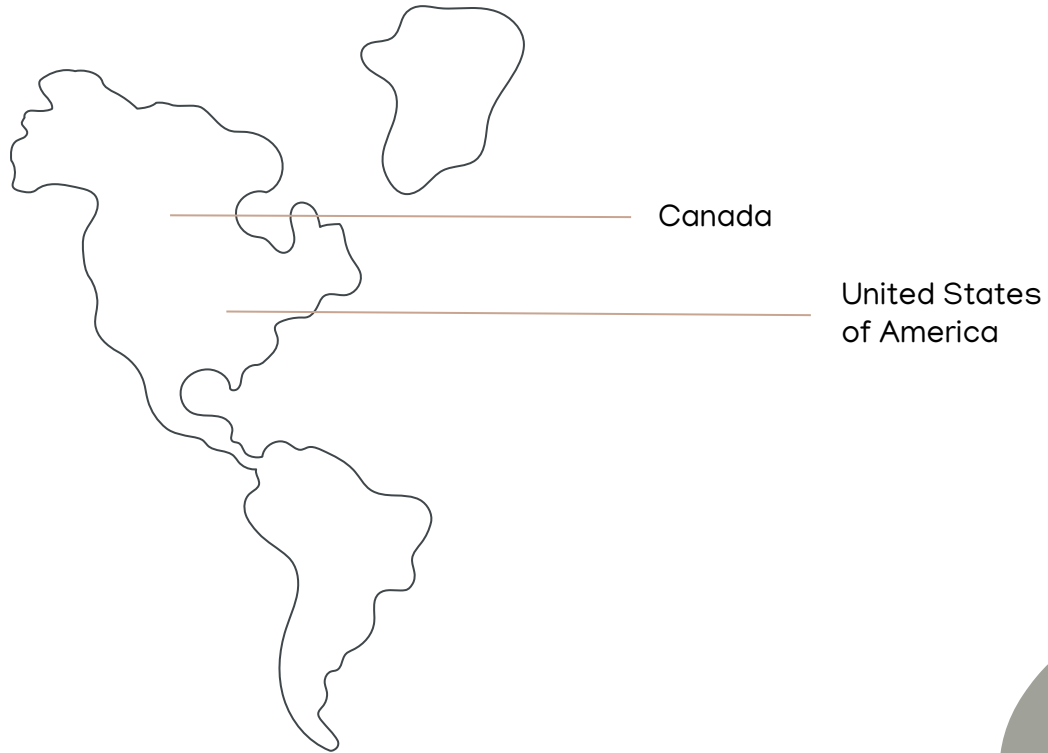


Comparative Health Systems: Canadian v. American Healthcare

Shelby Roal
Abby Juillerat
Audrey Strange
Kathleen Wheeler

So Close, yet so Far



Population and Demographics

America

- Population: 335, 472, 554
- Ethnicity: White 75.8%, