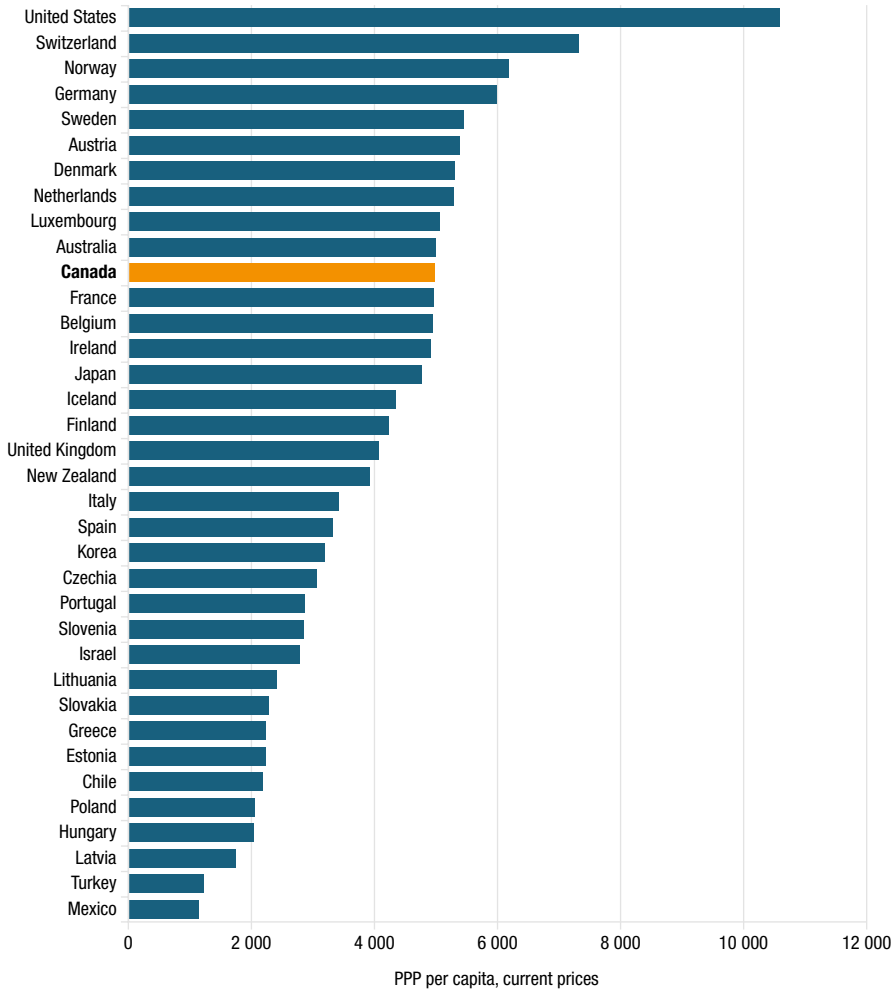
As can be seen in Figure 3.1, Canada is ranked seventh in the share of GDP spent on health among OECD countries. Canada's recent experience in terms of the growth of health spending as a share of the economy is similar to other OECD countries (Fig. 3.2). The one exception is the USA, which spends appreciably more as a proportion of its economy. Figure 3.3 compares per capita spending in purchasing power parity across OECD countries, and Canada ranks 11th in 2018.

Public and private spending per capita has increased at similar rates since 2010. The average annual growth rate in per capita private health spending for the 9-year period 2010 to 2019 was 2.8% compared with 2.7% for public spending (CIHI, 2019a). Canada's share of private health expenditures has been stable over the past 20 years but is high relative to other OECD countries, in part the product of low public coverage for prescription drugs and almost no public coverage for dental care and vision care (Fig. 3.4). Public spending on health in Canada made up 19% of total government expenditures in 2015, which is comparable to the Netherlands (19) and the UK (18.5), higher than in Australia (16.7), and lower than in the USA (22.6) (Fig. 3.5).

FIG. 3.2 Trends in current health expenditure as a share (%) of GDP in Canada and selected countries, 2000–2018



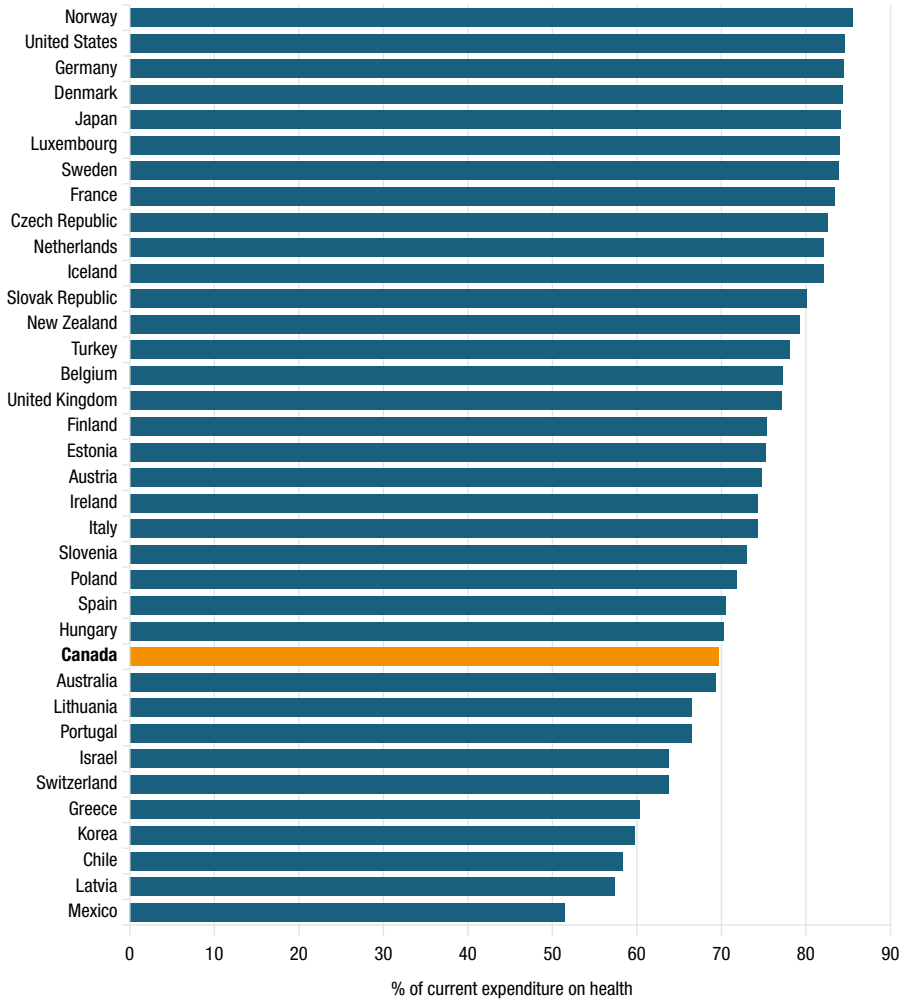
Source: OECD (2019) Health Statistics Database

FIG. 3.3 Current health expenditure in US\$ PPP per capita in OECD countries, 2018

PPP: purchasing power parity

Source: OECD (2019) Health Statistics Database

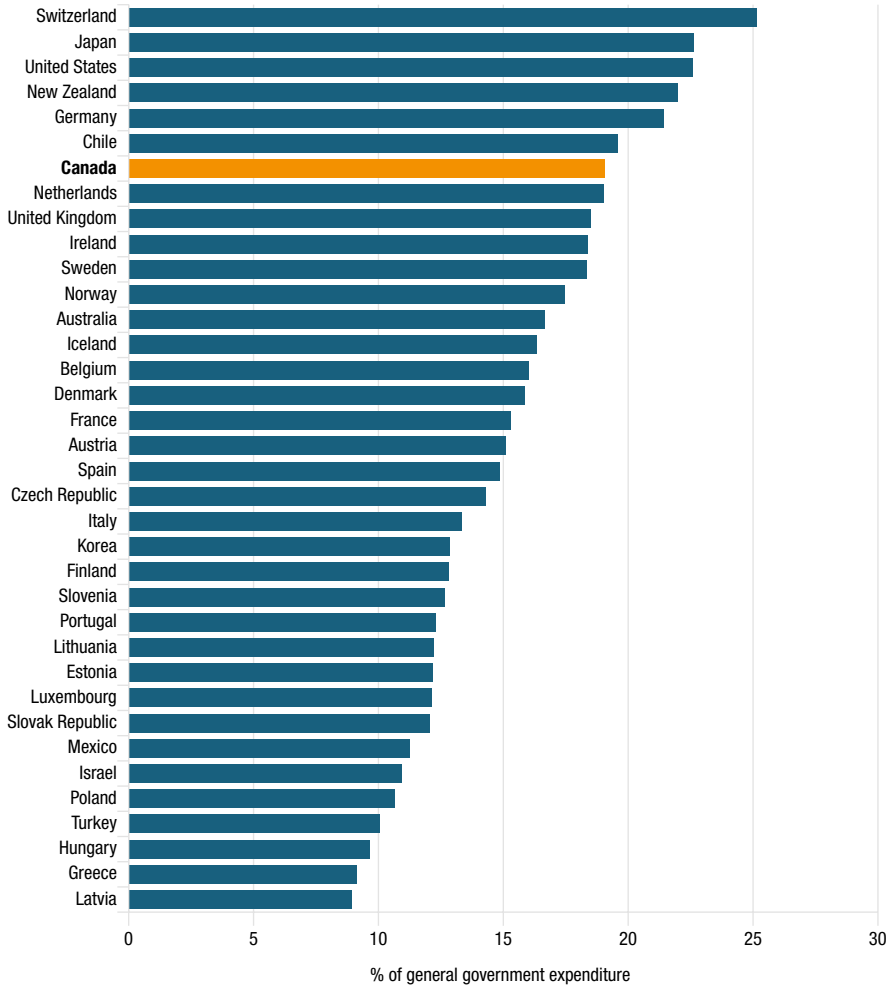
FIG. 3.4 Public expenditure on health as a share (%) of current health expenditure in OECD countries, 2018



Note: Public expenditures is defined here to include government schemes plus social health insurance schemes

Source: OECD (2019) Health Statistics Database

FIG. 3.5 Public expenditure on health as a share (%) of general government expenditure in OECD countries, 2015 or latest available year



Source: World Bank (2018)

■ 3.2 Sources of revenue and financial flows

The principal source of health system finance is taxation by the provincial, territorial and federal governments: general taxation provides well over two thirds of all financing for health (Table 3.2). Since medicare services (hospital, diagnostic, medical care, designated surgical-dental services and inpatient drug therapies) are free at the point of use, they are entirely financed by

government revenues mainly at the provincial level. In 2018, national estimates suggest public finance made up 90% of hospital spending, and over 98% of physician spending (CIHI, 2019a). The sources of funding for other health goods and services are derived from a combination of taxation, OOP payments and private health insurance. Compulsory (or social) insurance forms the smallest portion of health funding and is largely used for health benefits for workplace injuries or ailments available under workers' compensation schemes in PTs (see section 3.3.2).

Drawing on national estimates from CIHI, we can see that nearly 55% of public spending on health was on hospital and physician services, with the remaining 45% of public spending on the following functions: public health (7.7% of total public spending), publicly funded or subsidized non-medicare services such as other institutions (the majority of which are LTC facilities) (11.1%), and prescription drugs (8.1%), as well as health infrastructure, administration, and research (CIHI, 2019a). Private spending (which makes up about 30% of total spending), was for prescription drugs (25%), dental care (20.1% of total private spending), vision care (6.5%), other health professionals (6%), non-hospital institutions, most of which are LTC facilities (10.5%) and over-the-counter pharmaceuticals and personal health supplies (8.1%).

TABLE 3.2 Expenditure on health (as % of total current health expenditure) according to function and type of financing, 2018 (provisional)

	INPATIENT CARE (INCL. DAY CARE)	OUTPATIENT CARE	LONG-TERM CARE	MEDICAL GOODS	PREVENTIVE CARE	ADMINI- STRATION	OTHER SERVICES	TOTAL
General government	18.8	21.5	14.3	5.8	5.8	1.3	1.4	68.9
Compulsory health insurance	0.1	0.37	0.1	0.7	0.2	0	0.1	1.5
Private out-of-pocket	0.4	4.2	2.9	7.2	0	0	0.1	14.7
Private insurance	1.5	5.1	0.6	5.7	0	1.8	0.1	14.9
Total expenditure	20.8	31.2	17.9	19.3	5.9	3.1	1.8	100

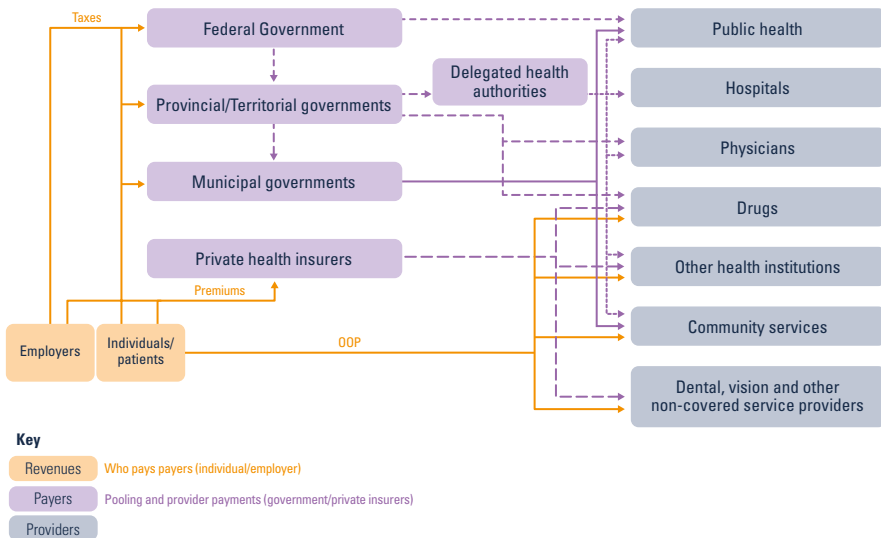
Note: Outpatient care includes home care and ancillary services

Source: OECD (2019) Health Statistics

3.3 Overview of the statutory financing system

There are two levels of statutory or compulsory funding and coverage for health services. The first is universal medicare, which includes medically necessary hospital, diagnostic, medical care, designated surgical-dental services and inpatient drug therapies that are provided free at the point of use and prepaid through general taxation. Medicare is protected by federal legislation, and serves as a floor for PT UHC programmes. Specifically, as described in Chapter 2, the Canada Health Act (CHA) establishes criteria and conditions related to the insured health services that PTs must fulfil to receive the full federal cash contribution under the Canada Health Transfer. The second level is non-medicare goods and services, often referred to as extended benefits, which are legislated provincially (with the exception of some targeted federal programmes; see section 3.3.1). Coverage of non-medicare goods and services varies considerably across the country, and there are different approaches to covering different types of goods and services within PTs. The financial flows are described in Figure 3.6.

FIG. 3.6 Financial flows in Canada



OOP: out of pocket

Note: Delegated Health Authorities can refer to either a single provincial authority or multiple subprovincial, regional authorities

Source: Authors

While the PTs are most directly responsible for raising the majority of financing for publicly funded health care, the federal government contributes funding through transfers to these governments. Federal transfers through the Canada Health Transfer are conditional on the PTs meeting the five criteria under the CHA (see Table 2.2). At the same time, the provinces receive additional funds in the form of unconditional transfers from the federal government through what is called Equalization, while the territories receive unconditional transfers through Territorial Formula Financing. The specific purpose of equalization is to ensure that Canadians, wherever they live, “have access to reasonably comparable services at reasonably comparable levels of taxation”, a purpose that is stated and protected in the Canadian constitution (Expert Panel on Equalization and Territorial Formula Financing 2006, p. 18). In 2019–2020, five provinces received equalization payments (estimated \$ 19.8 billion in total, € 13.2 billion): Prince Edward Island, Nova Scotia, New Brunswick, Quebec and Manitoba (Canada, 2019b). These unconditional payments combined with per capita funding through the Canada Health Transfer are essential to the ability of lower-income provinces in particular to provide medicare coverage that is roughly equivalent to the UHC of wealthier provinces (Béland et al., 2017).

■ 3.3.1 Coverage

MEDICARE

The breadth, depth and scope of coverage for broadly defined insured services under the CHA, although not identical, are remarkably similar from province to province. FPT governments have designed their UHC programmes to ensure that all eligible residents of Canadian PTs have free access to medically necessary hospital, diagnostics and medical services, commonly summarized as “medicare” (Marchildon, 2009).

Temporary health coverage is provided for refugee claimants, resettled refugees, asylum seekers and victims of human trafficking by the federal government through an Interim Federal Health Program until that person becomes resident and receives health coverage through the PT health insurance programme. In 2012, the Conservative federal government under Prime Minister Stephen Harper reformed this programme to reduce coverage provided for some categories of refugees and refugee claimants; though

this change was overturned by the federal court in 2014 (Stevenson, 2018). Undocumented migrants or those who enter the country illegally are not covered by any programme but generally receive emergency services from hospitals. A 2011 decision by the federal appeals court upheld this exclusion of health coverage to residents who are in Canada illegally and ruled against the argument that this practice contravened the Charter of Human Rights and Freedoms (*Nell Toussaint v Attorney General of Canada*).

Insured services are not specifically defined in either the CHA or PT medicare laws. However, the principle of comprehensiveness in the CHA requires that PT health systems cover medically necessary health services provided by hospitals and physicians, and as such PT governments err on the side of inclusion in their respective determinations of what services are included in medicare.

Similarly, at the provincial level, there is neither a positive list of inclusions nor a negative list of exclusions in the pertinent medicare legislation and regulations. Instead, provincial governments have, from the time that medicare was first introduced, tended to include all services provided in a hospital with the exception of some medically unnecessary (e.g. cosmetic surgery) procedures. As to which physician services are included, this has largely been a matter of negotiation between the provincial governments and the provincially based medical associations, but in practice almost all physician services are included. Ontario has one of the more formal mechanisms, involving three administrative bodies, for determining which physicians services are universally covered: 1) the Physicians Services Committee, a joint committee of officials drawn from the provincial health ministry and the Ontario Medical Association; 2) Medical Directors – physicians employed by the provincial health ministry who determine claims for public funding; and 3) the provincial Health Services Appeal and Review Board (Flood, Stabile & Tuohy, 2006). Also the Ontario Health Technology Advisory Committee reviews submissions for new services or medical technologies to receive public funding and makes recommendations to the provincial health ministry.

In terms of medicare, there has been no major reduction in, or expansion of, universally insured services by any level of government in Canada in recent years. Instead, most decisions involving new listings or de-listings are highly marginal in nature and, in fact, most of them appear to address procedures beyond those required by medicare (Stabile & Ward, 2006). For example, in Ontario the government delisted vitamin D testing in 2010. One historical exception involved the procedure to terminate pregnancy. After

considerable debate and controversy, termination of pregnancy became an included medicare service in all jurisdictions (most recently in Prince Edward Island). Although clinical effectiveness is an important principle in decision-making concerning inclusion, health technology assessment methods are not explicitly employed in these determinations.

The Government of Canada provides coverage to members of the Canadian Armed Forces and inmates of federal penitentiaries through separate federal programmes. The exclusion of these persons from insured health service coverage predates the adoption of the CHA and is not intended to constitute differences in access to publicly insured health care. For specialized care provided in hospitals, provincial governments receive compensation from the federal government for the costs incurred by these populations. Until 2012, members of the federal police force (the Royal Canadian Mounted Police or RCMP) were also excluded from the CHA definition of “insured persons”. An amendment to the CHA in 2012 removed serving members of the RCMP from the list of exclusions of insured persons under the CHA. Serving members of the RCMP are insured residents under provincial and territorial health insurance plans and are treated much the same as all federal public servants, receiving supplementary benefits from their employer.

NON-MEDICARE/ EXTENDED HEALTH BENEFITS AND SERVICES

Beyond the insured health services defined in the Canada Health Act, which are collectively referred to as medicare, it is up to the PT governments to decide the extent of coverage or subsidization for other health services. Since there is no pan-Canadian system or standards of coverage for non-medicare health services, it is very difficult to generalize concerning the breadth, depth and scope of coverage for non-medicare services although there are at least three areas of convergence: 1) the majority of funding for LTC is provided by the PTs; 2) all jurisdictions provide pharmaceutical coverage for older adults (either all older adults, or only those with lower income) and the very poor (see Table 3.3); and 3) limited public coverage is provided for dental care and vision care or for complementary and alternative medicines and therapies.

While PT governments provide medicare services to all registered First Nations and Inuit residents, the federal government provides these citizens with coverage for non-medicare goods and services including dental care,

TABLE 3.3 Summary of OOPs and protection mechanisms for outpatient prescription drugs

LEVEL AND TYPE OF OOPS	PROTECTION MECHANISMS (E.G. EXEMPTIONS, ANNUAL MAXIMUM)
<p>Most provinces provide some public coverage, for example for:^a</p> <ul style="list-style-type: none"> • Recipients of social assistance • Seniors aged 65 and older (All except MB)^b • General population under 65 (All except MB, NB) • Children and youth (ON, SK, AB, QC, NU) • General population, all ages (MB, NB) 	<p>Generally no annual OOP limits (except in NS where annual limit incl. premium and co-payments is \$ 382–806, varies with income), but low income seniors are often exempt from these charges</p>
<p>Co-payments vary by province and population:</p> <ul style="list-style-type: none"> • Programmes for social assistance recipients are the most generous: most provinces provide full coverage with no patient charges; four charge a fixed co-payment (C\$ 2–5), though in some cases (e.g. ON) these are often waived • Fixed co-pays for seniors in some provinces e.g. up to \$ 6 (NL), up to \$ 6.11/prescription (ON), up to \$ 30 (NB), fixed \$ 25/prescription (SK)^c • Co-insurance in public plans for the general population in several provinces: ranging from 30% (AB, BC, NS), to 35% of the cost of the prescription drug (QC, SK) • Deductibles in several provinces, tied to income in some (general population plan in BC, seniors plan in ON), but fixed in others (e.g. \$ 19.90/month, general population plan in QC) 	<p>Catastrophic drug coverage for the general population available in several provinces, some with a deductible and in some cases an annual maximum that is scaled to income. Examples of annual contribution limits:</p> <ul style="list-style-type: none"> • BC: 2–4% of net family income • MB: 3.09–6.98% of net income • ON: no maximum

AB: Alberta; BC: British Columbia; MB: Manitoba; NB: New Brunswick; NL: Newfoundland and Labrador; NS: Nova Scotia; NT: Northwest Territories; NU: Nunavut; ON: Ontario; OOP: out of pocket; PE: Prince Edward Island; QC: Quebec; SK: Saskatchewan; YT: Yukon

^aCertain conditions may apply for eligibility in various provinces (e.g. in Ontario only children and youth without private insurance are eligible for public drug coverage)

^b Public prescription drug programmes for seniors may charge annual or monthly premiums that typically vary by income

^c Co-payments are reduced for low-income seniors (with different thresholds for defining low income across provinces)

Note: Co-insurance refers to a percentage of the total costs that are paid by individuals.

Source: Allin et al. (2020a)

prescription drug therapies and medical travel as part of the non-insured health benefits (NIHB) programme (see sections 2.1 and 2.2.2). Populations covered by the NIHB are excluded from provincial programmes for these extended health benefits (e.g. provincial programmes covering prescription drugs or medical devices), thus the province is a payer of last resort for non-medicare services for First Nations and Inuit peoples registered with the federal government.*

* The federal NIHB is also a payer of last resort, which creates some confusion as well as a disincentive for provincial governments to expand their coverage of extended (non-medicare) health services for their residents.

BOX 3.1 What are the key gaps in coverage?

Under the *Canada Health Act*, Canada's federal health care insurance legislation, provinces and territories are required to cover medically necessary services (i.e. "insured health services") for their eligible residents. In addition to insured health services under the Act, the provinces and territories also provide a range of other programmes and services, such as some coverage for prescription drugs, limited coverage for dental care (mostly for children), and long-term care (both facility-based care and home care), at their discretion and on their own terms and conditions. These services are often targeted to specific population groups (e.g. seniors, children and those on social assistance), with levels of funding and scope varying from one province or territory to another. Many Canadian residents also have supplementary health insurance through employee benefits plans or purchase it from independent insurers. It is also common for Canadians to purchase private health insurance when travelling outside Canada, in order to ensure full coverage for any health services that may be required. While supplementary health insurance plans provide coverage for health services such as prescription drugs, vision care and dental care that are not considered part of the standard basket of publicly insured services in Canada, these plans generally entail some out-of-pocket payments through co-payments or the application of deductibles and/or maximum limits. The regulation and administration of these private health insurance carriers and their respective policies also falls under the responsibilities of provincial or territorial governments.

Notable gaps in universal coverage therefore include prescription drugs outside of hospitals, dental care, medical devices, long-term care in residential facilities and in the home, vision care and mental health and addictions services. Although estimates of financial protection suggest Canada does well relative to other countries (see Chapter 7), Canadian households' OOP spending on health care increased by 37% between 1998 and 2009; the top two categories of spending were dental care and prescription drugs (Law et al., 2013). Estimates from pooled data from 2014 to 2016 from the Survey of Household Spending show that for households in the lowest income quintile 34% of all OOP spending on health care was for prescription drugs, 38% was for medical products (which includes medical devices, eye care goods, and over-the-counter medications), and 24% was for dental care. For the highest income quintile, spending on health care was mostly on medical products (39%), dental care (25%) and prescription drugs (17%) (authors' calculations, unpublished). As described in Chapter 7, these coverage gaps contribute to high rates of cost-related non-adherence to medications as well as foregone dental care in Canada relative to other countries.

The federal government also provides extended health benefits for non-medicare goods and services to veterans, legislated by the Department of Veterans Affairs Act of 1985, as well as members of the Canadian Armed Forces and inmates of federal penitentiaries.

The level and design of outpatient prescription drug coverage varies by PT though these are mostly designed to provide catastrophic coverage. Within most provinces, there are separate public programmes for recipients of social assistance, seniors (those aged 65 years and older), and the general population under 65. The programmes for social assistance recipients are the most generous: most provinces provide full coverage with no patient charges with greater variation across PTs in the structure of the public drug programmes for seniors. Also, seniors who meet a low-income threshold are generally either fully covered or nearly fully covered. For the general population, several provinces provide some form of catastrophic drug coverage with a deductible that is scaled to income. Co-payments, including fixed charges per prescription dispensed, deductibles, and co-insurance, are used to varying degrees in the provincial drug programmes.

■ 3.3.2 *Collection*

The dominant sources of funding are the general revenues of FPT governments. Taxation revenues are largely from taxes on income, profits, and capital gains (78% of federal tax revenues and 50% of provincial tax revenues in 2018), goods and services (19% of federal tax revenues and 40% of provincial tax revenues), and property and payroll taxes (10% of provincial tax revenues) (Statistics Canada, 2019d).

These general tax revenues are supplemented by health premiums in two provinces. In British Columbia, health premiums come in the form of a poll tax, but these were eliminated in January 2020 and replaced with a new tax on employers. In Ontario, they take the form of a surtax that is collected through a progressive income tax system. Quebec removed its health premium in 2017, which had been part of the income tax system. Alberta had also abolished its health premium in 2009, after a Task Force on Health Care Funding and Revenue Generation concluded that the premiums collected early in the 21st century amounted to less than 13% of provincial health revenue needs (Alberta, 2002).

BOX 3.2 Is health financing fair?

FPT income taxes are progressive and make up a large share of health financing. The reliance on income taxes to finance medicare has the effect of redistributing income from higher to lower income groups, and to reduce income inequality (CIHI, 2013). However, there has been a long-term reduction in progressivity in the income tax system since the 1980s. Federal tax reforms introduced in 2016, such as a new income tax bracket for taxpayers earning over \$ 200 000 (€ 130 000), have led to an increase in progressivity (Milligan, 2016b). In British Columbia the removal of the health premium in 2020, found to be a regressive form of financing in an earlier study (McGrail, 2007), may slightly increase progressivity of finance in that province. Also in British Columbia, the change to their provincial public drug plan from an age-based programme (coverage started at age of 65 years) to a plan based on income had the effect of making funding slightly more progressive over the period 2001–2004 (Hanley et al., 2008). This move towards more progressive finance was due to the decrease in public subsidy directed towards high-income seniors, and not due to an increased benefit for low-income seniors (Hanley et al., 2008).

■ 3.3.3 *Pooling and allocation of funds*

Budgetary allocations for health expenditures are made at three main levels in Canada: 1) the federal government; 2) the PT governments; and 3) delegated health authorities. Budgetary allocations at both federal and PT level are decided in cabinet and then reviewed and passed in the respective legislative chambers.

Delegated health authorities do not collect taxes but they allocate the funds they receive from ministries of health based on what they perceive to be the health demands of the populations they serve and the health care organizations and providers they fund. Initially health authority allocation formulae were used as a tool of health system reform – specifically to encourage more activity in upstream primary care and public health from downstream acute care. However, at least in most cases, these funding allocation formulae did not appear to have achieved their original reform objective (McIntosh et al., 2010); they remained largely based on historical spending patterns, as opposed to using a population needs-based formula. Health authority budgets are approved by the provincial ministry of health.

Some provincial governments explicitly forbid health authorities from running deficits, while others permit budget deficits under certain conditions (McKillop, 2004).

The Canada Health Transfer is the latest iteration in a series of earmarked federal health transfers to the PTs. From the beginning, federal health transfers have been the subject of considerable debate due to differing perceptions concerning the appropriate level of health transfers and the degree of conditionality (or lack thereof) that accompanies such transfers (Lazar & St-Hilaire, 2004; Marchildon, 2004; McIntosh, 2004). Initially, federal health transfers were introduced as a 50:50 shared cost transfer to support provincial universal hospital insurance programmes beginning in 1958 and to support PT universal medical insurance programmes a decade later. These transfers were eventually perceived by some as too restrictive in terms of their exclusive emphasis on hospital and physician expenditures, and by the federal government as overly risky from a fiscal perspective given the rapid growth in PT medicare spending.

By 1977, FP governments negotiated the replacement of the cost-sharing transfer with a less conditional block transfer – Established Programs Financing (EPF) – that merged the health transfer with another transfer fund for higher education. EPF gave the provinces greater flexibility. No longer required to spend federal money on hospitals and medical care, provincial governments could apply transfer funds to any category of health expenditure including the nonmedical determinants of health. In return, the federal government was able to cap the growth in its health transfers to the growth in the national economy rather than matching the growth in provincial health spending (Coyte & Landon, 1990; Ostry, 2006). However, there were other consequences, including the fact that the portion converted into a permanent tax point transfer could not be taken away in the event of provincial non-compliance with the conditionality in the Hospital Insurance and Diagnostic Services Act or the Medical Care Act.*

While user fees on medicare services in some provinces pre-dated 1977, their use seemed to accelerate after the introduction of EPF. As a

* Tax points refer to the transfer of income tax room from the federal government to the provincial governments, whereby the federal government reduces its basic tax rate by a specific percentage and the provinces increase theirs without impacting the taxpayers.

consequence, in 1979, the federal Minister of Health ordered an external review by Justice Emmett Hall as a “check-up on medicare” and his commission’s landmark report of 1964. Concluding that extra billing and user fees were undermining the principle of universality of access, Hall recommended that the federal government take legislative action (Hall, 1980). A subsequent parliamentary committee agreed with Hall and suggested that federal transfers be withheld, on a graduated basis, where a provincial plan impeded reasonable access by permitting extra billing or user fees, and this proposal was incorporated into the CHA in 1984.

In 1995, the federal government replaced EPF with the Canada Health and Social Transfer. The new transfer folded in yet another transfer fund (for social assistance) with health and higher education but the cash portion of the transfer was reduced and the provision for automatic annual increases was eliminated. These actions triggered considerable intergovernmental acrimony as well as concerns about the impact of the changes on the national dimensions of the health system (Romanow, 2002). In response to these and other concerns, the federal government replaced the omnibus Canada Health and Social Transfer with the Canada Health Transfer in 2004 and reintroduced the feature of the annual increase – set at 6% per annum for 10 years. Although this annual 6% increase was unchanged until 2017, the composition of the Canada Health Transfer changed in 2014. Specifically, it was moved from a mix of per capita cash transfer and tax points to a full per capita funding formula. This change increased Canada Health Transfer payments to Alberta by 49.4% and Northwest Territories by 23.7% from the previous year (and an average increase of about 2% among the other PTs) (Office of the Parliamentary Budget Officer, 2014). Through the federal government’s total transfer protection, no province receives less in federal transfers in a given year than in the previous year. Arguably the change to the Canada Health Transfer to purely per capita cash transfer is administratively simpler. However, this cash transfer still does not account for any differences in population needs or costs of delivering health care (Di Matteo, 2012; Marchildon & Mou, 2014).

As of 2017, the annual increase in the federal cash transfer was reset in line with the growth rate of the economy, with a minimum increase of at least 3% per year. Over and above the Canada Health Transfer, the federal government made a series of bilateral agreements with the provinces in 2017

BOX 3.3 Are resources put where they are most needed?

There is very little consideration of populations' needs in the allocation of resources, neither from federal to PT governments, nor from PT ministries of health to delegated health authorities. The Canada Health Transfer funds less than a quarter of the PT health programmes on a purely per capita basis. Resources for hospital and LTC are pooled at the health authority level. However, the allocation of resources to health authorities is mostly on a historical basis. This feature, combined with the fact that health authorities do not have responsibility nor resources for payments for physicians and prescription drugs (these are done provincially), contributes to fragmented funding and misaligned incentives. Moreover, with the exception of new drugs, there is limited use of evidence of clinical effectiveness or cost-effectiveness to inform decisions about what services are covered. Although health authorities are responsible for funding multiple health sectors (though with major gaps) and they have the latitude to allocate funds to each sector based on the needs of a defined population (McKillop, 2004), there is little evidence of reallocation taking place. More research is needed concerning the precise payment methods used by health authorities and their impact on health system outcomes.

to achieve specific objectives. These include \$ 11.0 billion (€ 7.4 billion) over 10 years towards improved access to home and community care and mental health and addictions services, as well as additional investments supporting health innovation and pharmaceutical initiatives (Canada, 2019b) and \$ 150 million (€ 100 million) (for 2018) to address the opioid crisis (Canada, 2019c).

The first Canada Health Transfer payment accounted for an estimated 19.6% of PT health expenditures in 2004–2005, compared with 23.2% in 2019–2020.

■ 3.3.4 Purchasing and purchaser–provider relations

In addition to administering, funding and coordinating services provided by other organizations, most delegated health authorities also deliver health services directly. This mix of hierarchical integration and contractual coordination means that health authorities act as both purchasers and providers,

although the emphasis is more on integration than competitive contracting (as it is in the UK). The one major exception to this particular regionalized model was Ontario where the 14 regions, known as Local Health Integration Networks (LHINs), were responsible for contracting rather than directly providing services from 2006 to 2019 (Lee, 2018). Although it might be argued that the organizational design of regionalization in Canada creates a purchaser–provider split, there is little evidence that it was formally structured in a way to promote an internal market similar to the National Health Service reforms in the UK.

All provincial ministries of health continue to centrally control physician budgets and manage prescription drug plans, both of which fall outside the authority of health authorities. LTC facilities and organizations either have a contractual relationship with health authorities or are operated directly by health authority staff. The same applies to ambulance and palliative care organizations. In the case of the contractual arrangements, health authorities negotiate the terms of contract including the amount and terms of payment.

■ 3.4 Out-of-pocket payments

Universal medicare in Canada precludes extra billing or user fees, patient charges for medical, hospital-based services are not permitted under the CHA, and OOP payments are only relevant to non- medicare goods and services. Informal payments are almost non-existent in Canada: they have not been documented in any PT health system.

OOP payments make up just under 50% of expenditures on privately financed health services and products. In particular, OOP payments comprise the chief source of funding for vision care, over-the-counter pharmaceuticals as well as complementary and alternative medicines and therapies. OOP payments also cover some of the costs of long-term care including facility-based care and home care. Chapter 7 provides more information on the implications of these OOP payments on financial protection and equity. As described in section 3.3.1, the level and design of outpatient drug coverage varies across the country, and because these are mostly catastrophic coverage programmes that act as a safety net, there are significant costs borne by individuals.

■ 3.5 Private health insurance

Private health insurance is relegated to non-medicare sectors such as dental care, prescription drugs, rehab and mental health services, as well as a few non-medically necessary medical and hospital services. As a share of private health spending, private health insurance has grown relative to OOP expenditures since the late 1980s. In 2017, private health insurance spending made up 41.3% of total private health spending up from 31.3% in 1990 compared with 48.8% from OOP payments (from 56% in 1990) (CIHI, 2019a). Of the \$ 30.1 billion (€ 17.8 billion) expended through private health insurance in 2017, 39.6% was spent on prescription drugs, 27.8% on dental care and 5.5% on hospital accommodation – mainly on private rooms (CIHI, 2019a).

The majority of private health insurance comes in the form of employment-based group policies that are benefit plans sponsored by employers, unions, professional associations and similar organizations (Hurley & Guindon, 2020). Since this type of insurance “comes with the job”, it is not strictly “voluntary”. Canadians receiving or purchasing private health insurance are exempt from taxation on these benefits or premiums by the federal government and all provincial governments except Quebec.

In 2015, approximately 90% of premiums for private health plans were paid through employers, unions, or other organizations under a group contract or uninsured contract (by which a plan sponsor provides benefits to a group outside of an insurance contract) (Canadian Life and Health Insurance Association, 2016). Private health insurance is held by about two thirds of the population. In the context of limited regulation of the private insurance market in Canada, the costs of insurance have increased over the period 1991 to 2011 due in large part to an increase in nonmedical spending (profits and administration) as opposed to an increase in benefits paid (Law et al., 2014).

Almost all PHI in Canada would be classified as complementary to medicare (Hurley & Guindon, 2020). Private health insurance that attempts to provide a private alternative to medicare (substitutive private health insurance) or faster access to medicare services (supplementary private health insurance) is prohibited or discouraged by a complex array of provincial legislation. Five provinces (British Columbia, Alberta,

Manitoba, Ontario and Prince Edward Island) prohibit private insurers from covering publicly insured physician and hospital services. Other provinces discourage private coverage of medicare services in various ways, in particular by not allowing physicians to work in both public and private systems at the same time (Flood & Archibald, 2001). In the province of Quebec, private insurers are only permitted to cover publicly insured services for very few selected services including joint replacements and cataract surgeries.

Until recently, private health insurance has received relatively limited policy attention because it has been limited to complementary insurance – covering those services not included in medicare (Hurley & Guindon, 2020). In the wake of a 2005 ruling by the Supreme Court of Canada that Quebec’s law prohibiting supplementary insurance for medicare services violated Quebec’s Charter of Rights in the presence of excessive waiting times for non-emergency surgery (*Chaoulli v Government of Québec*), there have been repeated calls by market advocates for private health insurance for medicare (Flood et al., 2005; Flood, 2007). More recently in British Columbia a similar case was in trial for nearly four years that challenged provincial legislation that ban private insurance for medically necessary services, that ban extra billing and that require physicians to work either in the public system or entirely outside (and thus receive no public funds) on the basis that they violate Canadians rights under the Canadian Charter of Rights and Freedoms (*Cambie Surgeries Corporation v British Columbia*). While the ruling in favour of *Chaoulli* did not have the effect of increasing the size of the private insurance market in Quebec, a ruling in favour of *Cambie* could have had broader implications for the role of private insurance in Canada (Flood & Thomas, 2018).

■ 3.6 Social insurance

Of the remaining sources of finance, social insurance made up an estimated 1.4% of total health spending in 2018. The single most significant is social insurance funding from provincial workers’ compensation schemes. Health benefits for work-related injuries and sickness under provincial workers’ compensation plans pre-date the introduction of medicare with the first

such scheme introduced by British Columbia in 1917. Administered by provincial workers' compensation boards (WCBs), these benefits are paid for by compulsory employer contributions that are set by provincial law. Much of the WCB payments is paid directly to health authorities and individual health facilities and providers.

Health services provided through PT WCBs are specifically excluded from the definition of insured health services under the CHA because they are funded under the authority of legislation and administrative processes that pre-date provincial medicare plans. As a consequence, WCB clients sometimes obtain – and are often perceived to be able to obtain – insured services in advance of other Canadians, facilitated in part by WCB fees and payments that exceed the medicare tariff. For this reason, various commissions and commentators have argued that this public form of queue jumping must eventually be redressed (Hurley et al., 2008).

In 1997, the Government of Quebec established a provincial drug plan funded through the compulsory payment of premiums by employers. The law mandated employers to provide private health insurance to cover prescription drugs, while the provincial tax law was changed to make employee health benefits a taxable benefit thereby eliminating the tax expenditure subsidy. At the same time, individuals without access to employment-based private drug insurance (e.g. low-wage workers, retired persons and social assistance recipients) receive basic prescription drug coverage from the provincial government (Pomey et al., 2007). The unique funding arrangement for prescription drugs in Quebec explains why “social security” made up over twice the percentage of total health expenditure in Quebec compared with the rest of Canada (2.9% in Quebec compared with the average of 1.4% for the country) (CIHI, 2019a).

■ 3.7 Other

Voluntary and charitable donations provide other sources of finance for health research as well as supportive health services for patients and their families. Numerous NGOs – from hospitals to disease-based foundations – regularly collect donations from the public. These funds are then used to purchase capital or equipment, to provide services and to direct health research. Volunteers also donate their time and skills to public and nongovernmental

health service organizations and causes. While not a perfect estimate of charitable donations, non-consumption spending (which includes mostly hospital non-patient revenue, but also capital expenditures for privately owned facilities and health research from private sources), amounted to 9.9% of total private health spending in 2017 (CIHI, 2019a).

■ 3.8 Payment mechanisms

■ 3.8.1 *Paying for health services*

To the extent that hospitals are owned and operated by health authorities in Canada, there is no purchaser–provider split. In case of those hospitals that contract with health authorities – for example, all hospitals in Ontario and Catholic hospitals in Western Canada – most payments are generally made on the basis of the previous year’s allocation adjusted for inflation and budget growth. Thus, most hospitals’ operating costs are funded through global budgets, either directly (by ministries of health), or indirectly through budget allocations to health authorities. However, in recent years some jurisdictions in Canada have begun to experiment with alternative forms of funding mechanisms for hospital care. These include activity-based funding, with British Columbia being the first province to adopt an activity-based funding approach for hospitals (Sutherland et al., 2011) but this pilot was not scaled up, and the province subsequently reverted to global budgets. This funding reform in British Columbia led to a slight increase in the volume of inpatient surgeries performed with no impact on day surgeries or quality of care (Sutherland et al., 2016). Ontario has also experimented with activity-based funding for hospitals since 2012, but this has not been subject to a comprehensive evaluation to date. With regard to capital expenditures, such as the purchase and installation of diagnostics equipment, hospitals rely on a mix of funding sources including government and charitable donations (CIHI, 2019a).

LTC facilities are also paid on the basis of historical global budgets in most provinces, although in Alberta and Ontario there has been a move towards activity-based funding that adjusts per diem payments based on estimates of the complexity of the residents (Sutherland & Hellsten, 2017).

■ 3.8.2 *Paying health workers*

Most non-physician health care personnel are paid a salary to work within hierarchically directed health organizations. Within this group, regulated nurses are the most numerous. Most nurse remuneration and conditions of work are negotiated through collective bargaining by nurses' unions and province-wide employer organizations, often with provincial governments setting broad fiscal parameters. Nurse dissatisfaction with working conditions and stagnant remuneration during the provincial health reforms of the early to mid-1990s led to labour strife and rising sick leave by the latter part of the 1990s. Since that time, staffing levels climbed and nurse remuneration improved considerably as governments and health organizations attempted to recruit nurses in a tight labour market (CIHI, 2011). Health sector jobs (other than physicians) generally include comprehensive benefits (e.g. sick leave, pension) and extended health insurance (for prescription drugs, dental care) as a part of the compensation package.

The majority of physicians continue to be remunerated on the basis of fee-for-service (FFS) although it is important to distinguish between specialists and GPs, because payments for GPs have been gradually moving away from FFS to alternative payment methods. Specialists are mostly paid on a FFS basis, although there is some variation across provinces. For example, in Quebec, alternative payment structures made up about 20% of total payments to specialists in 2017–2018, compared with 19.5% in British Columbia and 37% in Saskatchewan (CIHI, 2019b). Alternative payments to FFS for specialists are still the exception to the rule, and may include hospital-based specialists who receive salaries.

Since GPs continue to provide the majority of primary care services in Canada, primary care reform has involved some shifts in payment systems. Provincial ministries of health have considered the advantages and disadvantages of FFS, capitation, salary and mixed payment systems. In addition, some ministries have also begun to implement pay for performance (P4P) incentives, group-based profit sharing and capitation payment systems (Léger, 2011; Peckham, Ho & Marchildon, 2018). However, these “alternative payment systems”, so-called in Canada because they pose an alternative to FFS systems, should not be seen as synonymous with primary care reform (Hutchison et al., 2011).

While most provinces have adopted some alternative forms of payment

for GPs (e.g. through incentive-based bonuses to retain physicians in rural areas or compensate them for after-hours care), only in Ontario has funding reform been used as a lever for changing the role of GPs in primary care with capitation as the dominant payment model. Thus, while there appears to be some use of blended payment models across the country, there has not been a major shift away from FFS as the base payment models for GPs outside of Ontario (Marchildon & Hutchison, 2016). In 2017–2018, FFS payments made up 44.4% of GP payments in Ontario compared with 72.3% in Quebec, and 81.8% in British Columbia (CIHI, 2019b).

4

Physical and human resources

■ Chapter summary

- The ability of any health system to provide timely access to quality health services depends not only on the sufficiency of buildings, equipment, information and communications technology (ICT) and human resources but on finding the appropriate balance among them.
- Both the sufficiency and the balance of resources need to be adjusted continually by federal, provincial and territorial governments in response to the constantly evolving technology, health care practices and health needs of Canadians.
- From the mid-1970s until 2000, capital investment in hospitals declined. Small hospitals were closed in many parts of Canada and acute care services were consolidated.
- Despite reinvestments by provincial and territorial governments in hospital stock, in particular in medical equipment, imaging technologies and ICT in the last two decades, the number of acute care beds per capita has continued to fall, in part a result of the increase in day surgeries and shortened discharges, changes in inpatient cardiovascular health which have shortened hospital stays, and improvements in outpatient cancer care. Compared with other countries, the supply of hospital

beds and medical imaging is low, and the adoption of ICT in health care is slow in Canada.

- The health workforce has continued to grow since the mid-1990s, to some extent due to expansions in medical school enrollment, and increased investment in medicare; however, the supply of physicians and nurses is uneven across the country with chronic shortages in rural and remote areas, and on average remain low relative to comparator countries.

■ 4.1 Physical resources

■ 4.1.1 *Infrastructure, capital stock and investments*

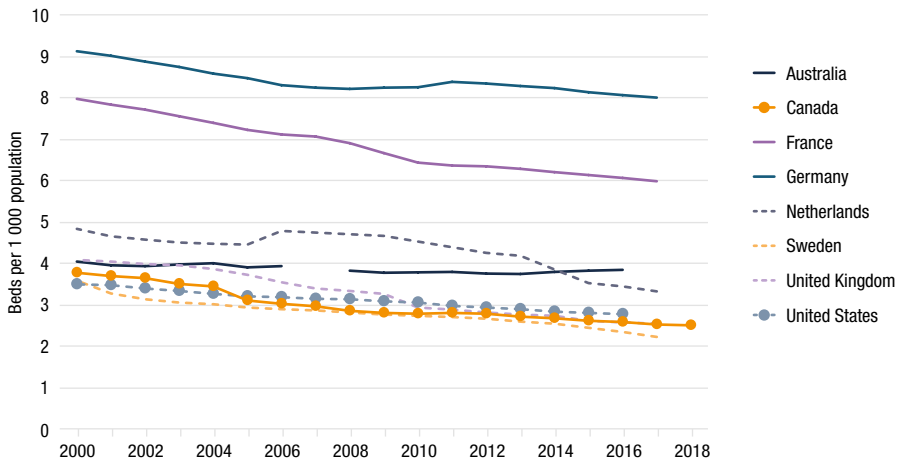
From the late 1940s until the 1960s, Canada experienced rapid growth in the number and size of hospitals due to the growth in demand for inpatient care. This growth was fuelled by national hospital construction grants provided to the provinces by the federal government and by the introduction of public hospital insurance in Saskatchewan, Alberta and British Columbia by the end of the 1940s, and the remaining provinces by the end of the 1950s. This construction boom would produce an overhang of outdated hospital facilities that provincial ministries of health would have to address in subsequent decades through consolidation and closure on the one hand, and the need for additional capital investment on the other (Ostry, 2006).

By the mid-1970s, the investment in hospitals had slowed, and by the 1980s and 1990s, provincial governments were encouraging hospital consolidation with a concomitant reduction in the number of small and inefficient hospitals (Mackenzie, 2004; Ostry, 2006). Consolidation aimed to reduce operating costs and increase organizational efficiencies. Based on a study comparing hospital administrative costs in a selection of OECD countries including France, Germany, the Netherlands, the UK (England, Scotland and Wales) and the USA, Canada had very low administrative costs within this sample (Himmelstein et al., 2014).

The number of acute care beds per capita has fallen continuously during the past two decades. In this respect, the trend in Canada is similar to the trend observed in comparator OECD countries (Fig. 4.1).

Over the 7 years from 2010 to 2017, however, the hospitalization rate increased by 4% in Canada, even though most of the smaller (less populous) provinces and territories experienced a decline in hospitalization rates (Table 4.1). This differing trend in hospitalizations between the smaller and larger provinces reflects the initially higher hospitalization rates in the smaller jurisdictions, thus there was more room for efficiency improvements (shifting care outside hospital or to day surgeries) than in the larger provinces. At the same time, the average length of stay (ALOS) in Canadian acute care hospitals, after standardizing for changes in the age and sex distribution, declined slightly from 7.5 days in 1995–1996, to 6.9 days in 2017–2018 (CIHI, 2019c). As shown in Table 4.2, Canada has a higher ALOS in hospitals than all other comparable countries except Germany, and a significantly higher occupancy rate than the other countries, a pattern that has been consistent over the past decade (OECD, 2019).

FIG. 4.1 Hospital beds per 1 000 population in Canada and selected countries, 2000–2018



Source: OECD (2019)

TABLE 4.1 Inpatient hospitalization rates in acute care hospitals (per 100 000 population) in Canadian provinces and territories, age- and sex-standardized, 2010–2011 and 2017–2018

PROVINCE OR TERRITORY	2010–2011	2017–2018	7-YEAR CHANGE (%)
British Columbia	7 376	7 678	4.1
Alberta	8 385	8 488	1.2
Saskatchewan	10 897	10 509	–3.6
Manitoba	8 818	8 427	–4.4
Ontario	6 958	7 096	2.0
Quebec	7 473	8 032	7.5
New Brunswick	9 856	9 263	–6.0
Nova Scotia	7 767	7 858	1.2
Prince Edward Island	9 926	9 404	–5.3
Newfoundland and Labrador	9 157	8 603	–6.1
Yukon	11 309	11 022	–2.5
Northwest Territories	14 404	13 488	–6.4
Nunavut	14 888	15 801	6.1
Canada	7 635	7 944	4.0

Source: CIHI (2019c)

TABLE 4.2 Operating indicators for hospital-based acute care in Canada and selected countries, latest available year

	CANADA 2017	AUSTRALIA 2016	FRANCE 2016	GERMANY 2017	NETHERLANDS 2017	SWEDEN 2017	UK 2017	USA 2016
Average length of stay (ALOS)	7.4	4.2	5.6	7.5	5	5.5	5.9	5.5
Bed-days (per capita)	0.6	0.7	0.9	1.8	0.5	NA	0.7	NA
Occupancy rate (% of available beds)	91.6	NA	75.6	79.8	65.4	NA	84.3 (2010)	64

Source: OECD (2019)

BOX 4.1 Are hospitals properly distributed in Canada?

As with any jurisdiction covering a large land mass, the population of Canada is very unevenly distributed. Most Canadians live in large urban centres such as Toronto, Montreal, Vancouver and Calgary which hug the southern border with the USA. The rest of the population is spread over a vast area including rural and remote areas which are far from more populated centres. By their very nature, hospitals – especially tertiary care hospitals – are capital intensive institutions drawing upon very specialized human resources and are therefore concentrated in urban areas. At the same time, all PT medicare plans are expected to provide access to hospital services on uniform terms and conditions. This is achieved through extensive referral patterns involving medical transportation and evacuation from rural and remote areas to tertiary care hospitals located in urban areas. These services involve extensive and expensive networks of road-based and air-based EMS (emergency medical services).

Teaching hospitals affiliated with medical faculties in Canadian universities anchor this system by providing the most specialized acute care services. Nine provinces have major teachings hospitals in their larger cities. Lacking university-based medical schools, Prince Edward Island and the three northern territories send their patients to more specialized hospitals in neighbouring jurisdictions. In addition, there has been considerable effort in many Canadian jurisdictions to use virtual care in rural and remote regions. While these are long-term arrangements, there is no PT or national policy addressing the issue of the appropriate distribution of hospital care in rural and remote areas. Based on a study of eight high-income countries, Canada is not unique in this lack of policy development (Rechl et al., 2016).

Since almost all hospital care is considered a fully insured service under the Canada Health Act and PT medicare plans, public funding is critical to decisions concerning capital expansion and improvement. Public budgeting rules at the PT level require that governments and their delegated health authorities carry capital expenditures as current liabilities. As a consequence, there has been an incentive to reduce capital expenditures more than operating expenditures during periods of budgetary restraint. In addition, governments and health authorities sometimes prefer not to carry the burden of financing infrastructure “up front”.

While some governments and delegated health authorities have explored private finance initiatives (PFI) – known as public–private partnerships or “P3s” in Canada – to finance, manage and deliver health services, it has been more common to contract out the delivery of care to private companies or

professional corporations. Almost all free-standing medical laboratories (not including those in hospital and public health laboratories) are owned by private corporations (Sutherland, 2011). In some provinces, premium payments offered by workers' compensation schemes in combination with the looser regulatory controls placed on diagnostic clinics and the desire by most provincial ministries of health to contract out to private medical laboratories has generated a market for private-for-profit facilities (Hurley et al., 2008; Sutherland, 2011).

■ 4.1.2 *Medical equipment*

Canada has a decentralized process of purchasing most medical aids and devices, consistent with a decentralized delivery system. Although provincial ministries of health are ultimately responsible for ensuring the availability and quality of medical equipment, devices and aids as part of first-dollar coverage for hospital and medical services, arm's-length health organizations and providers actually purchase most medical aids and devices. In addition, most physicians maintain private offices and make independent decisions concerning the purchase of a broad range of medical equipment, devices and aids to support their respective general (family) and specialist practices.

Individual clinicians, particularly specialist physicians, play a major role in the decisions of delegated health authorities and hospitals to purchase medical equipment, including the selection of particular vendors. At the same time, provincial health ministries can play a key role in determining the timing and procurement of extremely expensive medical equipment, especially magnetic resonance imaging (MRI) units and computed tomography (CT) scanners. From the early to mid-1990s, provincial governments severely constrained their spending on advanced diagnostics. These actions created a bottleneck, lengthening waiting times for certain conditions and treatments (Romanow, 2002). Since that time, there has been a substantial investment in advanced diagnostics by provincial health ministries and delegated health authorities. As can be seen in Table 4.3, Canada is no longer an outlier among its OECD comparators, but the country's supply of diagnostics is comparable to Australia but significantly lower than in France. The number of examinations has increased over the period 2007 to 2017, from 103.3 to 153 CT exams per 1 000 people, and 31.2 to 51 MRI

exams per 1 000 people (CADTH, 2017). The majority of medical imaging is based in hospitals (88%) while the remaining are located in free-standing clinics (CADTH, 2017).

TABLE 4.3 Number of selected diagnostic imaging exams, per 1 000 population, in Canada and selected countries, latest available year

YEAR	CANADA 2018	AUSTRALIA 2018	FRANCE 2017	GERMANY 2016
CT	159.4	134.4	189.7	148.5
MRI	52	48	114.1	143.4
PET	2.7	3.5	7.5	1.7 (2017)

Note: Data for the Netherlands, Sweden, UK and USA are not available. PET is positron emission tomography

Source: OECD (2019)

TABLE 4.4 Number of selected imaging technologies per million population by province, 2017

	CT SCANNERS	MRI SCANNERS	PET-CT SCANNERS	SPECT SCANNERS	SPECT-CT SCANNERS
British Columbia	13.78	9.60	0.63	5.85	6.5
Alberta	13.05	9.55	0.93	9.79	7.5
Saskatchewan	12.92	8.61	0.86	7.75	8.6
Manitoba	17.26	9.00	0.75	6.75	6.0
Ontario	13.02	8.49	1.20	10.68	5.5
Quebec	19.47	12.78	2.51	9.20	9.1
New Brunswick	19.80	14.52	2.64	6.60	6.6
Nova Scotia	18.88	12.59	1.05	7.34	10.5
Prince Edward Island	13.35	6.68	0	0	13.4
Newfoundland and Labrador	30.26	9.46	1.89	3.78	17.0
Yukon	26.45	26.45	0	0	0
Northwest Territories	22.53	0	0	0	0
Nunavut	26.69	0	0	0	0
Canada	15.33	10.00	1.39	9.02	7.13

Note: Includes equipment in both hospitals and free-standing facilities.

SPECT is single-photon emission computed tomography

Source: CADTH, (2018)

Table 4.4 compares the provinces in terms of the number of selected imaging technologies per million population. There are important variations among the provinces and territories, mostly associated with those that have smaller or geographically dispersed populations (e.g. Prince Edward Island and the three territories) and therefore lack the economies of scale to justify investment in some high-cost technologies.

■ 4.1.3 *Information technology and e-Health*

As in all countries, access to the Internet – at home, work and school – has increased dramatically in recent years. Moreover, there is considerable evidence from a number of sources that Canadians use the Internet on a regular basis, including to access both medical and health information (Middleton, Veenhof & Leith, 2010; Statistics Canada 2019h). However, in terms of ICT infrastructure (not specific to health), intensity of access and skill levels, it appears that Canada is not faring as well as other high-income countries. Based on a composite index of 11 indicators measuring ICT access, use and skills, the ICT Development Index (IDI) was developed by the United Nations' International Telecommunication Union (ITU). In 2017, Canada was ranked in 29th position on this index, considerably lower than Australia (14th), France (15th), Germany (12th), the Netherlands (7th), Sweden (11th), the UK (5th) and the USA (16th). Moreover, it is the only country other than Sweden in this group to experience a decline in its IDI ranking between 2010 and 2017 (see Table 4.5).

Canada's performance in the use of ICT for health delivery is also mediocre relative to a number of other developed countries. In a 2019 survey of primary care physicians, the Commonwealth Fund found that 86% of Canadian GPs used electronic patient medical records, which was lower than all other countries (see Table 4.6). However, the majority of primary care physicians in Canada do not offer patients health IT services such as electronic communication, requesting appointments and prescription renewals online, and viewing tests online in 2019 (Table 4.6). Similarly, few Canadians reported to have access to their own medical records online (15% in 2018), the use of electronic appointment booking was very low (8% of Canadians) and visiting a health care provider virtually by video was rare (3% of Canadians) according to a 2018 survey (Canada Health Infoway, 2018). While there has been some progress made to allow patients to access medical

information online, such as with the Québec Health Booklet (Carnet santé Québec) and MyHealth Records in Alberta, these are not yet widely available across Canada, and most online portals for patients to receive lab test results, and other medical information are specific to an organization (e.g. hospital).

TABLE 4.5 ICT Development Index (IDI) levels based on 11 indicators, level and rank, in Canada and selected countries, 2010 and 2017

	2010		2017	
	IDI LEVEL ^a	RANK	IDI LEVEL ^a	RANK
Australia	7.32	15	8.24	14
Canada	7.03	20	7.77	29
France	7.22	18	8.24	15
Germany	7.28	17	8.39	12
Netherlands	7.82	7	8.49	7
Sweden	8.43	2	8.41	11
UK	7.62	10	8.65	5
USA	7.30	16	8.18	16

^aThe ICT Development Index (IDI) combines 11 indicators on ICT access, use and skills, to capture key aspects of ICT development in one measure

Source: ITU (2017)

TABLE 4.6 Use of health IT by primary care physicians (% of physicians), 2019

	PROPORTION OF PRIMARY CARE PHYSICIANS WHO OFFER PATIENTS THE FOLLOWING OPTIONS:					
	Practice has electronic patient medical records (not including billing)	Electronic communication with a physician about medical question or concern	Request appointments online	Request prescription renewals online	View test results online	View patient visit summaries online
Australia	97.0	33.7	73.2	12.1	7.2	9.9
Canada	86.4	22.8	22.0	9.5	33.6	5.3
France	88.4	55.0	29.7	6.4	20.7	9.2
Germany	89.5	60.1	14.7	21.1	2.2	0.3
Netherlands	99.4	77.8	58.2	78.3	22.1	8.9
Sweden	99.3	95.4	87.4	96.4	76.6	90.9
UK	99.8	61.8	91.1	91.4	54.7	50.5
US	91.7	78.6	64.4	76.0	78.2	72.3

Source: CIHI (2019h)

■ 4.2 Human resources

■ 4.2.1 *Planning and registration of human resources*

Health human resource (HHR) planning tends to be divided between the ministries and provincial health authorities or RHAs with the responsibilities varying among provinces. In smaller non-regionalized jurisdictions such as Prince Edward Island, Yukon and Nunavut, HHR planning is done at the ministry level. Due to the mobility of health professionals in Canada, PT ministries and RHAs are sensitive to changes in remuneration, working conditions and regulatory requirements in other jurisdictions. In the 2000s, a number of provinces established health research agencies and health quality councils with a mandate to help improve health system processes and outcomes as well as to influence, if not reshape, physician practice and clinical decision-making.

Due to provincial jurisdiction over HHR, there is no single, national system of registration and planning of human resources in Canada (Wranik, 2008). The Royal College of Physicians and Surgeons of Canada (RCPSC), for example, is not a licensing body even though it sets standards for specialist medical education in Canada and is responsible for certifying specialists. Physicians certified by the RCPSC are not required to be registered as members of the RCPSC. PT governments are ultimately responsible for the regulation of the professions and human resource planning.

In an effort to facilitate greater collaboration on a pan-Canadian basis, the FPT Conference of Deputy Ministers of Health created the Advisory Committee on Health Delivery and Human Resources in 2002, which is now known as the Committee on Health Workforce (CHW). The CHW provides policy and strategic advice on the planning, organization and delivery of health services to the deputy health ministers. CHW is also expected to identify emerging issues in HHR planning and supply on a pan-Canadian basis and develop recommendations to deal with such issues.

Ontario's Ministry of Health has been among the most active governments in Canada in using regulation as a tool in human resource policy and planning (O'Reilly, 2000). This has included the introduction of a single law that provides a common regulatory framework for all the health

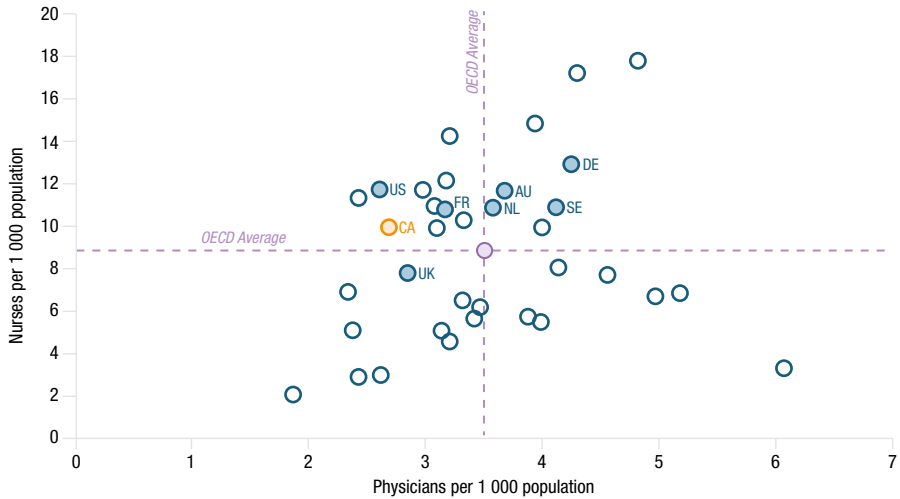
professions and the establishment of a permanent Health Professions Regulatory Advisory Council (HPRAC) in the 1990s. The goals of the law include promoting higher quality care, treating professionals equitably by providing a single set of regulatory principles, improving the accountability of the professions to patients, and providing more choice by ensuring access to a range of providers. In contrast, the Nova Scotia government has taken a very different “bottom-up” approach to provider regulation in an effort to facilitate greater interprofessional collaboration (Lahey & Fierbeck, 2016). However, there has been no systematic research on the effectiveness of either approach.

■ 4.2.2 *Trends in the health workforce*

During the past decade, PT government decision-makers throughout Canada have expressed concerns about HHR shortages, in particular doctors and nurses. In response, these governments implemented policies to increase educational enrolments as well as recruit professionals from outside their respective jurisdictions and from other countries. This shift contrasts with the period in the early to mid-1990s when governments were concerned about surpluses and actively worked with the professions and postsecondary institutions to curtail the supply of both physicians and nurses as well as reduce the number of new entrants into these professions (Tuohy, 2002; Chan, 2002a; Evans & McGrail, 2008). These recent efforts to increase the number of providers have led to higher health sector remuneration and inflation as well as a gradual increase in per capita supply of nurses and doctors (see Fig. 4.4).

During the 1990s, physician supply grew at an annual average of 1.1% (CIHI, 2011), a rate that would more than double in the 2000s. From 2007 to 2018 the annual increase in physician supply averaged 2% (CIHI, 2019b). This growth was due to an expansion of seats in Canadian medical schools as well as an increase in international medical graduates (IMGs) particularly for GPs (from 22% of all GPs in 1997 to 30% in 2018) (CIHI, 2019b). As a consequence, the number of physicians per capita has risen steadily in recent years (Fig. 4.3), although it remains low relative to other OECD countries (Fig. 4.2).

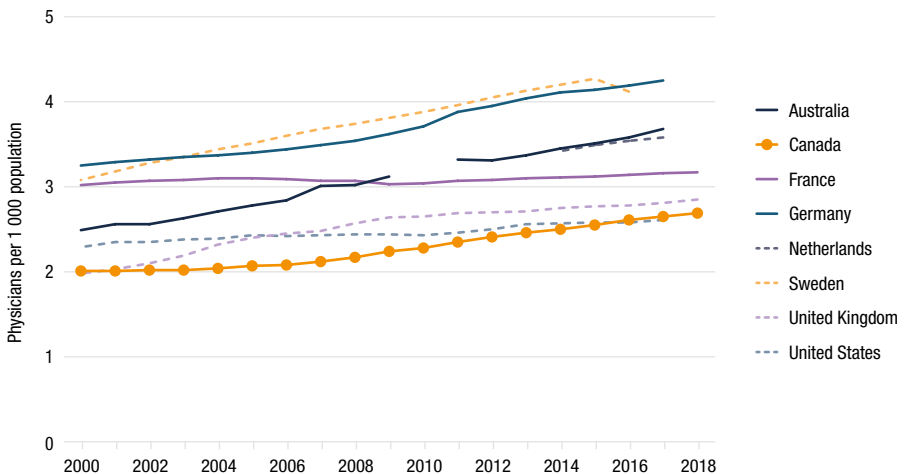
FIG. 4.2 Practising nurses and physicians per 1 000 population, 2018 or latest available year



AU: Australia; CA: Canada; DE: Germany; FR: France; NL: Netherlands;
SE: Sweden; UK: United Kingdom; US: United States

Source: OECD (2019)

FIG. 4.3 Number of physicians per 1 000 population in Canada and selected countries, 2000–2018

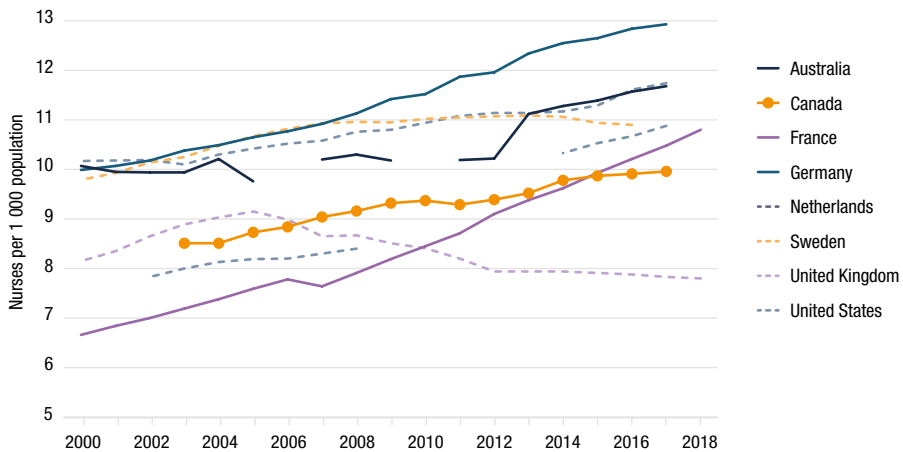


Note: Breaks in trend lines are due to missing data

Source: OECD (2019)

When comparing Canada to selected OECD comparators in terms of the number of nurses per 1 000 population, as shown in Figure 4.4, Canada has been on a comparable growth (with the prominent exception of the UK). However, this growth has been slower than most comparator countries, and only the UK now has a lower proportion of nurses per population. In 2017, about 62% of regulated nurses (registered nurses, nurse practitioners, licensed practical nurses, and registered psychiatric nurses) worked in hospitals and 15% in community health settings (CIHI, 2019d).

FIG. 4.4 Number of nurses per 1 000 population in Canada and selected countries, 2000–2018



Note: Data refer to practising nurses for Australia, Canada, Germany, Netherlands, Sweden and UK, professionally active nurses for France and USA. Breaks in trend lines are due to missing data

Source: OECD (2019)

As with the trends we have seen with nurses and doctors in the 2000s, there has been a steady growth in the supply of several other health professions (Table 4.7). Since dental care is largely private in Canada, dentists were not affected by public sector expenditure cutting in the 1990s. While prescription drugs are a mixed sector subject to both public and private coverage and therefore insulated to a limited degree by public budget cutting, the more salient factor affecting the number of pharmacists has been the rapid increase in drug utilization during the past three decades.

TABLE 4.7 Supply of selected health professions, per 100 000 population, for available provinces and territories, 2008, 2013 and 2017

	2008	2013	2017
Chiropractors	23	25	25
Dental hygienists	67	81	82
Dentists	59	62	65
Midwives	2	3	4
Occupational therapists	39	44	49
Pharmacists	93	104	115
Physician assistants	na	1	2
Physiotherapists	52	57	64
Psychologists	48	49	51
Social workers	101	125	143

na: Data is not applicable or does not exist

Note: Not all provinces and territories are included for every profession. For example, the 2017 supply data for chiropractors do not include Manitoba.

Source: CIHI (2018b)

Due to geography, population dispersion and differences in health systems and policies, there are significant variations in the density of the health professions among provinces and territories. As illustrated in Table 4.8, the registered nurse (RN) density in the three northern territories is considerably higher than the Canadian average while the physician density is considerably lower. This is a product of dispersed Arctic communities that rely heavily on nurse-based primary care provided in publicly administered health centres rather than on GPs. With the exception of its large presence in the territories in which the populations suffer most from dental disease, and where federal government funds dental care for eligible First Nations and Inuit peoples, the dental professions tend to concentrate in the four most urbanized provinces in Canada – Ontario, Quebec, British Columbia and Alberta.

TABLE 4.8 Health workforce density by province and territory, rate per 100 000 population, 2017

PROVINCE/ TERRITORY	NURSES		PHYSICIANS		DENTAL PROFESSIONALS		PHARMACISTS	OPTOMETRISTS	PHYSIOTHERAPISTS	OCCUPATIONAL THERAPISTS	PSYCHOLOGISTS
	RNS	LPNS	PRIMARY	SPECIALISTS	DENTISTS	DENTAL HYGIENISTS					
BC	753	243	135	117	72	70	114	16	77	48	25
AB	829	344	127	123	63	75	126	19	69	51	86
SK	932	314	114	92	46	57	142	15	64	30	44
MB	974	249	113	113	54	56	120	13	58	50	20
ON	715	349	117	119	73	90	111	18	64	42	28
QC	852	329	123	126	64	78	110	18	64	64	92
NB	1 043	440	133	111	42	66	119	15	70	48	46
NS	984	443	135	138	59	74	139	14	75	56	63
PEI	1 087	473	114	85	55	62	125	15	55	43	31
NL	1 117	452	138	131	45	42	144	12	56	41	48
YT/NT/NU	1 036	352	90	19	167	68	84	6	–	32	106

AB: Alberta; BC: British Columbia; MB: Manitoba; NB: New Brunswick; NL: Newfoundland and Labrador; NS: Nova Scotia; NT: Northwest Territories; NU: Nunavut; ON: Ontario; PEI: Prince Edward Island; QC: Quebec; SK: Saskatchewan; YT: Yukon

Notes: Physician supply is much higher in Yukon (191 physicians per 100 000 population) than in Northwest Territories (92 physicians per 100 000 population) and Nunavut (44 physicians per 100 000 population (CIHI, 2019b)). Also, supply data in the territories do not include temporary or relief workers who do not reside permanently in the territories

Source: CIHI (2019c)

BOX 4.2 Are health care workers (doctors and nurses) appropriately distributed in Canada?

There is a major urban–rural divide in Canada in the distribution of HHR. Doctors, both specialists and GPs, tend to prefer to work in larger urban centres where they are closer to professional and personal amenities including teaching hospitals and university-based medical schools and research institutes. There is a chronic shortage of GPs in rural and remote areas. As a consequence, a number of provincial governments depend heavily on locum GPs and IMGs to provide primary care services in their more rural areas. In BC and Ontario, northern medical programmes have been established in order to increase the supply of physicians willing and able to work in northern areas. In the most remote areas, especially in the northernmost provincial regions and the three northern territories, governments have long relied on nurse-based primary care to provide the majority of services to their residents. Although similar to the approach taken in Alaska, this contrasts with the physician-based primary care approach for northerners in the Nordic countries and Russia (Young & Marchildon, 2012; Young et al., 2018). Nurse-based primary care is generally seen as a substitute for physician-based primary care, this approach has provided accessible and high-quality primary care services to residents of northern Canada for generations (Marchildon & Torgerson, 2013). No government has yet enacted a policy to support nurse-based care in northern areas with GPs and nurse practitioners, although a recent report recommended that this be done in Yukon following the Nuka model of primary care implemented by the Southcentral Foundation in Alaska (Independent Expert Panel, 2020; Collins, 2015).

■ 4.2.3 Professional mobility of health workers

Physicians are highly mobile in Canada and the competition for physicians among and within PT health systems has been intense since the late 1990s. This has resulted in significant inter-provincial mobility despite some barriers to entry due to PT differences in professional licensing and regulatory requirements. Most physicians who leave a province or territory move to another part of Canada rather than abroad. In 2018, there were 181 physicians who moved abroad, 143 physicians who returned from abroad and 1856 physicians who moved from one province or territory to work in another jurisdiction in Canada (CIHI, 2019b). When doctors do move abroad, most move to the USA. Even in the years when more doctors move to the USA

than return to Canada, the total supply of physicians has grown in Canada due to the influx of IMGs (Neiterman, Bourgeault & Covell, 2017).

Although the overall impact of migration appears to have had a marginal impact on the overall domestic supply of physicians, there is variation across provinces in their reliance on IMGs. For example, 53% of all physicians in Saskatchewan were IMGs in 2017, compared with 34% in Manitoba and 30% in Ontario and British Columbia (2013 to 2017). The majority of IMGs are from middle-income countries, the top two countries are South Africa for GPs and India for specialists (CIHI, 2019b). Indeed, some ministries of health in association with the provincial medical bodies have established programmes to facilitate and speed up the licensure of IMGs, many of whom, at least initially, migrate to underserved areas in the country (Dumont et al., 2008).

Nurses are also mobile and the shortage of nurses has intensified competition among the provinces, territories, provincial and regional health authorities and independent hospitals over the past three decades. As a consequence, salaries and wages rose well above the rate of salaries outside the health sector; in 2016 the average employment income for nurses was \$ 64 633 (about € 44 000) compared with \$ 46 057 (about € 31 300) for the average employment income across all occupations (Statistics Canada, 2019g).^{*} In 2018 about 8.5% of the nurse workforce was originally educated outside Canada, a proportion which has increased slightly since 2013 (CIHI, 2019d). Some jurisdictions and health organizations have actively recruited nurses from other countries such as the Philippines (Runnels, Labonte & Packer, 2011; Hawkins & Rodney, 2015). Internationally trained nurses need to be recertified as a regulated nurse by passing the licensing exam and then gaining employment in order to be integrated into the workforce in Canada (Covell et al., 2017).

■ 4.2.4 *Training of health personnel*

In terms of educating and training health providers, provincial ministries of health work in tandem with provider organizations to set or alter the number of “seats” or entry positions in professional programmes in postsecondary

* The average exchange rate used for 2016 is C\$ 1 = € 0.68.

institutions. Since education is exclusively within the jurisdiction of the provinces, provincial governments determine the funding for the postsecondary education of the health professions that is delivered by universities, colleges and technical institutions (Tzountzouris & Gilbert, 2009). The educational and training requirements vary by profession, including a diploma (e.g. dental assistant, medical radiation technologist, respiratory therapist), Bachelor's degree (e.g. midwife, pharmacist, registered nurse), Master's (e.g. audiologist, physiotherapist) and Professional Doctorate (chiropractor, dentist). For all occupations, there is a requirement for undertaking an internship or clinical practicum, sometimes accompanied by a national exam administered by the profession.

There are 17 medical programmes offering a medical doctorate (MD) in Canadian universities. The programmes vary in length from 3 years (McMaster University and University of Calgary) to the more typical 4-year programme including the clinical practicum (CIHI, 2011). In 2018/2019 the average tuition for Canadian full-time students in medicine was \$ 14 780 (€ 9 750), compared with \$ 23 474 (€ 15 500) for dentistry and \$ 10 746 (€ 7 100) for pharmacy (Statistics Canada, 2018c).^{*} After graduating, medical students enter a residency programme in family practice or some specialization and complete their training – a minimum 2-year residency programme in the case of family practice and 4 or more years in other specialties in medical, surgical and laboratory medicine. As in most countries, the number of physician specialties has grown over time. As of 2019, there were 94 specialties (including “family medicine”, subspecialties and areas of focused competence (CMA, 2019)). There is also an increasing number of physician assistants (797 as of 2017 compared with 308 in 2013) who mostly work in Manitoba and Ontario, the two provinces that also offer university-based programmes for these physician assistants (CIHI, 2019c).

While undergraduate education and the awarding of undergraduate medical degrees (the basic MD) is the purview of the 17 medical schools in Canada, the RCPSC is responsible for overseeing the graduate education and training of physicians. As such, the RCPSC accredits 17 residency programmes, all run by the university-based medical schools. Specialists are also certified by the RCPSC, which is recognized by all province medical licensing authorities except for Quebec where the Collège des médecins du

* The average exchange rate used for 2018/9 is C\$ 1 = € 0.66.

Québec is the primary certifying body (Flegel, Hébert & MacDonald, 2008; Bates, Lovato & Buller-Taylor, 2008; CIHI, 2011).

Educational requirements for nurses have increased dramatically over the last two decades, with a major shift from 2-year diploma programmes to 4-year bachelor degree programmes. Nurse practitioners (NPs) are RNs whose extra training and education entitles them to an “extended class” designation. Their scope of practice – which includes prescribing certain classes of prescription drug therapies and ordering some diagnostic tests – overlaps with that of GPs. More importantly, given the evidence of the declining comprehensiveness of the primary care offered by physicians since the late 1980s, the range of health services offered by NPs has been of interest to primary health care reform advocates and provincial ministries of health (Chan, 2002b; College of Nurses of Ontario, 2004; CIHI, 2011). In addition to their RN education and training, NPs must get additional training from accredited institutions that are offered in all 10 provinces. The length of these programmes, including the clinical practicum, vary from 1 year to slightly in excess of 2 years (CIHI, 2011).

To practise in Canada, a pharmacist must hold a bachelor’s degree in pharmacy from an accredited programme, pass the qualifying examination administered by the Pharmacy Examining Board of Canada, and register with the appropriate PT regulatory body. Ten universities offer programmes in Canada. All are 4-year programmes, including clinical practicum, with the exception of a 5-year programme at Memorial University of Newfoundland.

Dentists practising in Canada must have a doctor of dental medicine (DDM) or a doctor of dental surgery (DDS) degree from an accredited programme, pass the National Dental Examining Board of Canada Written Examination and Objective Structured Clinical Examination as well as register with the pertinent PT regulatory body. There are 10 accredited programmes, all 4-years in length. There is considerable competition for entry into Canada’s 10 dental schools, five of which are located in Quebec and Ontario. Canadians are among the world’s highest spenders on dental care, in part due to the prevalence of private dental insurance – largely through employment-based benefit plans. As with physicians, a number of specializations requiring 2 to 3 years of higher education and residency have emerged over time including (but not limited to) orthodontists, periodontists, endodontists and paediatric dentists. A number of allied dental professionals support dentists and dental specialists in their work including

dental assistants, dental hygienists and dental therapists. Provincial dental organizations are responsible for licensing and self-regulating various professional subgroups, although the Royal College of Dentists of Canada plays a role similar to the RCPSC in setting standards for postgraduate education and training.

■ 4.2.5 *Physicians' and nurses' career paths*

There are few formalized managerial and policy career paths for doctors and nurses within the health system. This is despite the fact that, increasingly, clinicians are asked to take on managerial roles within health systems. As a consequence, career paths are being developed but in an ad hoc and varying manner by individual health care organizations.

Originally established in 1970, the Canadian College of Health Leaders (CCHL) – originally known as the Canadian College of Health Service Executives – provides professional support including a journal, professional programmes and services. CCHL also offers a competency-based Certified Health Executive programme for its members, some of whom include existing and former clinicians.

5

Provision of services

■ Chapter summary

- All PT governments have public health and health promotion initiatives. They also conduct health surveillance and manage epidemic response. While the Public Health Agency of Canada (PHAC) develops and manages programmes supporting public health throughout Canada, most day-to-day public health activities and supporting infrastructure remains with the PT governments (as well as some municipal governments in Ontario).
- The typical patient pathway starts with a visit to a family physician (GP) who then determines the course of basic treatment, if any. GPs act as gatekeepers: they decide whether their patients should obtain diagnostic tests, prescription drug therapies or be referred to medical specialists.
- Almost all acute care is provided in public or not-for-profit private hospitals in Canada, although some specialized ambulatory and advanced diagnostic services may be provided in private-for-profit clinics provided there are no patient charges at the point of use for medicare services.
- Most hospitals have an emergency department that is fed by independent emergency medical service units providing first response care to patients they transport to emergency departments.

- Every PT government has a prescription drug plan that covers outpatient prescription drugs for designated populations (e.g. seniors and social assistance recipients), with the federal government providing drug coverage for eligible First Nations and Inuit. There is renewed federal interest in implementation of a pan-Canadian drug coverage programme (Pharmacare).
- Rehabilitation and long-term care policies and services, including home and community care, palliative care and support for informal carers, and mental health and addictions services vary considerably among provinces and territories. Almost all dental care, and complementary and alternative medicine, is privately funded in Canada.
- Due to the disparities in health outcomes for Indigenous peoples – as well as the historical challenge of servicing some of the most remote communities in Canada – FPT governments have established a number of targeted programmes and services.

■ 5.1 Public health

Public health aims to improve health, prolong life and improve the quality of life through health promotion, disease prevention and other forms of health intervention. Unlike the other services covered in this chapter, the majority of public health policies and programmes target populations rather than individuals. Provincial governments have had a long history of public health interventions dating back to 1882 when Ontario's Public Health Act established a broad range of public health measures, a permanent board of health and the country's first medical officer of health.

In Canada, public health is generally identified with the following six discrete functions: population health assessment; health promotion; disease and injury control and prevention; health protection; surveillance; and emergency preparedness and epidemic response. The FPT governments (and their delegated health authorities) perform some or all of these functions. All governments appoint a chief public or medical health officer to lead their public health efforts in their respective jurisdictions. These individuals are generally physicians with specialized education and training in public health.

By virtue of their extensive responsibilities for health and health care, provincial ministries of health all have public health branches (some even have a separate public health agency or department) with responsibility for the six discrete functions of public health. In addition, most ministries of health have launched major population health initiatives in recent years. In some provinces, health authorities and regionally-based public health offices (e.g. public health units in Ontario) have initiated their own public health promotion and illness prevention programmes in areas of greatest need for their respective populations.

The federal government also provides a broad range of public health services principally through PHAC, which coordinates, at least in part, the six public health functions described above. PHAC, under the authority of the federal Minister of Health and led by the President and Chief Public Health Officer, is responsible for disease surveillance including reporting back to WHO and other relevant international bodies. PHAC also administers a network of disease-control laboratory services such as the National Microbiology Laboratory. Like Health Canada, PHAC is responsible for funding and administering a number of public health programmes, some of which emphasize the social determinants of health including the Aboriginal Head Start in Urban and Northern Communities Program, the Canada Prenatal Nutrition Program and the Pan-Canadian Healthy Living Strategy, and illness prevention programmes for HIV/AIDS and tobacco reduction. The Chief Public Health Officer publishes an annual report on a public health issue, the focus in the past 3 years have been on addressing stigma and discrimination in the health system (2020), appropriate use of antibiotics (2019) and reducing problematic substance use in youth (2018).

The Canadian Public Health Association (CPHA) is a voluntary organization dedicated to improving the state of public health in Canada. In conjunction with its PT branches or associations, CPHA advocates for greater awareness of the impact of public health interventions and encourages public health research and education.

The Canadian Partnership Against Cancer (CPAC) was set up in 2007 to oversee the 2006 Canadian Strategy for Cancer Control; the latest version of this strategy was in 2019 (CPAC, 2019). CPAC took on the responsibility of the Screening Initiative and works in partnership with PT cancer agencies to reduce cancer incidence and mortality and to improve quality of life for people living with cancer. CPAC reports on the performance of cancer care

systems on a regular basis and describes PT variations in cancer screening and treatment programmes.

The provinces are mainly responsible for the funding and administration of screening programmes for the early detection of cancer and all PT ministries of health have implemented one or more of these programmes. Although they vary considerably in approach, delivery and comprehensiveness, provincial governments do adopt screening programmes developed in other provinces once they have proven successful. For example, British Columbia was the first province to initiate a population-based breast cancer screening programme in 1988. Two years later, the province of Ontario began to provide population-based breast cancer screening for women aged 50 or older. Following this, the Canadian Breast Cancer Screening Initiative was launched with funding support from Health Canada, and a pan-Canadian breast screening surveillance database was established based on provincial data. Organized breast cancer screening is now the norm rather than the exception in Canada: all provinces and territories (except Nunavut) have in place an organized breast cancer screening programme with the most recent programme introduced in Yukon in 2008 (CPAC, 2018a). Cervical cancer screening and surveillance followed a very similar trajectory in the 1990s. The first programme was in British Columbia in 1960; the most recent was in New Brunswick in 2014, as of March 2019 all provinces except Quebec had an organized cervical cancer screening programme (CPAC, 2018b). Also as of March 2019, all provinces and territories had established, or were in the process of implementing, organized colorectal cancer screening programmes (CPAC, 2018c).

All PT ministries of health also devote resources to communicable and infectious disease control. However, given the geographical reach of such diseases and the rapidity with which they spread, the federal government has played a larger role in both control and surveillance since the early 2000s. The SARS (severe acute respiratory syndrome) outbreak in 2003 and the advisory report that followed in its wake were the catalysts for a policy change, which many public health advocates considered overdue (Health Canada, 2003). One year later PHAC was established with a mandate to monitor, prepare for and respond to disease outbreaks in addition to other public health functions. Following the H1N1 outbreak in 2009, the federal government conducted another review that highlighted some areas for improvement, including: better coordination and information sharing across

federal, provincial and territorial government, ensuring clear and consistent messaging to Canadians, reviewing the emergency stockpile and supporting implementation of pandemic plans in First Nations communities (PHAC, 2010). Building on these lessons, a new FPT Public Health Response Plan for Biological Events was developed in 2017 to clarify the roles and responsibilities of the federal and PT governments and introduce a new governance mechanism to ensure a coordinated response to public health threats across the country (Pan-Canadian Public Health Network, 2018). This Plan was activated in 2020 during the novel coronavirus pandemic (COVID-19), a virus which had infected over 96 000 Canadians and caused over 7 800 deaths as of 8 June 2020.

Immunization planning and programming is also a primary responsibility for PT health ministries (De Wals, 2011). Immunization can be delivered in a number of ways but the two most common are through GPs or regionally-based public health offices. The National Advisory Committee on Immunization (NACI) is an external advisory body to PHAC that makes recommendations on the use of vaccines in Canada. NACI is comprised of experts in the fields of infectious diseases, immunology, pharmacy, nursing, pharmaco-economics, epidemiology and public health. NACI recommendations are conveyed to the public, including health providers and health system decision-makers, through published statements and the online *Canadian Immunization Guide*. There is no federal legislation on vaccination, but three provinces have mandatory reporting of vaccination status for school-aged children (British Columbia, Ontario and New Brunswick), though they allow parents to opt out on religious or other grounds.

Public health interventions to address major risk factors have been successful in some areas, such as smoking, though less so for others, such as alcohol (see Box 5.1). The federal government has made regulatory changes in recent years that impact these risk factors. For example, in 2018, the federal government announced the new Canada's Tobacco Control Strategy to replace the Federal Tobacco Control Strategy that had been in place for the previous two decades. The goal of this strategy is to reduce tobacco use in Canada to less than 5% by 2035. In 2018, the federal government also amended the 1997 Tobacco Act, creating the Tobacco and Vaping Products Act (TVPA). The TVPA created a new legal framework for vaping products (also known as e-cigarettes) with and without nicotine for adults aged 18 years and older and restrict their promotion, including prohibiting lifestyle

advertising among others. The TVPA also provides new regulatory powers to enable the introduction of plain and standardized appearance requirements for tobacco products.

In 2018 Canada legalized recreational marijuana to address its risks and harms with the Cannabis Act. The stated purpose of the Cannabis Act is to protect public health and public safety and in particular to: protect the health of young persons (i.e. individuals under 18 years of age) by restricting their access to cannabis; protect young persons and others from inducements to use cannabis; provide for the legal production of cannabis to reduce illegal activities with cannabis; deter illegal activities with cannabis through appropriate sanctions and enforcement measures; reduce the burden on the criminal justice system in relation to cannabis; provide adults with access to a quality-controlled supply of cannabis; and enhance public awareness of the risks associated with cannabis use. The Act creates a comprehensive national framework to provide restricted access to regulated cannabis, and to control its production, distribution, sale, importation, exportation and possession. For example, the Cannabis Act prohibits the sale of cannabis to anyone under the age of 18 years, and permits adults to possess up to 30 grams of dried cannabis or its equivalent in a public place. Provinces and territories, together with local governments, can also tailor certain rules in their own jurisdiction (for example, setting a higher minimum age or more restrictive limits on possession). The Canadian Medical Association advocated for a national minimum age of purchase and consumption of 21 years, given the higher risks posed by marijuana in youth (Keisall, 2017). Building on the lessons learned from Canada experience with tobacco control, the Act and associated Cannabis Regulations establish controls on promotion and advertising; prohibit products appealing to young persons; require plain, child-resistant packaging with labels that display mandatory health warning messages; and establish rigorous manufacturing and product standards, including restricting or prohibiting harmful ingredients, potency limits and mandatory product testing.

Under the framework, the federal government shares responsibility for oversight of the legal cannabis supply chain with PT governments. The federal Minister of Health is responsible for licensing, among other activities, the production of cannabis (cultivation and processing), while provincial and territorial governments can authorize the distribution and retail sale of cannabis in their respective jurisdictions.

The Cannabis Act also maintains Canada's system to provide access to cannabis for medical purposes, which has evolved since it was first established in 2001. There is ongoing monitoring of cannabis use and health outcomes, and significant investments in public education and awareness activities and research into both the health harms and therapeutic potential of cannabis. It is too early to comment on any positive or negative health and social effects of the legalization of recreational marijuana.

BOX 5.1 Are public health interventions making a difference?

There has been longstanding effort to reduce smoking prevalence in Canada by both federal and PT governments. The rate of smoking among Canadians has decreased over the past four decades. From 1965 (the earliest year for which comparable data are available) to 2018, the percentage of current cigarette smokers decreased from 50% to 16% (Statistics Canada, 2019c). Federal tobacco control policies include a prohibition of tobacco products (with limited exceptions), a ban on the use of some flavouring additives in certain tobacco products, and labelling requirements for tobacco products, including the requirement for graphic health warnings to take up 75% of the front and back of cigarette packages. The recent increase in vaping (e-cigarettes) in youth present significant health risks and may contribute to increased smoking rates in the near future Canada (Hammond et al., 2019).

Alcohol consumption and harm has received less public health and policy attention than smoking. Yet, estimates suggest 80% of Canadians drink alcohol, and economic costs of alcohol harm is estimated at \$ 14.6 billion (€ 9.8 billion) (including health care costs, policing, and lost productivity), which is substantially higher than the revenue from alcohol sales (\$ 10.9 billion, € 7.3 billion) (Stockwell et al., 2019). Over the past decade, there has been some strengthening of alcohol control policies, as seen in the small increase in federal alcohol excise tax rates after almost 30 years of no effective increase (Stockwell et al., 2019), and adoption of impaired driving countermeasures by the PT governments, with little change in other policies such as alcohol advertising regulations and legal minimum drinking ages, and a loosening of control policies in some areas such as to increase physical availability of alcohol in some provinces (e.g. Ontario). One indicator of alcohol harm – hospitalization due to alcohol – shows an increase in hospitalizations over the period 2015–2016 to 2017–2018, hospitalization due to alcohol outnumber those from heart attacks, were four-times more common than hospitalizations related to opioid use, and made up more than half of all hospitalizations from substances (others include opioids, cannabis, etc.) (CIHI, 2019e).

■ 5.2 Patient pathways

Due to the decentralized nature of health delivery, patient pathways vary considerably depending on the province or territory of residents. The following steps are part of a highly stylized pathway of a woman named Mary living in the more southern and urban part of the country.* This pathway does not describe the many possible barriers to access that a patient may experience depending on who they are and where they live. As detailed in Chapter 7, these barriers include wait times (especially to see a specialist), difficulty accessing after-hours primary care which may prompt patients to use walk-in-clinics in urban areas, difficulty paying for prescription drugs if they do not have private insurance or public coverage, and challenges related to transitions between providers and poor communication and coordination among different health care providers.

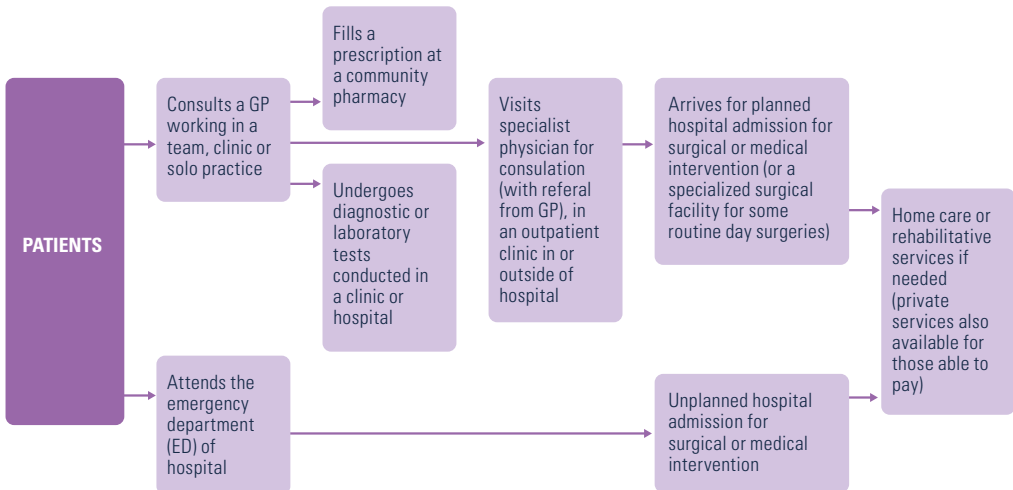
- On getting ill, Mary visits her family physician (GP) where she is given a preliminary examination. Depending on the preliminary diagnosis, Mary could be given a prescription for a drug therapy, a referral for further diagnostic tests or a referral to a specialist. Mary does not pay for her physician visits or the cost of any physician-ordered, medically necessary diagnostic tests.
- Mary could alternatively visit the emergency department if it is after hours, if the GP was not able to see her, or if she perceived the illness to be urgent.
- If given a prescription, Mary will go to a drug store (community pharmacy) of her choice and give the pharmacist the prescription signed by her physician. If she does not have private insurance or does not meet the requirements of her provincial drug plan, Mary may have to pay the full cost of the drug.
- If sent for further diagnostic tests, Mary will provide blood or other bodily fluids at a private laboratory, or get basic (e.g. X-ray) or advanced (e.g. MRI) diagnostic tests, either at a private clinic or a hospital. Since these tests are medically

* In the far north of the provinces and in the three northern territories, the first point of contact is more likely to be a registered nurse in a community health centre.

necessary, Mary will not be charged a fee irrespective of where she obtains the test.

- Mary's diagnostics results will be returned to the GP. Once the physician receives the results, she will call Mary back to her office for a further consultation and, if necessary, explain the next steps in treatment.
- If referred to a specialist (consulting) physician, Mary will be examined and a decision made concerning specialized treatment. Her GP will be informed of the results.
- If the treatment involves a surgical procedure or other acute intervention, Mary will be given a date to attend the hospital or, in cases involving more routine day surgeries, a specialized surgery clinic.
- On Mary's discharge from the hospital, her GP receives a discharge summary from her specialist to allow for appropriate follow-up.
- If Mary requires further home care or rehabilitations services, Mary's doctor will provide her a referral. If these services are deemed medically necessary by her physician, she may not have to pay: but she could pay part or all of the costs, depending on the extended benefit coverage offered in her province of residence.

FIG. 5.1 Patient pathway



■ 5.3 Primary care

Primary care is defined as the individual's first point of contact with the health system and, at its core, involves general medical care for common conditions and injuries. It can, and should, involve some health promotion and disease prevention activities, although, unlike the public health services described above, these will be provided at the individual rather than population level.

The traditional model of primary care in Canada has been one based on individual GPs or teams of GPs providing primary medical services on a fee-for-service basis (as described in Chapter 3). Most GPs or physician groups have a relatively stable group of patients after the initial period required to build up a medical practice. And while patients are free to change GP, most choose to have longstanding relationships with one physician or physician group. While the requirements for patient registration vary considerably by province and territory, no jurisdiction has implemented strict rostering (Peckham, Ho & Marchildon, 2018). There has been a gradual shift away from the traditional model of primary care, as evidenced by the decline in the proportion of physicians providing “comprehensive” or “full-service” primary care in British Columbia (from 1991/2 to 2009/10) and Ontario (from 2003/4 to 2013/14) (Lavergne et al., 2014; Schultz & Glazier, 2017). Similarly, there has been a decline in the percentage of Canadians who report having a regular family doctor (from 87.7% in 2001 to 83.6% in 2015) (CIHI 2019e; Statistics Canada, nd), and an increase in supply of walk-in clinics (Izenberg & Buchanan, 2018).

PT governments have established a number of initiatives to improve primary care starting with the establishment of community-based primary care clinics in Ontario and Quebec in the 1970s and 1980s. In Ontario, Community Health Centres were introduced in the 1970s, a salaried team-based model that services lower socioeconomic status populations. Although this model has expanded to 101 centres across the province, they serve less than 5% of the population of Ontario. By the 1990s, there were a number of primary health care reforms initiated on a pilot basis. Despite this activity and earlier reforms, there was limited change by the end of the century (Hutchison, Abelson & Lavis, 2001).

Since the early 2000s, there has been some experimentation with

different models of primary care delivery, but most of the reforms are more evolutionary than revolutionary (Hutchison et al., 2011). Private fee-for-service physician practices remain the dominant model of primary care in Canada outside Ontario, though all provinces and territories have made some move towards team-based primary care that brings physicians together with other health professions. These models vary in team composition, governance structure, and population coverage and include Family Medicine Groups in Quebec, Family Health Teams in Ontario, Primary Care Networks in Prince Edward Island and Alberta, among other PT initiatives (Peckham, Ho & Marchildon, 2018). In addition, there has been a slight shift away from fee-for-service remuneration of physicians over the years since the late 1990s. However, among provinces with available data (all but Alberta and Northwest Territories), only Ontario has moved significantly beyond fee-for-service to the extent that the majority of payments made to GPs are now through an alternative payment programme (such as capitation and salary). There has also been a gradual increase in non-physician primary health care providers, with expanded training and employment opportunities for midwives, nurse practitioners, and physician assistants (see Chapter 4). Nurse-led primary care is the dominant model of care in northern regions

BOX 5.2 What are the key strengths and weaknesses of primary care?

Primary care continues to be dominated by GPs working in solo or small group private practices, paid on a fee-for-service basis, though there has been a move towards interprofessional team-based care, and alternate payment models in an effort to improve patient experiences, outcomes and contain costs. In addition, there has been an increased role of nurses, midwives, and community pharmacists in primary care, though these are still extremely limited, and there are variations across provinces in the extent to which they have been integrated into primary care teams. In spite of these reforms to primary care, compared with other countries, primary care performance has been consistently weak as measured by timely access to care and the use of electronic medical records (see Chapter 7). Another persistent challenge concerns the integration of primary care with other sectors, in part due to the limited interoperability of information systems that challenge the sharing of patient information across providers, and in part due to the fact that provincial ministries of health have delegated responsibility for hospital and long-term care to arm's-length health authorities but retained responsibility for funding physicians.

and in First Nations communities (see section 5.11). For example, in Ontario there are 43 nursing stations providing primary health care in the north of the province funded by the provincial government and 29 funded by the federal government (Lavis & Hammill, 2016).

■ 5.4 Specialized care

In Canada, virtually all secondary, tertiary and emergency care, as well as the majority of specialized ambulatory care, is performed in hospitals. Based on the typology introduced by Healy & McKee (2002), the prevailing trend for decades has been towards the separatist model of acute care rather than a comprehensive model of hospital-based curative care. In the separatist model, the hospital specializes in acute and emergency care, leaving primary care to GPs or community-based health care clinics and institutional care to long-term care homes and similar facilities. A clearly noticeable trend in Canada is for the consolidation of tertiary care in fewer, more specialized hospitals, as well as the spinning off of some types of elective surgery and advanced diagnostics to specialized clinics.

Historically, hospitals in Canada were organized and administered on a local basis, and almost all were administered at arm's length from provincial governments (Boyчук, 1999; Deber, 2004). In the provinces and territories that have regionalized or have a delegated health authority, hospitals have been integrated into a broader continuum of care either through direct health authority ownership or through contract with health authorities. Where the hospital is owned by the health authority, the hospital boards have been disbanded and senior management are employees of the health authority. Where the hospital continues to be owned by religious or secular civil society organization – almost all of which are non-profit organizations with charitable status – they continue to have a board and senior management that is independent of the health authority. However, since these hospitals derive most of their income stream from the health authorities, they generally conform to the overall objectives of the health authority and are integrated to a considerable degree into the health authority's continuum of care services.

■ 5.4.1 *Specialized ambulatory care and day services*

Specialized ambulatory services are generally provided in outpatient departments of hospitals. There has been a growth in recent decades in the number of facilities outside of hospital that provide advanced diagnostic and surgical services, most of which are for-profit with an ownership mix of small business/provider and corporate. Surgical procedures that are performed in non-hospital facilities vary across the provinces but generally are limited to high volume, low complexity procedures that do not require overnight stay such as ophthalmologic (e.g. cataracts), orthopaedic (e.g. joint replacement) and dermatologic procedures. However, there has been resistance to this trend from various groups including the Canadian Union of Public Employees (CUPE), the largest public sector unions in Canada, and the Canadian Centre for Policy Alternatives, a left-leaning public policy think tank which has argued that expanding private delivery will result in poorer quality care and higher administrative costs (Longhurst et al., 2016).

BOX 5.3 Are efforts to improve integrated care working?

Efforts to improve integration of care vary across the country, though they share some common goals such as to: 1) improve integration and transitions of care across primary, community and hospital care (vertical integration); and 2) leverage networks of providers (e.g. physician groups, hospitals) on a voluntary basis. Some examples of these PT initiatives include Health Links (established 2012) and Integrated Comprehensive Care Demonstration Projects (established 2015) in Ontario, and Primary Health Care Integration Network (established 2017) in Alberta. These efforts have so far failed to address the major system challenges such as inappropriate use of hospitals (referred to as alternate level of care; see Chapter 7), poor patient experience and limited interoperability of information systems. The most recent major effort to strengthen integration was in Ontario with the establishment of Ontario Health Teams in 2019, again on a voluntary basis, but with the potential added feature of a consolidated budget for all providers which would represent a major change given the physician budgets have been, for the most part, sheltered from any health system restructuring efforts since the beginning of medicare.

■ 5.4.2 *Inpatient care*

The most common reason for hospitalization in Canada is giving birth, and the most common inpatient surgery is caesarean section delivery. Only 2% of births in Canada are outside of hospital, a percentage that has been stable from 2013–2017 (Statistics Canada 2019h); and the overall caesarean section rate for Canada is 29% of all hospital births (CIHI, 2019c). The other top reasons for hospitalization are chronic obstructive pulmonary disease, bronchitis and acute myocardial infarction (CIHI, 2019c). Over time there has been a shift away from inpatient care toward outpatient care, including day surgeries. In addition to the gradual decrease in average length of stay and (age- and sex-standardized) hospitalization rates in Canada (see Chapter 4), the volume of outpatient care has increased by 25% since 2005 compared with an increase in inpatient volume by 17% (CIHI, 2019c).

BOX 5.4 What do patients think of the hospital care they receive?

There is limited comparable data on patient experience across hospitals in Canada. There is one pan-Canadian survey on patient experience to date that has six participating provinces: Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia and Ontario. Aggregated results show that 62% of patients reported their overall experience was very good, 54% felt their medication was always explained well, and 56% of patients felt that their care was always well coordinated by hospital staff. While two thirds of patients felt completely informed of their condition, treatment and medication before leaving the hospital, the percentage was lower with older adults: only 47% of patients aged 80 years and older felt completely informed. These data are relatively new so no trends over time are yet available, and they are only reported publicly at the provincial level, though hospital-level results are available privately to hospitals that submit data (CIHI, 2019f).

■ 5.5 **Urgent and emergency care**

Emergency care in Canada generally refers to the care provided in an emergency department (ED), sometimes also referred to as an emergency ward or emergency room, of a hospital, staffed for 24-hours a day by emergency physicians and emergency nurses. Some lower acuity emergency care is

provided in urgent care centres; these are staffed by physicians and nurses, and may have diagnostic and laboratory services onsite. Emergency care also includes the emergency medical services (EMS) that provide transportation (e.g. road or air ambulance) and the pre-hospital or inter-hospital patient care during transportation, including the certified first responders and emergency medical technicians who stabilize the patient before and during transportation. Physicians who practise emergency medicine are either specialist fellows of the Royal College of Physicians and Surgeons or specialist GPs who are certified through the College of Family Physicians of Canada. RNs can be certified as emergency nurses through the Canadian Nurses Association.

Concerns about ED overcrowding and long waiting times have persisted over the past decades. Evidence suggests that the time from ED triage to treatment, as well as the time spent in EDs has increased over time. Only about 10% of ED patients are admitted to an inpatient bed. The time spent in ED among patients who are admitted to hospital has risen over time: 90% of ED visits were completed within 35.5 hours in 2018–2019, compared with 30.5 hours in 2014–2015 (CIHI, 2019g). Wait times in Canada also appear to be longer than other countries (see Chapter 7).

■ 5.5.1 *Patient pathway in an emergency care episode*

In Canada, a man with acute appendicitis on a Sunday morning would take the following steps:

- The man goes directly to the ED (the vast majority of ED patients come without a GP's referral). He is taken to hospital by a household member or by an ambulance. The co-payment for the ambulance ride depends on which province he lives in (ranges from no charge in Yukon to \$ 385 (€ 258) in Alberta), which may be covered by his private insurance if he has it.
- Once at the ED, he provides his provincial or territorial health card and briefly describes the problem. He is then referred to a triage nurse who estimates the urgency of the complaint after further inquiry. The waiting time for admission into an ED room for further tests and examination depends on the level of urgency.

- The man is then examined by an emergency physician and told about the diagnosis and the recommended surgical procedure.
- A surgical team performs the required surgery.

■ 5.6 Pharmaceutical care

Inpatient drugs are dispensed by hospitals without charge to patients as part of medicare. Outpatient pharmaceuticals, the cost of which may be covered in whole or part through public or private drug plans, are prescribed by physicians and in rare cases by other health providers who have the right to prescribe certain classes of drugs. Individuals obtain their prescription drugs at retail pharmacies. Almost all pharmacies, whether they are independent or part of a chain, sell a host of products beyond prescription and over-the-counter (OTC) drugs. Pharmacies in large chain grocery stores now compete directly with traditional stand-alone pharmacies by selling prescription and OTC drugs. In 2018 there were 10 692 retail pharmacies and drug stores in Canada of which two thirds were commercial chains (IQVIA, 2019).

Pharmaceutical sales in Canada doubled from 2002 to 2017, with the majority of sales to retail drug stores (88%), and the remainder to hospitals (Canada, 2019d). In 2018 there were 29 802 Canadians employed in pharmaceutical manufacturing, mostly in the three largest cities: Toronto, Montreal and Vancouver. While there is some domestic pharmaceutical production, the majority of the pharmaceuticals in the Canadian market are imported (about 64%), mostly from the USA (38% of all imports) and the European Union (40% of imports) (Canada, 2019d).

FPT governments manage multiple drug plans for their populations; across Canada public drug plans vary in terms of the target populations, formularies and the extent and depth of coverage (CIHI, 2018d; see Chapter 3). There are over 100 public drug plans across the country, since PTs generally administer a catastrophic drug coverage programme for the general population as well as targeted benefits for specific subpopulations such as lower-income people receiving social assistance, older adults aged 65 years and older, and disease specific programmes such as for HIV and cancers. Unlike all other provincial plans, the Quebec drug programme is a mandated insurance plan in which private insurance plays a key role (Pomey et al., 2007). To add further complexity to these PT differences, eligible First Nations and

Inuit patients are covered through the federal non-insured health benefits (NIHB) programme administered by Indigenous Services Canada. The one exception to variations in coverage for prescription drugs across jurisdictions is inpatient drug therapy: since prescription drugs provided in hospitals are considered insured health services and part of universal coverage, they are provided by all PT governments to all PT residents, including First Nations and Inuit, free of charge, by PT governments. Geographical variations in drug coverage and costs to individuals reflect this patchwork of programmes in place. For example out-of-pocket (OOP) spending on pharmaceuticals was lowest in Ontario (\$ 402 per household, € 272), and highest in Quebec \$ 534 per household, € 358); and spending on private drug plan premiums was also lowest in Ontario (\$ 153 per household, € 103) and highest in New Brunswick (\$ 396 per household, € 265) in 2016 (Morgan, 2018a).

Since the early 2000s there have been a number of Canada-wide initiatives where FPT governments have collaborated to strengthen pharmaceutical pricing and reimbursement policies. With the exception of Quebec, governments agreed to allow CADTH to establish a pan-Canadian process to review the clinical and cost-effectiveness of new prescription drugs known as the Common Drug Review (CDR), which began in 2003. However, the CDR makes only recommendations, and provincial governments ultimately decide whether or not to consider CDR analyses in determining whether or not to include specific pharmaceuticals in their respective formularies. Cancer drugs are reviewed separately by CADTH through the pan-Canadian Oncology Drug Review.

In 2010 the provinces established the Pan-Canadian Pharmaceutical Alliance to jointly negotiate drug prices with the objective of reducing prices, to reduce duplication of effort with each province negotiating separately with drug manufacturers for its own public drug programmes, and to improve consistency of drug decisions across the country. The federal government joined in 2015. As of November 2019, FPT governments collectively negotiated prices of over 300 drug products (COF, 2019). The introduction of this Canada-wide drug review process and joint negotiations have reduced the differences in timing and nature of drug coverage decisions across the country over time, so the provincial drug plan formularies have become increasingly aligned (Gamble et al., 2011; Milliken et al., 2015; PMPRB, 2017).

Pharmaceutical prices in Canada are determined through a mix of statutory price limits and voluntary price negotiations. PMPRB regulates

the non-excessive price ceilings of newly patented medicines in Canada by setting the maximum price against the public price across several countries. In 2019, the federal government made several changes to the PMPRB primarily to address the significantly higher price of drugs in Canada compared with other countries. One of these changes was to the list of international reference countries. Prior to 2019 the comparator countries included France, Germany, Italy, Sweden, Switzerland, the UK and the USA, but since then Switzerland and the USA have been removed and other countries have been added (see Box 5.5). PTs then negotiate confidential price discounts through the Pan-Canadian Pharmaceutical Alliance (Morgan, 2018b). For generic drugs, the individual public drug programmes set price limits (relative to brand name equivalents), and the Pan-Canadian Pharmaceutical Alliance has set a price limit for over 60 high volume generic drugs at approximately 10–18% of the equivalent brand name product.

As noted above, prices in Canada are higher than most other OECD countries (see Box 5.5). A recent study of the cost drivers of the differences in spending on prescription drugs in six primary care therapeutic categories between Canada and nine OECD countries found that the difference in spending was primarily driven by the price of drugs and not by volume (Morgan, Leopold & Wagner, 2017). They found that the use of generic drugs in these six therapeutic categories was higher in Canada than in the nine other countries. Moreover, the volume of prescribed medications in these therapeutic categories was comparable across the countries. The main reason for the differences, were twofold. First, the list prices in Canada were significantly higher (about 61%) than the average list prices in nine comparator OECD countries (and higher than all comparators except Switzerland). Second, Canadians were prescribed higher-cost drugs within these therapeutic categories than in the other countries (particularly for lipid lowering drugs and antidepressants) (Morgan et al., 2017).

In response to the variations in drug coverage and costs to individuals across the country, along with the high prices paid in Canada relative to other countries, some experts have long argued for a single national drug plan and formulary as well as a single agency to regulate pharmaceutical pricing. However, such an approach is challenged by two opposing imperatives: that of provincial governments, especially Quebec, that wish to retain control over provincial drug policies including prescription drug plans, and that of the federal government, which has resisted assuming the financial burden and

future fiscal risk of a federally financed and administered pharmaceutical coverage programme (Marchildon, 2007).

Since the introduction of Canadian medicare, all attempts to introduce a national Pharmacare programme have been unsuccessful (see Chapter 6). Attempts such as the 2004 National Pharmaceuticals Strategy that was part of the 10-Year Plan to Strengthen Health Care led only to incremental change. That strategy encompassed nine action items including developing a common national formulary, strengthening evaluation of drug safety and effectiveness, expanding e-prescribing, and strengthening drug purchasing strategies (CICS, 2004). While there was some effort to address these recommendations, it largely came to a halt by the

BOX 5.5 Is there waste in pharmaceutical spending?

Canada is the third highest spender on pharmaceuticals in the OECD next to the USA and Switzerland. The considerable variation in pharmaceutical spending suggests that there is room to reduce utilization and prices: in 2017, total drug spending in the highest spending province (Quebec, \$ 1055, € 717 per capita) was nearly twice as high as in the lowest spending province (British Columbia, \$ 588, € 400 per capita). The challenges of overuse of potentially inappropriate medications is widely acknowledged: about 45% of Canadians aged 65 years or older have had at least one claim for a potentially inappropriate drug on the Beers list* (in 2017–2018; CIHI Your Health System). The challenge of high prices has also been a policy priority in recent years. Branded drug prices in Canada were found to be the third highest in the OECD (next to USA and Switzerland). Though there was high use of generic drugs in Canada (generics made up 74% of all prescriptions); generic drug prices were seventh highest in the OECD (PMPRB, 2018). To address these high prices, FPT governments have come together to collectively negotiate with drug companies over the past decade. Also the federal government amended the Patented Medicine Regulations in August 2019 to provide the PMPRB with new regulatory tools and information to better protect Canadian consumers. This is the first time since 1987 that the PMPRB has been substantially modernized and includes such changes as revising the list of comparator countries and adding new price regulatory factors (Canada, 2017; 2019e).

* The Beers Criteria for Potentially Inappropriate Medication Use in Older Adults, commonly called the Beers List, are guidelines for health care professionals to help improve the safety of prescribing medicines for older adults.

end of the decade. This was due in part to changes in FPT government administrations in the intervening years (HCC, 2009). Since then the establishment of the Pan-Canadian Pharmaceutical Alliance in 2010 has strengthened purchasing strategies. More recently there has been increased federal interest in developing a national Pharmacare programme, with the appointment of a federal Advisory Committee on the Implementation of National Pharmacare in 2018, and 2019 Federal Budget which signalled the intention to create a “Canadian Drug Agency” and take “steps towards the development of a national formulary”. Following the election in October 2019, the government expressed its intent to establish the Canada Drug Agency, and to implement a national formulary and a rare disease strategy (see Chapter 6).

■ 5.7 Rehabilitation/intermediate care

Inpatient rehabilitation services provided in hospitals and specialized rehabilitation facilities are deemed medically necessary services and are available without charge to Canadians. Inpatient rehabilitation tends to focus on orthopaedics (immediately following hip and knee replacement surgery), stroke, brain dysfunction, limb amputation and spinal cord injury with 50% involving orthopaedic and post-stroke rehabilitation (CIHI, 2019c). Public coverage, including workers’ compensation, for outpatient rehabilitation services, varies by province and territory, and private insurance coverage and OOP payments are common (Landry et al., 2008; Landry, Raman & Al-Hamdan, 2010). These outpatient services are generally provided in clinics directed by physiotherapists or occupational therapists.

■ 5.8 Long-term care

This section focuses on long-term care (LTC) provision for older adults with limitations in the activities of daily living arising from health conditions. LTC may be provided in facility-based settings, or in the community through home care and other support services. Publicly funded programmes are available in all provinces and territories for both sectors (facility-based care and home care). In most provinces, LTC has increasingly been integrated

into geographically based delegated health authorities, and provincial ministries of health generally have division(s) responsible for LTC which provide overarching policy direction.

As LTC is not an insured service under the Canada Health Act, public policies, subsidies, programmes and regulatory regimes vary widely across the country. In both facility-based care and home care, access to publicly funded services is based on needs assessment. In home care, there may be an income-based co-payment for publicly funded services in some provinces and territories. There is also a significant market for privately procured home care services (Allin et al., 2020b). The cost of care in publicly funded LTC facilities does not generally entail out-of-pocket expenses to residents. Charges to residents for accommodation and meals are generally reduced or waived for those on low income.

Private facility-based LTC (i.e. paid for fully out of pocket) is a small segment of the sector. There are other privately paid residential options for seniors – variously referred to as seniors’ residences, or retirement residences – which are generally considered part of the housing (rather than LTC) sector. Core services generally include meal provision and housekeeping services. Residents may also be eligible for publicly funded home care, and/or choose to purchase care services privately. These residential options are not examined further in this section, where “LTC facilities” refers to publicly funded institutions to which admission is based on care need, and which provide 24/7 supervision and access to nursing services.

Estimates suggest that roughly 11% of public/government spending on health is directed to non-hospital institutions, most of which are LTC facilities, compared with about 5.5% on home and community care (CIHI, 2019a). In 2016, about 3% of Canadians aged 65 years and older, and 12% of Canadians 85 years and older, were living in an LTC institution (Statistics Canada, 2016). Factors predicting admission to a facility include age, diagnosis of dementia and other chronic conditions (such as diabetes, urinary incontinence and mood disorders) and losing a spouse (Garner et al., 2018). While facility-based care is generally targeted to high-needs individuals, there is some evidence of potentially inappropriate use of facility-based LTC: a study of six provinces and territories found that 22% of individuals aged 65 and older who entered an LTC facility had been assessed with low to moderate needs which may indicate that they that could have been supported at home (CIHI, 2017a).

In 2020, 46% of LTC facilities were publicly owned, with 28% operated on a private-for-profit basis, and 23% private not-for-profit, with variations across provinces (CIHI 2020). For example, in Ontario, the majority of LTC facilities are private-for-profit (57%) and private not-for-profit (27%), while in Quebec the majority are publicly owned (86%) (CIHI 2020). Even after adjusting for case mix, there is evidence that not-for-profit facilities provide more direct care per client than for-profit facilities, and that chain-affiliated facilities, both for-profit (of which 83% are chain affiliated) and not-for-profit (of which 38.5% are chain affiliated), provided fewer direct hours of care than non-chain-affiliated facilities (Hsu et al., 2016). While there is some evidence that better patient outcomes are associated with not-for-profit LTC facilities compared with for-profit homes, more research is needed to test this association (McGrail et al., 2007; McGregor & Ronald, 2011). A recent study in British Columbia found that there was greater use of the emergency department and hospital beds by residents from private LTC facilities versus residents from publicly-owned facilities (Office of the Seniors Advocate British Columbia, 2018).

Wait times for publicly funded facility-based LTC across the country are common, although comprehensive data is limited. Estimates from Ontario suggest that the median wait time for an LTC facility from hospital was 92 days in 2016/2017, up from 70 days in 2015/16. The median wait time for LTC home from community was 149 days in 2016/17, up from 132 days in 2015/2016 (Health Quality Ontario, 2018). In 2018–9, about 40% of LTC residents are admitted from hospital, 34% from home-based settings, and 25% from other residential settings (e.g. seniors' residences) (CIHI, 2019c).

In 2014–2015, an estimated 3.3% of adult Canadians (not limited to seniors) received home care services, including publicly funded and privately procured services (Gilmour, 2018). About 60% of care recipients were seniors, who primarily receive long-term services (other target populations for home care services include those with short-term acute needs; for example, to avoid or following a hospital stay, or at end of life). Publicly funded home care is intended to support (rather than replace) informal care by family members or friends, and is mostly provided in-kind. It may be delivered by public employees or through contracted agencies which may be for-profit or not-for-profit. Most provinces and territories have programmes that offer the option of providing personal budgets for clients to purchase their own care

for some selected groups that meet certain eligibility criteria.* These programmes have historically been oriented to younger adults with disabilities (Carbone & Allin, 2020).

Some of the characteristics of home care users (of long-term services) include cognitive impairment, mobility issues, chronic conditions, and associated with older age, urban location of residence and female clients (Johnson et al., 2018). In Ontario, while 39% of people receiving home care in 2011–2012 had cognitive impairment, this increased to 57.3% in 2016–2017. Similar increases were seen in the percentage reporting high care needs (37% to 48%), needing assistance with activities such as bathing and eating (17% to 24%) and with high to very high health instability (13% to 23%) (Health Quality Ontario, 2018).

■ 5.9 Services for informal carers

Each province and territory has its own policies and programmes for informal caregivers generally as part of the package of home care services and benefits provided by the particular PT government. Since 2002, the federal government has provided tax credits for eligible caregivers.† In response to the work completed by the national Secretariat on Palliative and End-of-Life Care (2001–2007), the Government of Canada introduced the Compassionate Care Benefit (CCB) in 2004 that initially offered workers 6 weeks’ paid leave from their employment to support family members who are in the final 6 months of life. In 2016, the eligibility criteria for the CCB were expanded to include anyone considered “like family” to the care recipient, and the length of the benefit is now up to 26 weeks, within a 52-week period. The CCB is part of the Employment Insurance programme and therefore is limited to those people who meet that programme’s criteria, in addition to the specific CCB criteria. CCB was not initially available to non-standard employees

* For example, the Choice in Supports for Independent Living in British Columbia and Self-Managed Care in Alberta are programmes that allow clients to pay for and manage their home care.

† There is also a long history of tax credits and transfers for families with children in Canada, with the size of the benefits growing significantly over time; the most recent iteration is the new consolidated Canada Child Benefit in 2016, which is income-tested and replaces a universal cash transfer that was in place since 2006 (Milligan, 2016a).

and the self-employed* and does not provide any benefit to people who are not in the workforce.

Recent estimates of the economic value of unpaid caregivers reveal the extent to which home-based LTC depends on volunteerism (Hollander, Guiping & Chappell, 2009). However, researchers as well as caregiver advocacy groups have questioned the sustainability of this policy. One research study concluded that the higher proportion of non-kin, male and geographically distant members that make up a given patient's informal care network, the less sustainable the care (Fast et al., 2004). In some cases, informal caregiving may be inadequate. There also appears to be an urban-rural divide in the support of informal caregivers with many more programmes in place for urban caregivers (Crosato & Leipert, 2006). There are also major differences in terms of the quality of home-support services more generally (Sims-Gould & Martin-Matthews, 2010).

In 2017, the Canada Caregiver Credit consolidated three previous tax credits (the Family Caregiver Amount, for children up to age 18, the Amount for Infirm Dependents, for those 18 years and older, and the Caregiver Amount). This new programme is a non-refundable federal tax credit to help unpaid, tax-paying caregivers cover the costs of caring for a family member who depends on them for support because of physical or mental impairment. The amount claimed depends on the relationship between the caregiver and the dependent family member, and the dependent family members' level of income. One of the notable changes with the 2017 tax credit was that it no longer required the caregiver to be living with the person for whom they were caring. Only one province – Nova Scotia – has introduced a cash allowance programme (versus a tax credit) for caregivers that offers eligible caregivers and care recipients a fixed amount (\$ 400, € 268) per month.

Unpaid family and friend caregivers provide the majority of care in the home, and there is evidence of increasing caregiver distress. In Ontario, 26% of home care clients' caregivers experienced distress in 2017/18, compared with 21% in 2012/13. In other provinces, the percentage of caregivers experiencing distress is lower, with 20% in British Columbia, 13% in Alberta, 15% in Newfoundland and Labrador in 2017/8 (Health Quality Ontario, 2018).

* Although some of these benefits have recently been extended to the self-employed on a voluntary basis, enrollment has been low because only a tiny percentage of the self-employed have been willing to pay the premiums.

■ 5.10 Palliative care

Although the terms “hospice care” (care offered in the community) and “palliative care” (care offered in hospitals or similar institutions) have different historical meanings (Syme & Bruce, 2009), following the general practice in Canada, the term palliative care is used here for both types of care. Wright et al. (2008) have demonstrated that there is a positive correlation between income as well as human development, as measured by the United Nations’ human development index (HDI), and the availability of palliative care services across countries. As such, Canada is similar to high-income and high-HDI countries in the OECD in terms of the provision and integration of palliative care services. Similar to the overall public–private split in the funding of health care, slightly more than 70% of palliative care services are publicly funded through federal* and PT health plans (Dumont et al., 2009).

The level of public funding is due in part to the fact that most palliative care in Canada is provided to patients dying of cancer who, in turn, receive a substantial amount of end-of-life care in hospital, despite the common preference for home-based palliative care (Leeb, Morris & Kasman, 2005; Widger et al., 2007; CIHI, 2018f). However, in the past two decades, there has been a dramatic shift in the location of end-of-life care. In the period 1994–2004, the proportion of Canadians dying in hospital dropped from 77.7% to 60.6% (Wilson et al., 2008). By 2017 the proportion of deaths in hospital was 60% of all deaths (Statistics Canada, 2019g), with the remainder in LTC facilities, residential hospices or at home. Estimates suggest that in 2015, 15% of deaths were at home (CIHI, 2018f). In addition, while cancer patients are still more likely to get palliative care services, patients with other life-limiting diagnoses are a growing proportion.

Since it was founded in 1991, the Canadian Hospice Palliative Care Association (CHPCA), a charitable non-profit organization, has been a consistent advocate for improving access to palliative care outside hospitals, and for the setting of national norms and practice guidelines for outpatient palliative care (CHPCA, 2002). In addition, the Senate of Canada has both raised awareness of palliative care and recommended a pan-Canadian strategy for a more consistent, comprehensive and integrated system of palliative care

* The federal government is mentioned in this context because Veterans Affairs Canada offers palliative care services to eligible veterans of the Canadian Armed Forces.

(Senate, 2010). Health Canada has had an office serving as the federal focal point for national palliative care policy since 2002.

In June 2016, legislation amended the federal Criminal Code to allow eligible adults to request medical assistance in dying from a physician or nurse practitioner. This followed a series of court challenges, including to the Supreme Court of Canada, and introduction of a law in Quebec in 2015 that legalized medical assistance in dying in that province (Farmanara, 2017). Since legalization, PT governments and medical associations have set up the processes and regulatory frameworks to allow for medical assistance in dying for eligible individuals. It is estimated nearly 11 000 Canadians received medical assistance in dying between the period December 2015 to October 2019 (Canada, 2019f).

In 2017, partially in response to concerns about the impact of medical assistance in dying on the availability and quality of palliative care, legislation was passed in parliament to support the development of a framework on palliative care. The federal government published its framework for palliative care in 2018 based on broad consultations with PTs, health care providers and their organizations, persons with life-limiting illnesses, caregivers, palliative care experts and others. The Framework describes how palliative care is provided in Canada, and outlines a range of goals and priorities to strengthen palliative care. The priorities focus on palliative care education and training for health care providers and caregivers, measures to support palliative care providers, research and collection of data on palliative care and measures to facilitate equitable access to palliative care (Health Canada, 2018). To implement the Framework, Health Canada released its 5-year Action Plan on Palliative Care in August 2019 (Health Canada, 2019b). The Action Plan, proposing a broad range of activities within the federal mandate, will complement the bilateral funding agreements between federal and PT governments under the Common Statement of Principles on Shared Health Priorities, which also included improved access to palliative and end-of-life care at home or in hospices among its objectives.

Statistics on palliative care, particularly outside of hospitals, are quite limited. The available statistics show improvements in recent decades, but reflect ongoing variability and discrepancies for certain populations. The majority of larger hospitals in Canada offer some palliative care services, a development that originated with the division of cancer treatment into curative and palliative in the 1970s. There are residential hospices in most

provinces. They generally only admit patients who are expected to live less than 3 months, and they vary widely in the extent to which they receive public funding from the provincial government and the number of people they care for (CIHI, 2018f). While hospital-based end-of-life care is relatively consistent in Canada, there are important differences in terms of home-based palliative care services funded and administered by PT governments (Quality End-of-Life Care Coalition of Canada, 2008). There is also considerable variety in palliative care policies and programmes across the country (Williams et al., 2010; Health Canada, 2018). For provinces where data are available (Ontario and Alberta), while two thirds of adults who died in 2016–2017 received some type of home care in their last year of life, only 15% received palliative home care services (CIHI, 2018f). The likelihood of receiving palliative care both at home and in hospital is much greater for patients with a cancer diagnosis (CIHI, 2018f). Less than 3% of Canadian physicians (1% in Alberta, 3% in Ontario) and 2% of Canadian nurses specialized in palliative care in 2016 (CIHI, 2018f). Also, fewer primary care doctors reported that they are prepared to care for patients at the end of life in Canada than in other countries surveyed in 2015 by the Commonwealth Fund (41% in Canada compared with the international average of 54%, and 81% in the UK) (CIHI, 2018f).

■ 5.11 Mental health care

For historical reasons, some mental health services, particularly those not provided in hospitals or by physicians, have never been included as fully insured services under the CHA. The policy legacies associated with the development of universal medicare in Canada included an emphasis on hospital-based treatment and a privileged position for doctors – GPs and psychiatrists – over other mental health care providers (Mulvale, Abelson & Goering, 2007; Dyck, 2018). For example, the services provided by psychologists are largely private, and paid for through private health insurance as part of employment benefit packages, or OOP payments (Romanow & Marchildon, 2003).

As a consequence, in part, of this policy legacy, GPs provide the majority of primary mental health services in Canada. GPs also serve a referral function to community services, and each province and territory includes a range

of community mental health and addictions services in its publicly funded insurance programme: these include case management, help for families and caregivers, community-based crisis services, and supportive housing (CIHI, 2018e). The Commonwealth Fund Survey of Primary Care Physicians in 2019 found that 61.4% of GPs felt well prepared to care for patients with mental illness (e.g. anxiety, mild or moderate depression), and only 19% felt prepared to care for patients with substance use disorders (e.g. drug, opioid or alcohol use) (CIHI 2019h). These findings have been echoed in other studies, for example, revealing that patients perceived that their GPs had limited knowledge of mental health and addictions, and that primary care professionals felt they needed more knowledge and experience in order to provide high-quality mental health care (Wener & Woodgate, 2017).

There is limited comparable data across Canada on access to mental health services, or measures of mental health and well-being. PHAC has compiled national statistics on mental health and well-being to populate a Positive Mental Health Surveillance Indicator Framework, and disaggregate indicators by age, sex, province, urban/rural, and other variables. Recent estimates from CIHI suggest that nearly 10% of Canadians have frequent visits to the ED (four or more in a year) due to mental health and/or addictions, and 12.7% of individuals who had been hospitalized in a year for a mental health condition had three or more hospitalizations in a year (CIHI, 2019e). These data suggest that there are major challenges in accessing mental health and addictions services in the community. Moreover, estimates suggest that although provinces and territories have increased their spending on mental health in the past decade, as a proportion of total health spending, mental health spending is lower in Canada than in other countries, at 7% in Canada compared with 15% in France, 13% in England, 11% in Germany and 8% in Australia (CIHI, 2019i).

Like almost all other OECD countries, Canada's mental health outcomes in term of mental and behavioural disorders has not improved appreciably since the implementation of deinstitutionalization in the 1960s (OECD, 2018). In 2006, the Standing Senate Committee on Social Affairs, Science and Technology recommended that a national commission be established to develop a pan-Canadian policy for mental health care and addictions (Senate, 2006). One year later, the Mental Health Commission of Canada (MHCC) was established by the federal government with the endorsement of all provinces and territories except for Quebec. In 2009, after extensive

consultations with governmental and nongovernmental stakeholders, the MHCC released its first major report setting out a mental health strategy (MHCC, 2009). Since then, the MHCC has produced public reports, and contributed to training, capacity-building and public awareness about mental health in Canada.

■ 5.12 Dental care

Almost all dental health services are delivered by independent practitioners operating their own practices. With the exception of surgical-dental services (performed by a dentist in a hospital) which are considered insured health services under the CHA, payment for dental care is through private health insurance or direct OOP payment. If a PT resident is receiving social assistance, then a portion or all of the costs for personal dental services may be covered by the PT government, with variations in eligibility and coverage rules across PTs. Similarly, if an individual is an eligible First Nation or Inuit, then a portion or all of the costs will be covered by the federal government through the NIHB programme.

Unlike many other high-income countries, Canada provides a very low level of public subsidies to access dental care. Currently, about 94% of all dental services are funded privately, a level that is lower than in other countries with a large private market for dental care (e.g. the United States at 13% and Australia at 18%) (Allin et al., 2020c). This degree of dependence on private funding has contributed to high levels of inequalities in terms of dental care (see Chapter 7). Almost 54% of all dental care is funded through private health insurance, the majority of which is through employment-based benefit plans. The remaining amount is funded directly OOP (40%) or through public funds (6%) (CIHI, 2019a).

In order to address these inequities, a few targeted oral health and dental service programmes have been initiated by governments. The first provincial programme of this type, launched by the government of Saskatchewan in the 1970s, targeted school children. Utilizing dental therapists as para-professionals, the Saskatchewan Health Dental Program proved to be highly effective but was disbanded within a decade (Wolfson, 1997). This was followed by a similar programme in Manitoba targeting rural children but it too was eventually discontinued by a subsequent administration (Marchildon,

2011). To date, most PT programmes target specific groups such as low-income children, the population for whom most attention has been paid, as well as social assistance recipients, and individuals with developmental disabilities (Shaw & Farmer, 2015). In Ontario, for example, through cost-sharing agreements with the provinces, municipalities finance and deliver care for low-income children and social assistance recipients, and since November 2019, also low-income older adults.

■ 5.13 Health services for Indigenous peoples

The term “Indigenous peoples” includes First Nations, Inuit and Métis residents, a reference to the descendants of peoples who lived in the geographical expanses now called Canada before European settlement. PT governments are responsible for providing all their residents, including Indigenous peoples, with hospital, physician and surgical-dental services defined as insured services under the Canada Health Act. The federal government provides coverage to registered First Nations and recognized Inuit for a package of extended health benefits – including dental care, pharmaceuticals and vision care – known as non-insured health benefits (NIHB) (Marchildon, 2017; Lavoie, 2018). Previously administered by Health Canada, NIHB is currently administered by Indigenous Services Canada, a department established in 2017. As of 31 March 2018, there were 867 749 eligible First Nations and Inuit NIHB beneficiaries in Canada (Canada, 2019).

Historically, government efforts to target the health needs of Indigenous peoples have achieved limited success. The system of “Indian hospitals”, for example, first established in the 1920s by the Government of Canada, may have actually served to institutionalize lower quality care for Indigenous peoples as well as perpetuate racism and abuse. These hospitals were phased out between the 1960s and 1980s (Lux, 2016). Despite the federal government’s desire to ensure that First Nations and Inuit received coverage for non-insured services – NIHB has had limited impact on health status. In the case of oral health, for example, NIHB-coverage of dental services for eligible First Nations and Inuit seems to have had a limited impact on reducing disparities between Indigenous peoples and non-Indigenous Canadians (Lawrence et al., 2009). As a consequence of these persistent disparities, Indigenous organizations and leaders have argued for greater control over

the funding and delivery of health services. Since the 1990s, a series of health funding transfer agreements between the federal government and eligible First Nations and Inuit organizations has permitted a greater degree of Indigenous control, particularly in areas of primary health care (Lavoie, 2018). Such initiatives have spurred an Indigenous health movement advocating a more uniquely holistic philosophy to health and health care. There have been other experiments and reforms in Canada including an Indigenous-governed and managed health authority in northern Saskatchewan and a province-wide First Nations Health Authority in British Columbia (Marchildon, 2016c). These new governance arrangements are consistent with the Truth and Reconciliation Commission (TRC) of Canada's calls for action.

The TRC called for fundamental changes in the way that FPT governments interact with Indigenous peoples, including recognizing and implementing the health care rights of Indigenous peoples in Canada. The TRC called for Canadian governments: to provide sustainable funding for Indigenous healing centres; to recognize the value of, and find a place for, Indigenous healing practices; to increase the number of Indigenous health professionals; and to require that all medical and nursing students to take at least one course addressing Indigenous health issues (TRC, 2012).

Despite these calls, there has been limited progress in addressing the significant gap in health disparities between Indigenous peoples and other Canadians (Martin et al., 2018). There has also been persistently poor living conditions on the reserves of First Nations including impure water supplies which have had a negative impact on health status (Galway, 2016). Despite efforts to ensure equitable access to health services such as Jordan's Principle – a legal decision that mandated providers to ensure care be provided in a timely manner to Indigenous citizens irrespective of constitutional and jurisdictional complexities, there remain significant barriers to access (Lavoie, 2018).

Principal health reforms

■ Chapter summary

- The past decade has seen few pan-Canadian health reform initiatives beyond the potential establishment of a national Pharmacare programme.
- Individual PT ministries of health have concentrated on the administrative structure of their health systems, with a number of governments – Alberta, Saskatchewan, Ontario, Nova Scotia, Prince Edward Island and the Northwest Territories – now having a single delegated health authority responsible for coordinating most health services in their respective jurisdictions.
- Primary care reform has been a focus of governments since the early 2000s, including changes in payment modalities to shift away from fee-for-service to alternative payments models and moving from solo-practice to team-based care.
- There has been some movement towards Indigenous self-determination and self-governance in health administration and delivery, such as with the establishment of the British Columbia-wide First Nations Health Authority in 2013, as well as for all FPTs to implement changes consistent with the Truth and Reconciliation Commission of Canada's call for changes in the health sector.
- At the federal level, there are signs of renewed interest in a pan-Canadian system of outpatient pharmaceutical coverage. In

2018, an Advisory Council on the Implementation of National Pharmacare was established, and in 2019 the Council recommended in favour of a medicare-style model in which PTs would administer single-payer coverage plans under national standards. This change, if actually adopted, would be the most significant reform since the implementation of universal medical care coverage.

■ 6.1 Analysis of recent reforms

Since 2013, when the second edition of this study was published (Marchildon, 2013), there have been few pan-Canadian health reform initiatives beyond the potential establishment of a national Pharmacare programme (section 6.2). However, individual PT ministries of health have concentrated on the administrative structure of their health systems, with a number of governments amalgamating their regional health authorities into a single delegated health authority responsible for integrating and coordinating most health services within their respective jurisdictions. These reforms include the reorganization or fine tuning of their regional health systems, alongside efforts to improve the quality and timeliness of – and patient experience with – primary, acute and chronic care. Also, patient dissatisfaction with queues in hospital EDs and for elective surgery, such as joint replacements and cataract surgery, have triggered efforts in all provinces to better manage and reduce waiting times, though these remain persistent challenges, as described in Chapter 7.

In what follows, more recent and incremental health reforms have been separated into two categories, one driven by the continued desire for greater coordination and integration through structural reorganization (and more recently a move towards centralization) and primary care reform, the second moving towards Indigenous self-determination and self-governance in health administration and delivery.

The main purpose of regionalization was to gain the benefits of vertical integration by managing facilities and providers across a broad continuum of health services in particular to improve the coordination of “downstream” curative services with more “upstream” public health and disease prevention services and interventions (Marchildon, 2013). Although all provinces

adopted a form of regionalized health administration and delivery in the early to mid-1990s, with the exception of Ontario which waited until 2006 to adopt its unique approach to regionalization, this convergence has been unravelling in recent years due to political dissatisfaction with the results of regionalization (Marchildon, 2016b). In particular, a number of jurisdictions abandoned this experiment with regionalization in favour of establishing a single delegated health authority – most notably Alberta in 2008, Nova Scotia in 2015, Saskatchewan in 2017 and Ontario in 2019 (see Table 2.3). Broadly, these structural changes aimed to capture economies of scale and scope in service delivery as well as reduce infrastructure costs. In the provinces which have kept RHAs, there has been a movement towards amalgamating smaller geographical regions into larger RHAs in the hope of reaping greater economies of scale and facilitating greater integration and coordination across the health continuum. Thus far, there has been little evidence that these changes have yet resulted in any major cost efficiencies, enhanced integration or improved outputs or outcomes.

One of the areas of greatest concern has been primary health care because of its central position in the health continuum, between acute and institutional care on the one hand and community and social care on the other. Progress on primary care was also identified as a policy priority under the 10-Year Plan. All governments agreed to provide at least 50% of their respective populations with 24/7 (24-hour, 7-day-a-week) access to multidisciplinary primary care teams by 2011, a major commitment given the fact that the vast majority of primary care was still being provided by physicians in 2004. In most provinces and territories, primary care providers are expected to be both gatekeepers to more specialized services and coordinators of services for their patients across health sectors. As a consequence, there has been a continuing shift towards team-based and interprofessional primary care, an expansion of information technology (IT) and electronic health records (EHRs).

With the introduction of numerous primary care practices and major changes in payment modalities since the early 2000s, Ontario has gone further than any other province in terms of primary care reform (Marchildon & Hutchison, 2016). The Government of the Northwest Territories has made the most progress in terms of the introduction of a jurisdiction-wide EHR for use by both providers and patients (Peckham, Ho & Marchildon, 2018). Only the governments of Ontario and Quebec have introduced

rostering agreements between providers and patients to ensure more consistent and continuous care as well as greater accountability (Peckham, Ho & Marchildon, 2018).

Another area of reform has broadly aimed to improve health outcomes of Canada's First Nations, Inuit and Métis populations who face a persistent health disparity with other Canadians (see Chapter 7). Indigenous leadership has long argued that greater control through self-government is a prerequisite to obtaining more culturally-appropriate health services and better health outcomes (Lavoie, 2018). Currently, there are a number of approaches to move toward including: 1) the establishment of Nunavut in 1999, a public government and single point of contact for the administration and delivery of all health services to the territory's residents, the majority of which is Inuit; 2) Indigenous-controlled health authorities, either on a regional basis such as the Dene-governed Athabasca Health Authority in northern Saskatchewan or the British Columbia-wide First Nations Health Authority; and 3) separate First Nations delivery through individual bands or in modern treaty and lands claims arrangements. Moreover there have been calls for all FPT governments to implement changes consistent with the Truth and Reconciliation Commission of Canada's call for changes in the health sector (TRC, 2012; 2015).

The federal government has also changed its organization of Indigenous health services, including the administration of the non-insured health benefits (NIHB) programme which offers coverage for extended health benefits to eligible Indigenous beneficiaries. Once provided by the First Nations and Inuit Health Branch in Health Canada, Indigenous health services and NIHB has been moved to a government department created in 2017 called Indigenous Services Canada. At the same time, the federal government also established a second department, known as Crown-Indigenous Relations Canada, to negotiate the details of greater Indigenous self-governments arrangements. Given the very recent nature of all of these reforms, it is difficult to evaluate their impact.

■ 6.2 Future developments

In recent years, there has been an emerging expert and public consensus to add outpatient pharmaceutical therapies to the package of UHC in Canada.

Beginning with a Canadian House of Commons Standing Committee on Health review of the prospects for a national Pharmacare programme in Canada between 2016 and 2018 followed by an Advisory Council on the Implementation of National Pharmacare, the Government of Canada has received recommendations in favour of adding outpatient drugs to UHC. Both the House of Commons Standing Committee on Health (2018) and the government-appointed Advisory Committee on the Implementation of National Pharmacare (2019) have recommended in favour of a medicare-style model in which provinces and territories would administer single-payer coverage plans under national standards. This change, if actually adopted, would be the most significant reform since universal medical care coverage was implemented in the late 1960s and early 1970s. However, there is significant opposition to the programmes from the private insurance companies and, to some extent, by the pharmaceutical companies.

Furthermore, the COVID-19 pandemic of 2020 has led to rapid health system change across Canada, such as the escalation of virtual care in primary and ambulatory care; it has also drawn attention to some of the major weaknesses in the health system. Broadly, there are at least three changes triggered by the pandemic that may have lasting impacts on health care in Canada. The first is a shift in political and public focus from Pharmacare to LTC reform due to the concentration of COVID-19 cases and deaths in LTC institutions and retirement homes, the sustained media reporting on the LTC sector, and reports from the Canadian Armed Forces in May 2020 detailing the mistreatment, abuse and inadequate care and infection control within LTC homes in Ontario and Quebec, the two provinces to which they were deployed to provide support during outbreaks. The second area of change relates to the high cost of pandemic measures, both health system and economic relief measures, that have significantly increased FPT governments' deficits and overall public debt. These deficits may lead to a period of health spending restraint after the crisis, and perhaps at the same time when PT governments in particular are coping with the spillover effects of the restrictive public health measures and backlog of elective and non-urgent care. The third area of change relates to increased awareness of the need to shore up and improve public health infrastructure across Canada and to improve FPT collaboration and data-sharing.

7

Assessment of the health system

■ Chapter summary

- The role of patients and the public in health system governance has strengthened in the past decade; though there is still limited comparable data on patient-reported experience or outcomes measures.
- Canadians have financial protection against hospital and physician services, but there are important gaps in coverage, such as for prescription drugs outside hospital, dental, vision and non-physician mental health care. Since the majority of funding for health care comes from general tax revenues of the federal, provincial and territorial governments and the revenue sources range from progressive to proportionate, there is equity in financing.
- There are disparities in terms of access to health care but, outside a few areas such as dental care and mental health care, they do not appear to be large. While Canadians are generally satisfied with the financial protection offered by medicare in particular, they are less satisfied with other aspects determining access such as wait times to see a specialist or for elective surgery.
- Canadian performance on an index of health care quality indicators has improved in recent years, including in-hospital mortality rates, cancer survival and avoidable hospitalizations, though

relative to other comparable countries Canada's performance is usually close to the average.

- Health outcomes have improved in recent years, though the rate of improvement in amenable mortality has been slower in Canada than other comparable countries such as Australia. Moreover, the large gap in health outcomes between income groups and between Indigenous peoples and the rest of Canadians has persisted.
- There are numerous sources of inefficiency in Canada that signal room for improvement in the effective use of health resources, including the potentially inappropriate use of medications and institutional care, high prices for pharmaceuticals and poorly integrated care.

■ 7.1 Health system governance

Health systems in Canada are more transparent today than in decades past due to a number of trends and movements. Canadians, whether in their various roles as citizen, taxpayer or patient, demand greater transparency of their governments and health care organizations and are more involved in clinical decisions and in health system governance than in the past. On the supply side, access to information continues to increase and expand to include health professions and sectors beyond hospitals and doctors and more information on patient experience. In addition, the long-form census of the Canadian population was made mandatory in 2016 after it had been deemed voluntary for one data collection period (2011), thereby supporting the evidence base to inform policy and programme decisions across the country. The closure of the Health Council of Canada in 2014, whose mandate included public reporting on the health system, was criticized by some organizations and pro-medicare advocacy groups; however, some of the Council's reporting function was transferred to CIHI (e.g. the Canadian component of the Commonwealth Fund's international surveys). Also, a number of provincial health quality councils and Canadian policy think tanks provide reports on health system issues.

Health Canada provides a yearly report to parliament on the administration and operation of the Canada Health Act including all information

concerning the extent to which provincial and territorial health care insurance plans have satisfied the conditions and the criteria for payment under this Act (Health Canada, 2019a). However, concerns have been raised about what is actually included in the basket of universal health services under the Canada Health Act, and the lack of a transparent process for determining what is funded publicly (Flood & Thomas, 2016). Similarly, a federal government sponsored review of pan-Canadian health organizations recommended the formation of a new agency to review and update the list of services publicly insured which could, in part, address the inconsistent coverage of non-physician mental health care, home care and prescription drugs outside hospital across the country (Forest & Martin, 2018). In addition, private citizens have occasionally taken their provincial governments to court to have certain services added to the basket using arguments based on the Charter of Rights and Freedoms, and at least one scholar has argued that this is a useful mechanism for health care accountability, particularly given the paucity of other processes available to Canadians (Jackman, 2010).

Decisions on which drugs will be covered are made by PT governments; while there is some public involvement, the decisions are not fully transparent (Rosenberg-Yunger & Bayoumi, 2014). CADTH, which provides recommendations to PT decision-makers, includes public input by: 1) including members of the public on the Canadian Drug Expert Committee who participate fully in deliberations and in voting on the final recommendations for reimbursement, and 2) public submissions from individuals and advocacy groups on the drugs that are being evaluated which are then considered by the expert committee.

Another mechanism for ensuring transparency is the Canada Health Act Annual Report. On an annual basis, the federal Minister of Health is required under section 23 of the Canada Health Act to report to parliament on the administration and operation of the Act. This is done via the Canada Health Act Annual Report (CHAAR). The CHAAR describes the administration and operation of the CHA and includes all relevant information on the extent to which PT health care insurance plans have satisfied the criteria and the conditions of the Act. Each PT drafts its own submission to the report, based on a User's Guide provided by Health Canada. Health Canada reviews PT submissions for appropriateness, completeness and clarity. The 2018 initiative implemented by Minister Petitpas

Taylor further affirmed transparency standards through the CHAAR by strengthening reporting requirements. The CHA also stipulates that PT governments should acknowledge the transfer funding they receive from the federal government, which is used to deliver public health care services to their respective residents. Demands for greater transparency in terms of federal transfers to PT governments for health eventually led to the federal government splitting its omnibus block transfer into two in 2004 – the Canada Health Transfer dedicated to health, and the Canada Social Transfer (McIntosh, 2004). This came years after FP wrangling over what was the “real” value of the health portion of the block transfer, with the federal government continually exaggerating its value, and the provincial governments systematically underestimating its value (Marchildon, 2004). The Canada Health Transfer – a block transfer – provides no mechanism for holding provinces accountable for how they spend the money (Marchildon, 2016). However, the bilateral funding agreements between federal and PT governments in 2017/18 on home care and mental health care did include some conditions and accountability mechanisms to ensure spending was directed towards agreed upon targets.

Through their websites, most PT ministries of health provide extensive information on their services, including a comprehensive list of health care benefits and entitlements. With some notable exceptions, PT governments have also been relatively transparent in terms of new health policy developments in part because of their extensive and public use of commissions and ministerial advisory bodies during the past two decades. Inevitably, these processes have involved public consultations and hearings. The Commission on the Future of Health Care in Canada, chaired by Roy Romanow, the former Premier of Saskatchewan, conducted extensive consultations with Canadians between 2001 and 2002, including public hearings, televised forums, expert workshops, regional forums, partnered dialogue sessions and a series of 12 one-day deliberative dialogue sessions involving a random selection of almost 500 Canadian citizens (Romanow, 2002; Maxwell et al., 2002; Maxwell, Rosell & Forest, 2003). The Romanow Commission and its recommendations had an impact on the scale and direction of reform efforts, particularly in strengthening primary care and increasing coverage of home care following hospital discharge (see Chapter 6).

An external advisory panel was set up in 2014 by the Minister of Health to advise the federal government on how best to support innovation in health

care in Canada in order to reduce the growth in health spending and improve quality and accessibility of care. The panel's 2015 report drew on substantial public input and expert submissions (Health Canada, 2015), yet had little or no impact on decisions at the federal level. More recently, federal government committee reports have drawn on a wide range of public and stakeholder input, such as the House of Commons Standing Committee on Health's report on the development of a national Pharmacare programme in 2018. Also in 2018 the federal government established an Advisory Council on the Implementation of National Pharmacare, led by Dr Eric Hoskins, former Minister of Health in Ontario, to advise on implementation of a national Pharmacare programme (Grignon et al., 2019) (see Chapter 6).

Beyond participating in parliamentary politics at the FPT levels of government, direct public involvement in health governance has been limited to more regional and local levels (Flood & Archibald, 2005). While there was a movement towards citizen election to RHA boards in the early days of regionalization, almost all health authority boards are now appointed by provincial governments (Abelson & Eyles, 2004; Chessie, 2009) (see section 2.4). However, all provinces and territories have introduced formal mechanisms to engage patients and families in decision-making and health system governance, a trend that reflects a broader move toward greater public engagement and participation in government decision-making. In all provinces and territories there is a mechanism for patient and community engagement; for example, through family and community advisory councils* and provincial initiatives.† In some provinces, public engagement is mandated through legislation. For example, the Patients First Act in Ontario (2016) required each LHIN to establish a patient and family advisory committee to provide advice and discuss issues related to their planning and delivery of hospital and community care as well as quality improvement, thus formalizing the process of community engagement that had been occurring to various degrees

* For example in Alberta, the provincial planning agency, Alberta Health Services, supports 12 health advisory councils representing geographical areas across the province and three provincial advisory councils to engage community on three province-wide services – addiction and mental health, cancer, and seniors and continuing care.

† For example the British Columbia Ministry of Health published an updated and expanded strategy of patient, family and caregiver engagement in 2018 that builds on their Patients as Partners initiative from 2008 and provides a framework and tools to support engagement in individual care, planning and evaluation of health care programmes and services and strategic planning (Government of British Columbia, 2018).

across the LHINs since their formation in 2006. The Ontario Ministry of Health also established a patient and family advisory council to advise the government on health care plans and changes to provincial programmes and policies, and that province's quality council published a patient engagement framework in 2016 and a related guide in 2017 to support health organization and providers in their own engagement activities. However, it is unclear how the recent health system restructuring in Ontario that dissolved the LHINs and established a single arm's-length agency will impact patient participation and engagement (Government of Ontario, 2019).

There has also been a sustained effort to facilitate and expand patient engagement in health research. At the national level, Canada's Strategy for Patient-Oriented Research was launched by CIHR in 2011, which among other goals included the strengthening of patient engagement in all stages of the research process. By 2016 CIHR had invested over \$ 350 million (€ 238 million) through this strategy and related research (CIHR, 2016).

In terms of holding governments and other public actors to account for the management of health systems at the national, provincial, regional and local levels, Canadians have benefited from more public reporting on indicators and performance measures. The work of CIHI since its establishment in 1994 has been critical to providing the infrastructure and comparative methodologies to allow this to occur (Morris & Zelmer, 2005).

Health system performance reporting initiatives have also begun to incorporate measures of patient experience, but to date the only Canada-wide comparable measures in place are for hospitals in the form of a standardized inpatient patient experience survey. The 10-year bilateral funding agreements between federal and PT governments starting 2017–2018 included the requirement (Quebec excepted) for developing and reporting on an agreed set of indicators to monitor progress towards expanded access to home and community care, as well as mental health and addictions services (Canada, 2019a). In addition to the public reporting, provincial governments have also made use of other tools to strengthen accountability for example through regulation and financial incentives (Deber, 2014). Overall, there is strong capacity of the health system to engage stakeholders to develop policy options to address some of the pressing challenges in health systems in Canada, and to measure and monitor health system performance. However, in such a highly decentralized health system, policy adoption and implementation necessarily depends on FPT agreement to bring about pan-Canadian reforms.

■ 7.2 Accessibility

In response to growing levels of public dissatisfaction (see Table 7.1) originally rooted in the public sector cost cutting of the early to mid-1990s, and again during the economic recession of 2008–2009 which precipitated a period of slowed growth rate in health spending, there has been a discernible trend towards reforms that will make the health system more responsive to patients. This movement, loosely termed patient-centred care, has become increasingly important in Canada.

Since the early 2000s, there has been persistent patient dissatisfaction focused on the long waiting times for advanced diagnostics, specialist services and elective (non-urgent) surgery. Waiting times have also been an issue in some hospital emergency departments (EDs) especially in urban centres and the trend is worsening: the time patients spend in EDs has steadily and significantly increased over the past 5 years (CIHI, 2019e) (see section 5.5). Finally, access to primary care – especially in those communities where there is a shortage of GPs or where GPs are refusing to take on new patients – has also fuelled patient dissatisfaction.

Table 7.1 shows that in terms of the patient experience with waiting times for elective surgery, specialist services and same or next day access to a doctor or nurse, Canada ranks last among the 11 countries surveyed. However, when it comes to the pressure on emergency rooms after regular hours due to the lack of 24/7 primary care, Canadians face slightly less difficulty than patients in France and Germany. At the same time, ED wait times as self-reported by patients are the longest in Canada among selected comparison countries.* In light of these poor results, it is not surprising that a majority of Canadians (55% in the sample) feel that fundamental changes are needed to make the health system work better, compared with 46% of Australians and even 53% of Americans. When we look at the provincial survey results, we see consistent patterns of below average performance on the measures used in Table 7.1, with few exceptions: Saskatchewan performed at the international average in same or next day appointment, and Ontario and Alberta were at the international average in access to primary care after hours (CIHI, 2016a).

* In 2016, Commonwealth Fund Survey results found 29% of Canadians waited 4 or more hours the last time they went to the ED, compared with 20% in Sweden, 11% in the USA, 10% in Australia, 8% in the UK and 1% in France.

TABLE 7.1 Patient views on waiting times, access and health systems, 2016 (% of respondents in the 2016 Commonwealth Fund International Health Policy Survey of Adults)

	Wait for elective surgery (>4 months)	Wait for specialist appointment (>4 weeks)	Somewhat or very difficult getting after-hours care without going to ED	Same day appointment with doctor or nurse when sick	Wait to see doctor or nurse when sick (> 5 days)	Same or next day appointment with doctor or nurse when sick	The health system has good things, but fundamental changes are needed to make it work better
Australia	8.4	39.3	36.4	40.7	7.5	61.8	46.2
Canada	18.2	58.5	55.3	27.3	27	39.2	55.1
France	1.6	39.8	60.6	22.7	18.3	55.5	41.3
Germany	0	27.4	62.9	24.5	27.0	52.8	36.8
Netherlands	4.5	28.9	17.6	47.5	5.2	72.0	45.8
New Zealand	14.9	47.3	35.9	47.8	3.9	73.1	51.9
Norway	15.3	55.5	30.8	29.2	24.3	41.4	33.3
Sweden	11.8	44.7	43.8	31.6	22.6	44.5	58.2
Switzerland	6.5	25.9	39.5	28.0	9.1	53.0	37.4
UK	12.0	42.5	36.3	39.7	16.6	55.1	45.8
USA	3.6	25.3	45.4	31.6	18.4	46.8	53

Source: Commonwealth Fund (2016)

For the general public and health system decision-makers, waiting times have been a focus of policy and measurement attention since the early 2000s. Five waiting time priority areas were identified, followed by six waiting time benchmarks (for specific procedures in four of the five priority areas), which have been measured and reported annually since 2005 by CIHI. Table 7.2 indicates that while most provinces have met or come close to meeting the benchmarks for cancer radiation therapy, they still have some distance to go before they meet pan-Canadian waiting time benchmarks for joint replacement and sight restoration. In the past decade, progress towards reduced wait times in these priority procedures appears to have stalled, and in many cases there has been a reversal (CIHI, 2019j). However, comparable data in 2017 across countries suggest Canada has a lower median wait for cataract surgery (66 days) than in Australia (86 days), and the average of 16 OECD

countries with available data (77 days), but higher than the UK (62 days), Sweden (48 days) and Denmark (37 days) (OECD, 2019). However, the median wait for hip and knee replacements is longer in Canada than the OECD average.

TABLE 7.2 Percentage of patients receiving care within pan-Canadian benchmarks, by province, 2018

	RADIATION THERAPY FOR CANCER (<4 WEEKS)	CATARACT REMOVAL (<16 WEEKS)	HIP REPLACEMENT (<26 WEEKS)	KNEE REPLACEMENT (<26 WEEKS)	HIP FRACTURE REPAIR (<48 HOURS)
British Columbia	93	64	67	59	85
Alberta	100	49	70	66	94
Saskatchewan	97	62	66	56	79
Manitoba	100	29	49	37	92
Ontario	98	70	84	79	87
Quebec	97	83	80	77	NA
New Brunswick	95	67	55	43	90
Nova Scotia	96	68	49	47	91
Prince Edward Island	100	40	49	26	84
Newfoundland and Labrador	100	77	88	75	90
Canada (2018)	97	70	75	69	88
Canada (2014)	98	80	82	78	84

Source: CIHI (2019)

■ 7.2.1 Equity of access to health care

The introduction of UHC improved access to, and the benefits derived from, hospital (including diagnostics and drug treatments) and medical services (Enterline et al., 1973; James et al., 2007). By removing financial

barriers to UHC services, the populations with the greatest need, which also tend to face disproportionately greater social risks such as lower income and food insecurity, account for the majority of public spending on health (Rosella et al., 2014; Fitzpatrick et al., 2015). However, inequities in access to care persist despite this important public policy change in the 1950s and 1960s. Although these inequities are concentrated in non-UHC sectors where financing is largely private (see Box 3.1), they are also present in some services associated with medicare.

With regard to primary care, people with higher income on average have a slightly greater likelihood of visiting a GP than those with lower income, after statistically adjusting for differences in health status (Allin, 2008; Van Doorslaer & Masseria, 2004; Devaux, 2016). This finding relates to the narrowness of Canadian medicare, where some patients may avoid or delay seeing a doctor for fear of getting a prescription they cannot afford (Allin & Hurley, 2009). After this initial contact, however, studies have found greater use of GPs among lower income groups (Hutchison, 2007; McGrail, 2008; Allin, 2008). A recent international study drawing on Commonwealth Fund international survey data found that people with mental health conditions and lower than average income, as well as new immigrants, were all more likely to report multiple barriers to accessing primary care in Canada (Corcadden et al., 2018). An earlier study found persistent inequities based on both education and income in the utilization of mental health services (Steele et al., 2007). Other studies highlight the degree to which inequities exist in the use of non-UHC services for which Canadians have minimal financial protection including dental care, rehabilitation, physiotherapy, occupational therapy and speech pathology (Hutchison, 2007; Grignon et al., 2010) (see section 7.3). The pan-Canadian Health Inequalities Reporting Initiative (HIRI) shows similar patterns in dental use its Health Inequalities Data Tool (PHAC, 2017).

With regard to specialized care, lower income Canadians also appear to be less likely to access a specialist physician, and to use day surgeries, than higher income Canadians after statistically controlling for different levels of health status (Allin, 2008; McGrail, 2008). A recent OECD study also found that Canada was a middle performer in the magnitude of inequity both in cancer screening and the probability of visiting a specialist, though there was a much greater degree of inequity in the probability of accessing a GP, and in dental care use, in Canada compared with the other countries

(Devaux, 2016). Similarly, among Canadians aged 50 to 74 years, there were large absolute inequalities between the lowest and highest income groups in the prevalence of those reporting having accessed breast, cervical or colorectal cancer screening in the previous 5 years (PHAC, 2017). Inequalities by income are less pronounced, or in some cases not observed, for indicators related to treatment (e.g. hip fracture repair within 48 hours), readmissions (e.g. AMI readmission) and some care outcomes (e.g. stroke mortality) (CIHI, nd).

Lower-income Canadians report significantly greater challenges accessing care than higher income Canadians (Table 7.3). Compared with other countries included in the 2016 Commonwealth Fund International Health Policy Survey of Adults, Canada has the largest income gap in cost-related access barriers, with 30% of adults with income below the median for Canada reporting to have cost-related access barriers in the past year compared with 13% of Canadians with income above the median. These cost-related barriers in Canada result from the narrow scope of services included in medicare which leaves entire sectors outside of the universal system, such as outpatient prescription drugs and dental care (see Box 3.1). Thus, it is not surprising that Canada had the second highest prevalence of cost-related non-adherence to prescription drugs among 11 countries surveyed by the Commonwealth Fund (the highest was the USA) in 2014 (Morgan & Lee, 2017). There are also data supporting the impact of the high costs on access to dental care. The 2016 Commonwealth Fund International Health Policy Survey of Adults reported over 40% of Canadians with income below the median for Canada, and 17% of Canadians with income above the median skipped dental care or a check-up because of cost, which were among the highest among the countries surveyed, second only to the USA.

As seen in Table 7.3, Canada also fares poorly in reported waiting for an appointment, with both overall rate and the gap by income significantly larger than in Australia, the Netherlands and New Zealand, but similar to France, Germany, the UK and the USA. Challenges with care coordination do not appear to affect lower-than median income Canadians disproportionately, and all countries seem to face challenges with care coordination.

TABLE 7.3 Unmet needs for a medical examination (due to cost, waiting time) by income (% of respondents), 2016

	EXPERIENCED COST-RELATED ACCESS BARRIERS IN THE PAST		WAITED 6 DAYS OR MORE FOR APPOINTMENT LAST TIME CARE WAS NEEDED		EXPERIENCED COORDINATION GAPS IN PAST 2 YEARS	
	LOW-INCOME ADULTS	ALL OTHER ADULTS	LOW-INCOME ADULTS	ALL OTHER ADULTS	LOW-INCOME ADULTS	ALL OTHER ADULTS
Australia	24	13	11	7	28	22
Canada	30	13	37	27	33	29
France	30	14	27	17	48	28
Germany	16	6	38	27	24	18
Netherlands	23	7	5	5	25	23
New Zealand	28	18	7	3	36	20
Norway	20	8	29	25	39	34
Sweden	16	7	32	24	36	32
Switzerland	31	22	14	9	25	32
UK	8	7	27	16	37	20
USA	43	32	35	17	36	35

Note: Low-income refers to survey respondents with lower than the median income for their country

Source: Commonwealth Fund (2016)

There are few studies of the extent to which inequity in access has changed over time; however, the evidence available suggests little change, with some signs of an increasing gap over time. One study from Manitoba found inequality in health care by income has widened over the period 1985–2006 for some indicators (e.g. in continuity of care in rural settings, cervical cancer screening) and persisted for others (e.g. continuity of care in urban settings, post-AMI beta-blocker prescription use) (Martens et al., 2010). Aside from income, there is a large and growing body of research that has uncovered barriers to accessing health care that relates to systemic racism, implicit bias and discrimination which disproportionately affects subpopulations such as recent immigrants, racialized populations and Indigenous peoples (see for example, Ahmed et al., 2016; Durbin et al., 2015; Lavoie, 2018; Lofters et al., 2018; Nelson & Wilson, 2018; Nestel, 2012).

Within provinces and territories there is also evidence of significant geographical inequalities in access to care. Geographical barriers to access

disproportionately affect the north, which is sparsely populated and faces unique health and care delivery challenges (Health Quality Ontario, 2017; Marchildon & Torgerson, 2013; Young et al., 2017). Compared with other countries, the physician supply gap as measured in terms of physician density in predominantly urban regions compared with predominantly rural regions is relatively large in Canada (2.6 doctors per 1 000 population in urban areas, compared with one doctor per 1 000 population in rural areas) compared with other countries (the average across 16 OECD countries with available data was 4.3 doctors per 1 000 in urban areas and 2.8 per 1 000 in rural areas) (OECD, 2019). This measure serves as one example of the challenges facing the rural populations in Canada which extend beyond accessibility of physician care to all facets of the health system.

■ 7.3 Financial protection

Financial protection measures the extent to which individuals are protected from the financial consequences of illness. Three factors underpin the need for financial protection: uncertainty about the need for health care due to the unpredictability of the timing and severity of illness; the high cost of most interventions and treatments; and the potential loss of earnings due to ill health.

Historically, financial protection was the key motivation behind the introduction of universal medicare in Canada. Although coverage is deep (no user fees), the scope of medicare is narrow, limited as it is to hospital, diagnostic and medical care. As a result, there continues to be a debate as to whether financial protection is adequate for pharmaceuticals, dental care and other sectors and services not included in medicare.

Table 7.4 focuses on the mix of private health insurance and OOP in non-UHC sectors and services. When it comes to prescription drugs, private health insurance constitutes as important a source of coverage as public coverage plans. In the 1990s, many argued in favour of a national, universal Pharmacare programme that would provide first-dollar coverage. By the 2000s, largely for cost reasons, this had shifted to various proposals for a more targeted, catastrophic drug programme with last-dollar coverage. Though there has been renewed federal interest in a universal Pharmacare

programme in recent years, to date the provinces have mostly made marginal changes to their public drug programmes in the past decade. The most notable change was Ontario's introduction in 2018 of the first residency-based public programme for prescription drugs in Canada, called OHIP+, which covered those aged 24 years and younger and through the provincial insurance programme as a payer of first resort. However, in June 2018, a newly elected provincial government announced it would limit the programme to those children and youth who did not have existing prescription drug benefits (many middle-class children and youth benefit from their parents' employment-based health benefit insurance coverage), and thus become a payer of last resort.

There is virtually no public coverage for dental care. Almost two thirds of the cost of non-physician services provided by most other health care professionals are paid through OOP payments. A further 25% of the cost is covered through private health insurance and a miniscule percentage through the public purse. These professionals include dentists, psychologists, chiropractors, optometrists, physiotherapists and occupational therapists among others. Although some of these groups have occasionally been successful in obtaining some public coverage for their services, this coverage varies considerably across provinces and territories.

TABLE 7.4 OOP spending relative to private health insurance coverage for non-medicare services, amount (\$ billions) and % of total health care spending in Canada, 2017

	OOP SPENDING (\$ BILLIONS)	% OF HEALTH SPENDING IN CATEGORY	PRIVATE HEALTH INSURANCE SPENDING (\$ BILLIONS)	% OF HEALTH SPENDING IN CATEGORY
Prescription drugs	6.6	17.8	11.2	36.1
OTC drugs and personal health supplies	5.7	100	0	0
Dental care	6.2	44.4	6	51
Professionals other than physicians providing medicare	4.3	64.3	1.6	24.1
Institutions other than hospitals	7.7	28.5	0	0

Source: CIHI (2019a)

Although there is very little private health insurance coverage for institutional LTC, every province and territory provides targeted subsidies for individuals requiring more intensive LTC (OOP payments account for less than one third of the total outlay in this category). To date, there has been no concerted policy effort to address the lack of financial protection for LTC in part because of the means-tested subsidies offered by all PT governments.

■ 7.3.1 *Equity in financing*

Equity in financing is determined by the extent to which individual sources of health financing are progressive, proportional or regressive. The more progressive the health-financing system, the greater the equity in financing. The overall income tax system in Canada is progressive; however, the trend over the past 50 years shows a long-term reduction in progressivity in the personal income tax system since the 1980s, with some increase in progressivity with tax reforms introduced in 2016 (Milligan, 2016b).

The Canada Health Transfer provides implicit regional redistribution of finances across provinces. Through the Canada Health Transfer, revenues that are collected on a national basis are redistributed to the provinces, and those provinces with shallower tax bases benefit from the revenues collected in wealthier provinces. Prior to 2014 there was also explicit equalization built into the Canada Health Transfer where the formula that calculated the share of each province involved a degree of equalization in which less wealthy provinces received slightly more per capita than wealthier provinces. After 2014, this element of equalization was terminated in favour of pure per capita payments. Nonetheless, as long as federal revenues fund some portion of provincial health care costs, there is some redistribution from wealthier parts of the country (where taxpayers pay more federal income and corporate taxes) to less wealthy parts of the country – an implicit form of revenue redistribution that would not exist if provinces alone raised revenues for their own health care expenditures.

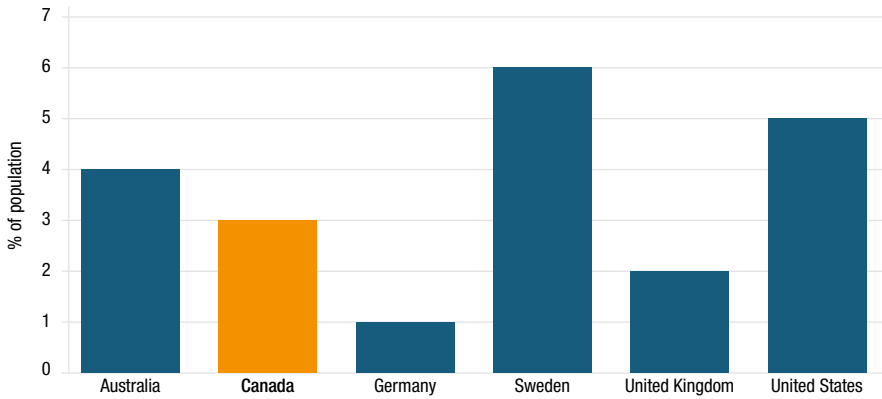
Comparable data suggest that Canada has achieved a considerable degree of financial protection for its population. About 3% of Canadians are estimated to spend more than one tenth of their disposable incomes on health care, compared with 2% in the UK, 5% in the USA and 6% in Sweden (Fig. 7.1). Not surprisingly, there is a big gap between income groups: nearly 8%

of Canadians in the lowest income quintile reported to spend 10% of their income on health care compared with 1% of those in the highest income quintile (World Bank, 2018).

As discussed in Chapter 3, OOP payments made up 15% of total health expenditure and private health insurance a further 12% of total health spending in Canada in 2017 (CIHI, 2019a). The majority of private health insurance originates in the benefit packages in group-based employment plans. Such benefits are generally restricted to higher-wage and higher-salary permanent jobs, whereas the working poor are often in low-paid, temporary or seasonal jobs, precisely the type of employment that does not come with private health insurance benefits (Hurley & Guindon, 2020). Dental care provides one of the most extreme examples of reliance on private funding. About 94% of all financing for dental care comes from either OOP or private health insurance sources, a figure considerably higher than in almost all high-income OECD countries.

Compared with private health insurance and OOP funding sources, general tax revenues are more equitable, involving some income redistribution from higher-income to lower-income households. As reviewed in Chapter 3, a number of revenue sources make up the general revenue funds of FPT. Although the largest is income tax – a progressive source of taxation – other taxes including consumption taxes tend to be regressive, making it difficult to assess the progressivity of the tax system as a whole. While tax systems are often perceived to be progressive, the reality depends on the relative mix and design of taxes that make up the basket of the general revenue funds of an individual government – federal, provincial or territorial. One study of the financing and use of publicly funded health care in Canada found the heavy reliance on income taxes to finance these services has the effect of redistributing income from higher to lower-income groups (CIHI, 2013). Specifically, using a model to simulate tax payments and health care costs over a lifetime, the study found that the 20% of the population with the highest income was estimated to contribute nearly half of total taxes paid towards health care, but they accounted for less than 20% of total health care costs. Compared with other countries, taxes and transfers in Canada significantly reduce income inequality (from a Gini coefficient of 0.44 to 0.31), albeit to a slightly lesser extent than in France (0.52 to 0.29) or Germany (0.5 to 0.29), but considerably more so than in the USA (0.51 to 0.39) (OECD, 2020).

FIG. 7.1 Share of households that experienced catastrophic health expenditure, 2010 or latest available year (10% threshold)



Note: Data for France was not available

Source: Wagstaff et al. (2018)

■ 7.4 Health care quality

Canada's performance on most comparable quality indicators paints a mixed picture. Indicators of quality in primary care are extremely limited in Canada and mostly use hospitalization data as a proxy. The lack of primary care data relates in large part to the fact that EMR data, even though used by most primary care physicians, are not standardized nor easily shared. It also relates to the provincial governments' prevalent use of negotiated fee schedules as a primary policy lever to influence physician behaviour, and hence billings data as the sole information source for monitoring and oversight.

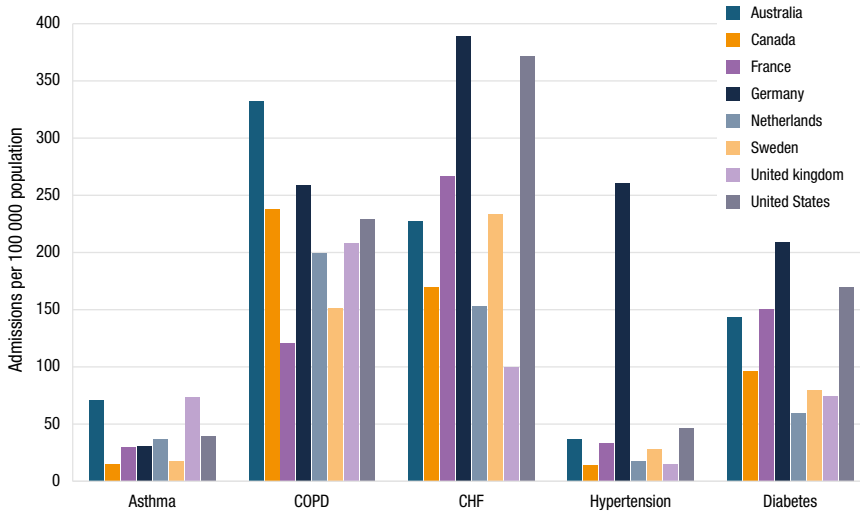
Using measures of hospital admissions that are considered to be "avoidable" in the context of strong primary care, Canada performs well in some indicators, such as hospitalizations for asthma, congestive heart failure and hypertension. In contrast, hospitalization rates for chronic obstructive pulmonary disease (COPD) are significantly higher in Canada than the OECD average and several comparable countries (see Fig. 7.2). However, there are significant variations across provinces in the rates of avoidable COPD and diabetes hospital admissions. Ontario and British Columbia have lower rates of avoidable COPD admissions (under 200 per 100 000 population) than the Canada average, while rates exceed 300 per 100 000

in Saskatchewan, Quebec and New Brunswick placing them higher than all other OECD countries except Hungary, Turkey and Australia (CIHI, 2019k). Hospitalizations for diabetes are higher than the OECD average in Saskatchewan and Newfoundland and Labrador (over 160 per 100 000 population), while in the rest of the country the rates are at or below the OECD average. Rates of asthma hospitalization are low in all provinces but they range from as low as 11 per 100 000 population in Quebec to 21.5 per 100 000 in Newfoundland and Labrador (compared with the OECD average of 42 admissions per 100 000)

Over time there have been signs of improvement in quality of primary care as measured by avoidable hospitalizations, but there remain significant inequalities. For example, rates of hospitalization for asthma among those under 20 years declined by 50% over the period 2006–2007 to 2015–2016. However, asthma hospitalization rates for children living in the lowest income neighbourhoods are 1.5 times higher than among those living higher-income neighbourhoods (CIHI, 2018g). Similarly, while hospitalizations for COPD among adults aged 75 and younger have declined over time, the gap by income widened because the rate of hospitalization actually increased for lower-income Canadians over the period 2001–2012 (CIHI, 2015). These trends suggest the need for more targeted efforts to support disease management for more vulnerable populations.

Other indicators of quality in primary care relate to prescribing, such as of antibiotics and other potentially inappropriate medications such as benzodiazepines. By these measures, Canada fares above average compared with OECD countries, with fewer long-acting benzodiazepines prescribed than most OECD countries with available data. In 2017, there were 14.6 prescriptions for benzodiazepines per 1 000 persons age 65 and older dispensed in Canada compared with 30.8 in Sweden and the OECD average of 34 prescriptions per 1 000 persons). Prescription use varies across the country, with the lowest rates of benzodiazepines in Saskatchewan (6.2 prescriptions per 1 000 persons), Ontario (8 prescriptions per 1 000 population), and British Columbia (7.2 prescriptions per 1 000 persons) compared with 35.8 in Alberta and 65.8 in New Brunswick (CIHI, 2019k). Quality of prescribing has been an area of increased federal and provincial policy attention. For example, the federally funded Deprescribing Network provides guidelines and supports for clinicians to reduce potentially inappropriate prescribing.

FIG. 7.2 Avoidable hospital admission rates for asthma, COPD, congestive heart failure, hypertension, and diabetes-related complications, 2017 or latest available



Source: OECD (2019)

Quality of hospital care in Canada has improved over the past 10 years as evidenced by declining in-hospital mortality rates. However, mortality rates for stroke and AMI are higher in Canada than in several comparable countries (Fig. 7.3).

Cancer survival rates also provide an indication of the quality of care, and here Canada fares quite well. As shown in Figure 7.4, 5-year survival rates have improved slightly over the period 2000–2004 to 2010–2014 for breast, colon and childhood leukaemia and Canada outperforms most other comparator countries especially in the case of colon cancer and leukaemia. Survival rates appear to vary across the country, with breast cancer survival rates ranging from a low of 84% in Newfoundland and Labrador to 90% in Alberta; and colon cancer from 60% in Prince Edward Island to 68% in Ontario (CIHI, 2019k).

FIG. 7.3 In-hospital mortality rates (deaths within 30 days of admission) for admissions following acute myocardial infarction, haemorrhagic stroke and ischaemic stroke, Canada and selected countries

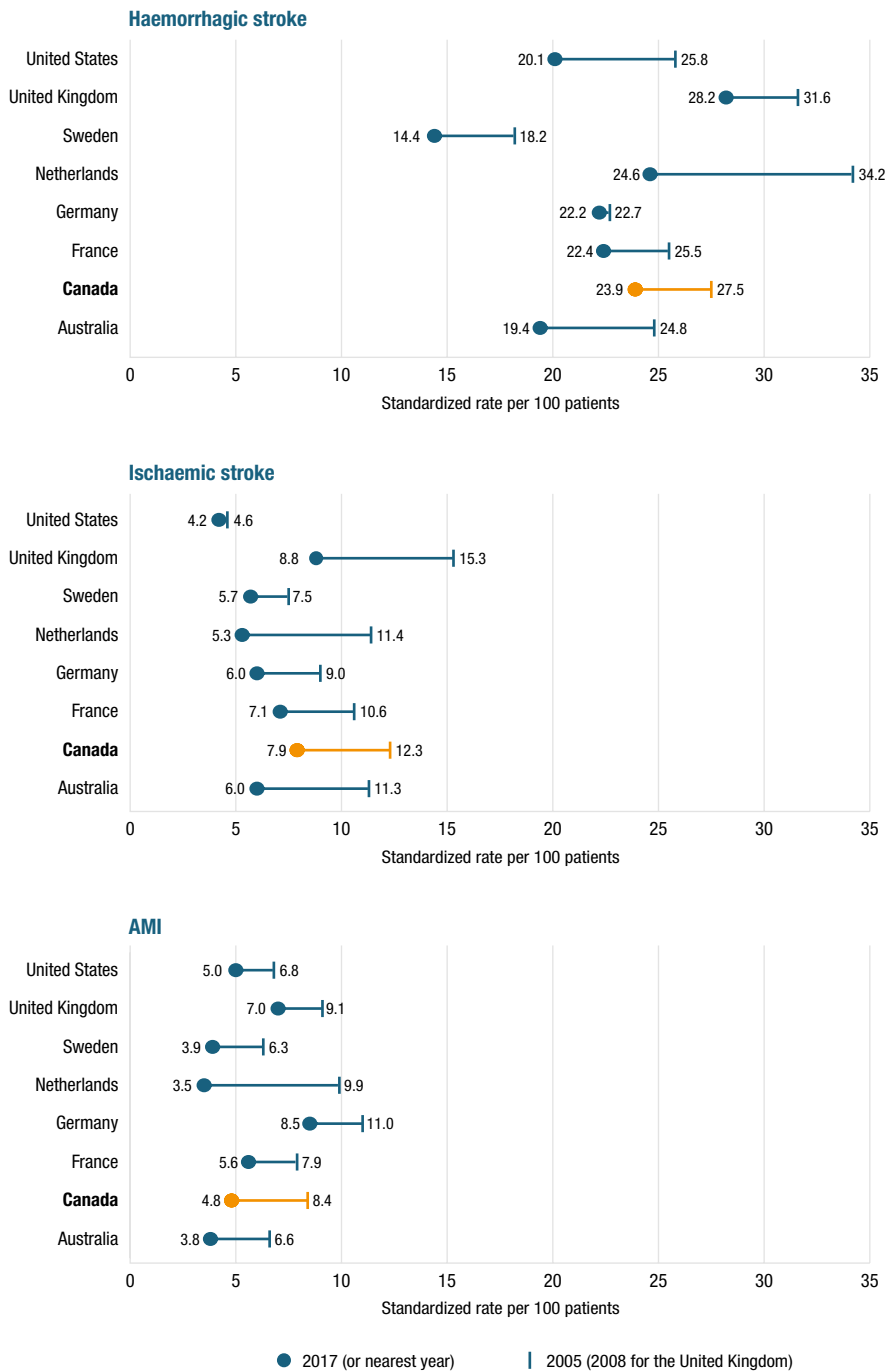
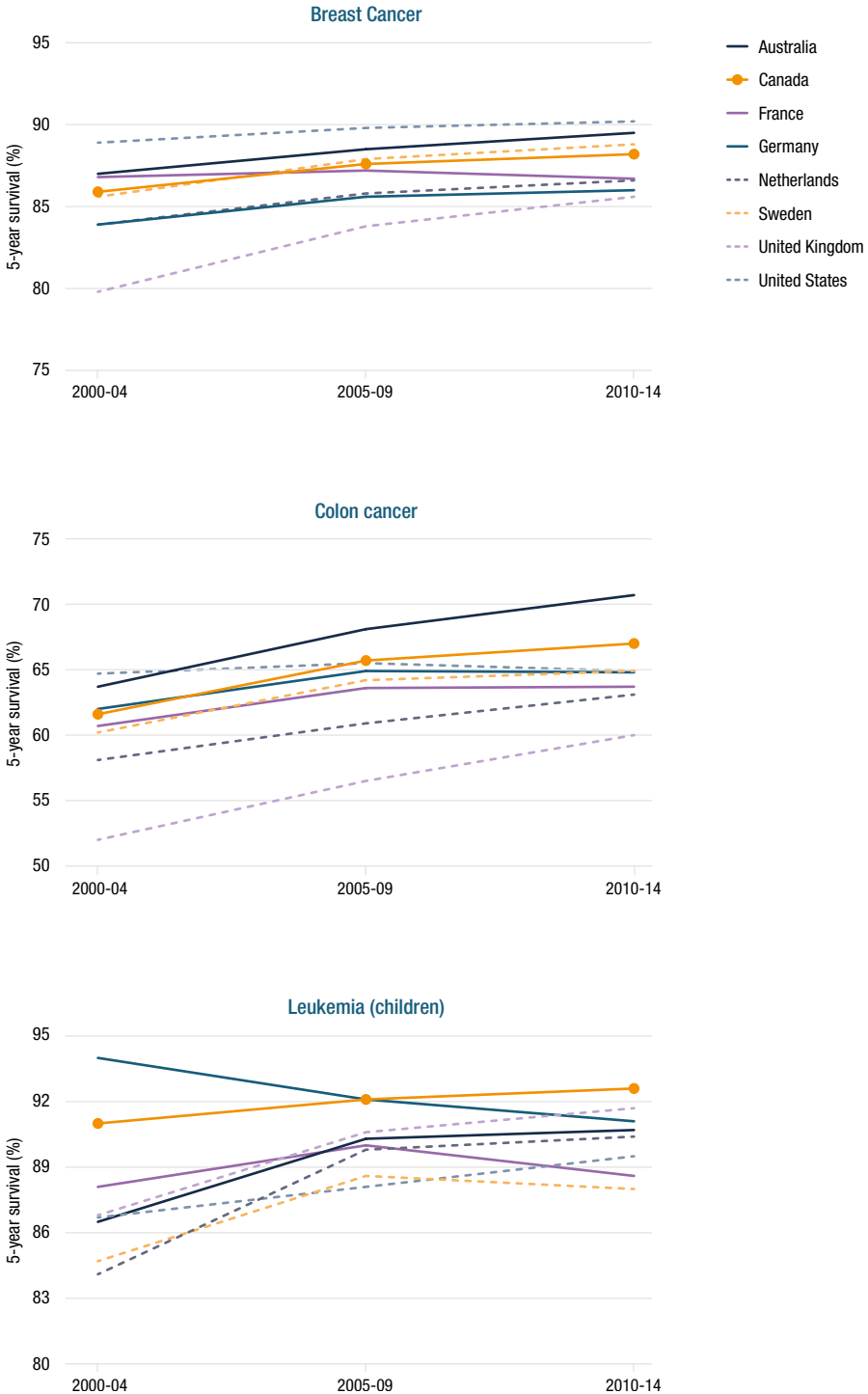


FIG. 7.4 Cancer survival rates for breast cancer (among women), colon cancer, and leukaemia (among children)



Source: Allemani et al. (2018)

Efforts to measure, monitor and improve quality of care are primarily the responsibility of provinces and territories, with some exceptions. For example, the federal government enacted new legislation in 2014 – Vanessa’s Law – to strengthen drug safety, including mandating the reporting of serious adverse drug reactions and medical device incidents (effective December 2019), following the death of a 15-year-old from a prescription drug in 2000. There are limited comparable data on medical errors and patient harm in Canada; though most provinces require hospitals to report on incidents of harm, this is not done in a comparable way across the country. One of the few attempts to measure harm in hospitals found that 5.3% of hospitalizations were associated with at least one occurrence of harm in 2018–2019; this rate had been stable since 2014–2015 (CIHI, 2019l). Harmful events in Canada appear to be high relative to other countries, with Canada performing below the international average in four out of five indicators of patient safety included in the OECD Health Care Quality Indicators project that Canada reports on: foreign body left in during procedure, postoperative pulmonary embolism after both hip and knee replacements, and obstetric trauma (CIHI, 2019k).

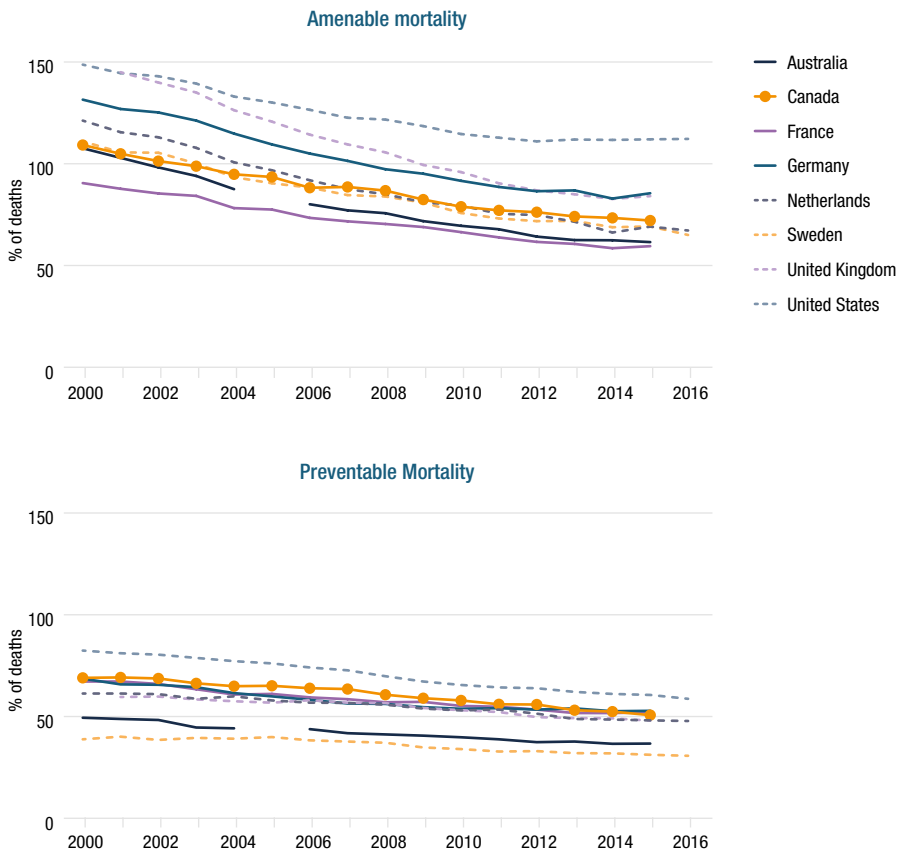
■ 7.5 Health system outcomes

Since the trends in health status have already been summarized in section 1.4, this section will focus on improvements in population health that can be attributed to the health system. One commonly used indicator of health system outcome is avoidable mortality. Avoidable mortality is an aggregate of all causes of premature death (i.e. deaths before age 75) death that experts agree should not occur if individuals had access to timely and effective health care (these causes of death are considered to be “amenable”) or if individual had access to effective public health interventions such as vaccinations (these causes of death are considered to be “preventable”) (Nolte & McKee, 2004). Some examples of causes of death that are classified as amenable include asthma, hernia, childbirth, selected cancers and 50% of all deaths from ischaemic heart disease.* Some examples of causes of death that are classified

* Some premature causes of death are considered to be both amenable (or treatable), and preventable (i.e. through public health interventions such as screening or dietary changes). Ischaemic heart disease, and diabetes mellitus are examples of causes of death that experts have suggested should be divided, equally, between amenable and preventable mortality calculations.

as preventable include some cancers (e.g. skin, lung), transport accidents, COPD, alcohol and drug-use disorders, and 50% of deaths from ischaemic heart disease. By isolating where death could be avoided and the condition in question treated (at least until a certain age), avoidable mortality seeks to capture the extent to which the health system has, or has not, been effective at avoiding premature death (Nolte & McKee, 2004; 2008).

FIG. 7.5 Amenable and preventable mortality in Canada and selected countries, 2000–2016



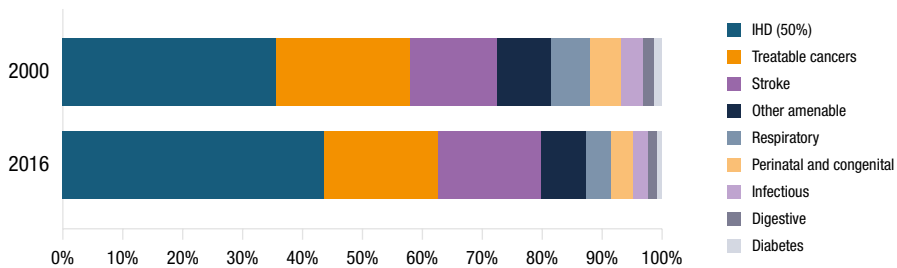
Note: Age-standardized death rates for all persons; calculated by European Observatory for Health Systems and Policies. Amenable causes as per list by Nolte and McKee (2004)

Sources: WHO (2019a)

Canada's amenable mortality rate was in the mid-range of the comparison countries – while not as low as in France, Sweden and Australia, Canada's rate was better than Germany, the UK and the USA (Fig. 7.5). Over the

period 2000–2016 the proportion of amenable deaths from ischaemic heart disease, stroke and treatable cancers has declined, and deaths from respiratory, perinatal, congenital, and infectious causes of death have increased (Fig. 7.6). In terms of causes of death that are considered to be preventable Canada’s performance is about average compared with other countries.

FIG. 7.6 Causes of amenable deaths in Canada, 2000 and 2016



IHD: ischaemic heart disease

Note: Age-standardized death rates for all persons; calculated by European Observatory for Health Systems and Policies. Amenable causes as per list by Nolte and McKee (2004)

Sources: WHO (2019a)

The long-term trends in amenable and preventable deaths (collectively these make up the metric of avoidable mortality) show that the rate of improvement in Canada has been slower for some causes of death compared with other countries, in particular ischaemic heart disease and deaths due to external causes, along with cancers in women (CIHI, 2016b). There are also geographical and socioeconomic inequalities. Avoidable mortality varies widely across the country from a low of 185 deaths per 100 000 population (age-standardized) in British Columbia, to 246 in Newfoundland and Labrador (CIHI, 2019e). A recent study in Ontario found avoidable mortality declined significantly over the period 1993 to 2014 but there were persistent inequalities by neighbourhood deprivation with higher rates of avoidable mortality in the more materially deprived neighbourhoods than in the less deprived neighbourhoods (Zygmunt et al., 2020). An earlier study found that in the 25 years following the introduction of universal medical care coverage in Canada the gap in amenable mortality between poor and rich declined, but there was little change in inequality in preventable mortality over the same period. This finding underscores the unrealized potential of public health policies, programmes and interventions (James et al., 2007).

This argument also applies to the social determinants of health. Despite the achievements made by Canadians in the early conceptualization on the importance of population health factors, it appears that the country's track record on the ground has been poor. Bryant et al. (2011) argued that ground has been ceded in the following five areas since the 1980s: redistributive impact of tax and transfer policies; family and child poverty; housing policy; early childhood education and care; and urban and metropolitan health planning and policy.

■ 7.5.1 *Equity of outcomes*

As in other OECD countries, there is a robust relationship between socio-economic status (SES) and health outcomes – the lower SES the poorer are health outcomes. The hard policy question is the extent to which existing and proposed health system interventions and services will improve health outcomes.

There is some evidence that suggests health inequalities have persisted in Canada since the early 2000s. For example, inequalities in many health indicators have remained largely unchanged, but for at least three indicators, smoking, hospitalization for COPD and self-rated mental health, the gap between the highest and lowest income groups have widened over the decade 2002–2012 (CIHI, 2015). More recently, a comparison of inequality in avoidable mortality in England and Ontario showed the income gap in avoidable mortality increased slightly in Ontario while it declined in England over the period 2004/05 to 2011/12 (Cookson et al., 2017).

Some additional light has been shed on this question by various scholars who have analysed the results of the Joint Canada–US Survey of Health, 2002–2003. Both countries demonstrate a positive correlation between income and population health but in the lowest income quintile, Canadians are healthier than Americans. Similarly, at lower levels of education, Canadians are healthier than Americans, a result attributed at least in part to the policy of universal medicare (Lasser, Himmelstein & Woolhandler, 2006; Eng & Feeny, 2007; McGrail et al., 2009).

Certain population groups, for example Indigenous populations, have poorer health outcomes relative to the non-Indigenous population. In part

because of its fiduciary responsibilities for First Nations and Inuit, the federal government has funded and administered a large number of targeted population and public health programmes in an effort to narrow the gap in health disparities. In recent years, PT governments have also initiated targeted policies and programmes. Despite these many efforts, a significant health disparity gap remains (Frohlick, Ross & Richmond, 2006; Loppie Reading & Wien, 2009). The life expectancy gap between Indigenous and non-Indigenous Canadians is approximately 11 years for Inuit, 10 years for First Nations and 5 years for Métis peoples (Tjepkema, Bushnik & Bougie, 2019) (see also Chapter 1). Infant mortality rates are 3.9, 2.3 and 1.9 times higher in areas with a high concentration of Inuit, First Nations, and Métis peoples as compared with areas with low concentration of Indigenous peoples (PHAC, 2018b).

In the 2016 census, immigrants made up 21.9% of the Canadian population, and this percentage is forecast to be in excess of 25% by 2031. Immigrants in Canada tend, on average, to be healthier at least as measured by age-standardized mortality rates. This is known as the healthy immigrant effect, an effect that declines as their years in Canada increase (Ng, 2011) and that appears to be strongest among working-age populations rather than among children and youth (Vang et al., 2017). Important exceptions are diabetes (long-term immigrants only), early child development, and tuberculosis (risk varies by country of origin) (PHAC, 2018b). Immigrants are also much more likely to be working poor and have higher rates of food insecurity and living in housing below standards (PHAC, 2018b). In terms of access to health care services, the lack of language proficiency (in either English or French depending on province of residence) is a barrier, especially for immigrant women (Pottie et al., 2008). While there is evidence that factors other than language, such as lower income and sociocultural differences, also act as barriers in accessing health care services, there are fewer health access disparities between immigrants and non-immigrants in Canada compared with immigrants and non-immigrants in the USA (Asanin & Wilson, 2008; Siddiqi, Zuberi & Nguyen, 2009). Some exceptions to the healthy immigrant effect are women from the USA and sub-Saharan Africa (Ng, 2011).

There are other important gender differences in terms of health outcomes and health service patterns in Canada. In particular, there is some evidence that women, particularly older women, are less likely than men to

receive critical care that they need, and are more likely to die from critical illnesses (Fowler et al., 2007). In addition, older women are at increased risk of receiving inappropriate medications (CIHI, 2016c). These results cannot be generalized across all domains in part because gender-based analyses are not a routine part of health research including clinical trials despite CIHR's policy supporting gender-based analysis. More importantly, without further gender-based analyses, it is extremely difficult to understand the reasons for these gender-based differences in outcomes (Bierman, 2007). When we look at health outcomes, we see that the gap in mortality between men and women has narrowed over the past two decades, because the rate of decline in mortality has been faster for men than for women (Rosella et al., 2016). However, inequalities in mortality by neighbourhood income persisted both among women and men throughout this entire period (Rosella et al., 2016).

■ 7.6 Health system efficiency

■ 7.6.1 *Allocative efficiency*

Allocative efficiency stipulates that a health system distributes services in “accord with the value that individuals place on those goods and services” (Hurley, 2010, p.36). PT health systems are funded through general tax revenues thus offering governments considerable latitude in the allocation of expenditures among resource inputs and service sectors (see Chapter 3). Budgeting processes require that provincial government cabinets and their respective subcommittees – especially treasury board committees of cabinet – allocate among competing needs across a myriad of economic and social policy and programme demands. Since provincial governments ramped up health care spending after the years of restraint in the 1990s, it was argued by some that cabinet allocations to health care have crowded out other public needs (Boothe & Carson, 2003; MacKinnon, 2004). While one empirical test of this hypothesis concluded that this was not the case (Landon et al., 2006), provincial spending on health care has significantly outpaced that of social spending from 1981 and 2011 and a higher ratio of social to health spending appears to be significantly associated with increased life expectancy (Dutton et al., 2018).

Once ministries of health receive their budgets, they allocate among a number of health services and sectors based on the historic needs and demands of the sector as well as health policy and reform priorities as communicated by cabinet. In regionalized jurisdictions, the majority of ministry funding is distributed to geographically based health authorities based on a variety of methodologies, including population needs-based formulae, activity-based calculations, historically based budgeting and the government's immediate policy priorities.

■ 7.6.2 *Technical efficiency*

Technical efficiency indicates the extent to which a health system draws on the minimum levels of inputs for a given output or, the alternative, the maximum level of output based on a given set of inputs.

A recent pan-Canadian study used data envelopment analysis to measure the efficiency with which regional (i.e. subprovincial) health systems converted their resources (measured in spending, by sector) to produce health gains, as measured by potential years of life lost (PYLL) from treatable causes of death. This study found that PYLL could be increased by between 18–35% if they were operating more efficiently (CIHI, 2014; Allin et al., 2015). The main factors associated with efficiency scores related to system management, as indicated by rates of hospital readmissions and ALC days,* while other factors that were statistically significantly associated with the variations in efficiency scores across regions reflected the characteristics of the local population (e.g. smoking rates, average income).

Inefficiency, or waste, in the health system could relate to the use of harmful or unnecessary services, or the use of more costly goods or services when there are less costly (equally or more effective) options available. Both of these are persistent challenges in Canada. Patient harm and the use of unnecessary care was reviewed briefly in the previous section and suggest that there is potential waste in particular due to harms to patients that occur in hospital as well as overuse of antibiotics. In addition, a study by CIHI and Choosing Wisely Canada found that for eight of the 200

* Patients who no longer require the specialized services in hospital but are still occupying a bed are labelled “alternate level of care” (ALC) in Canada.

CWC recommendations, up to 30% of tests and treatments are potentially unnecessary (CIHI, 2017b).

There is also evidence of inappropriate use of institutional care in Canada. Estimates suggest that between 10 and 20% of hospital bed-days in Canada were designated ALC in 2017/18 (e.g. 12% in BC, 15% in Ontario, 18% in Alberta, 20% in Newfoundland and Labrador) (CIHI, 2019e); and these estimates have been persistent over the past decades, during a period of hospital spending growth in the 2000s and through the period of reduced spending growth following the financial crisis of 2008. Many of these patients are older people who are waiting for placement in a long-term facility, or to be discharged home with the needed home care and support services. There is also potential inefficiency arising from the overuse of LTC facilities for people who have low or moderate needs that could be met with home care. One recent study found that about 15% of older people in British Columbia living in LTC residential facility have low to moderate needs, compared with 23% in Ontario and 30% in Alberta (CIHI, 2017a).

Spending on pharmaceuticals in Canada is high relative to other countries. This may contribute to inefficiency if drugs are used inappropriately and if drug prices could be lowered without impacting health outcomes. Over the past decade there have been significant efforts by PT governments to reduce prices as part of the Pan-Canadian Pharmaceutical Alliance established in 2010 (the federal government only became a member of this Alliance in 2016) (see Chapter 5). Through this Alliance, the governments collectively negotiate lower prices. For example, they have reduced the price of the most commonly prescribed drugs to 10–18% of the brand name equivalent, and reduced the prices of about 200 brand name drugs through collective FPT negotiations with pharmaceutical companies. In spite of these efforts, Canada has remained the third highest spender on pharmaceuticals in the OECD behind the USA and Switzerland for the past two decades. Variations across Canada in spending on prescription drugs also suggest there is significant room for further reduction in spending; for example, the gap in total spending on prescription drugs between the bottom and top spending provinces was nearly twofold (\$ 658 (€ 440) per capita in British Columbia compared with \$ 1055 (€ 700) in Quebec in 2017).

Another potential driver of inefficiency relates to duplication of services and poorly coordinated care that may increase costs and compromise quality. In part this lack of integration across care providers relates to the separate

funding streams for different health sectors. These funding streams include: 1) provincial governments who pay physicians (still in large part based on fee-for-service); 2) delegated health authorities pay for long-term and community care; and 3) a mix of private insurers, individuals and government programmes pay for non-UHC services such as vision, dental, rehabilitative, mental health and addictions services. What is more, physicians continue to be independent, with few mechanisms for holding them accountable for the costs incurred by their patients in the system, the quality of the care they provide or the health outcomes of their patients (Marchildon & Sherar, 2018). In part, poor integration reflects the limited sharing and use of clinical information across providers and overall lack of province-wide interoperable EMRs.

8

Conclusions

Part and product of a highly decentralized federation, the Canadian health system is also highly decentralized. Setting and achieving pan-Canadian standards and objectives requires considerable intergovernmental and intra-provincial collaboration. The last two decades have produced a dense network of intergovernmental agencies. While collaboration has succeeded in some areas (e.g. providing universal health coverage), it has been less effective in other areas (e.g. more effective use of IT).

In Canada, public and private coverage for health services is highly segmented by health sector. Universal, first-dollar coverage is restricted to medically necessary hospital (including inpatient pharmaceuticals), diagnostic, physician and surgical-dental services. Other health goods and services, including prescription drugs outside of hospitals, rehabilitative care and long-term care, are subject to targeted coverage or subsidies that cover some of the gaps left by private health insurance and OOP payments. Where private funds are the major source of financing, such as dental care, there are high levels of inequity in utilization and health outcomes.

In recent years, there has been some movement to make outpatient pharmaceuticals part of UHC in Canada. The federal government's Advisory Council on the Implementation of National Pharmacare has recommended a design that is consistent with the current FPT arrangements for medicare. If accomplished, national Pharmacare would be the first major expansion to UHC in over half a century.

Historically, major shifts in policy direction may be easier to achieve in unitary states with centralized health systems, but decentralized systems may

offer more opportunities for experimentation, as well as a rich environment for evaluating natural experiments. This is the potential offered by the varying innovations, experiments and reforms in the 13 PT health systems in Canada, a potential that could be more fully exploited in future years through careful evaluation of results and rigorous comparison.

While there has been a discernible movement to greater patient empowerment and patient-reported measures of health system performance in Canada in recent years, these remain relatively underdeveloped compared with similar movements in most other OECD countries. This is despite the fact that Canadians have a relatively poor view of at least some dimensions of their system, including timeliness and patient responsiveness. Such low satisfaction poses a challenge to Canadian governments that have devoted considerable resources on improving the timeliness, quality and safety of health care. Wait times, particularly for elective surgical procedures, remain long relative to comparable high-income countries.

As for health expenditure, Canada is almost identical to other OECD countries in terms of its recent experience, although the precise sources of cost pressures may vary. One of the most important cost drivers is health sector inflation, due mainly to recent increases in prices, including provider remuneration and the price of pharmaceuticals. At the same time, the trend in the growth rate of health costs in the decade since 2008 is lower than the inflationary period of 1998–2007.

The results of setting health reform priorities through FPT agreements have been mixed. In recent years, the federal government has attempted to use bilateral agreements with the provinces and territories to encourage innovative investments in home care and mental health care along with an agreement on the indicators used to determine progress. CIHI has worked closely with the FPT governments to develop and publicly report on these performance indicators, thus there is some accountability to the public even if the agreements themselves are not transparent. It remains too early to evaluate the success of this approach.

At the PT level, governments have been preoccupied with restructuring the governance of their systems. A number of jurisdictions have abandoned regional health authorities in favour of single, delegated health agencies. Other jurisdictions have reduced the number of regional bodies. Through more centralized administrations, these provincial and territorial governments are attempting to generate greater economies of scale and scope and more

coordinated care for their respective populations. There is no hard evidence yet that these changes are producing the desired results.

Indigenous peoples continue to face persistent health disparities relative to the majority of Canadians. Recently, PT governments as well as Indigenous governments have made a number of changes in governance and service arrangements in order to improve health care and reduce health disparities, including the establishment of a First Nations Health Authority in British Columbia. The federal government has moved its Indigenous health funding and services to a new department called Indigenous Services Canada.

Overall, health outcomes have improved in recent years, although the rate of improvement in amenable mortality has been slower in Canada than some other comparable high-income countries such as Australia. There remains considerable room for improvement in the effective use of information and communications technology, including electronic health records, the appropriate utilization of prescription drugs, the price regulation of pharmaceuticals overall, and the coordination of care across health and social sectors. Finally, the COVID-19 pandemic of 2020 has changed the health system in at least three ways: 1) a shift in political and public focus from Pharmacare to LTC reform; 2) the high cost of pandemic measures that have significantly increased FPT governments' deficits that will give them little fiscal room for new health investments; and 3) increased attention to the need to shore up and improve public health infrastructure across Canada and to improve FPT collaboration and data-sharing.

Appendices

9.1 References

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9.2 Useful websites

Canadian Association for Health Services and Policy Research	http://cahspr.ca/
Canadian Dental Association	http://www.cda-adc.ca/en/
Canadian Institute for Health Information	https://www.cihi.ca/en
Canadian Institutes of Health Research	https://cihr-irsc.gc.ca/e/193.html
Canadian Medical Association	https://www.cma.ca/
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Public Health Agency of Canada	https://www.canada.ca/en/public-health.html
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Royal College of Physicians and Surgeons	http://www.royalcollege.ca/rcsite/home-e
Statistics Canada	https://www.statcan.gc.ca/

■ 9.3 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The latest version of the template (2019) is available on the Observatory website http://www.euro.who.int/_data/assets/pdf_file/0009/393498/hit-template-eng.pdf?ua=1

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in All policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard Health for All data have been officially approved by national governments.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. **Introduction:** outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.
2. **Organization and governance:** provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights and cross-border health care.
3. **Financing:** provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers and health workers are paid.
4. **Physical and human resources:** deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. **Provision of services:** concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care and dental care.
6. **Principal health reforms:** reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. **Assessment of the health system:** provides an assessment of systems for monitoring health system performance, the impact of the health system on population health, access to health services, financial protection, health system efficiency, health care quality and safety, and transparency and accountability.
8. **Conclusions:** identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. **Appendices:** includes references and useful websites.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process.
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches).

The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

■ 9.4 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

■ 9.5 About the authors

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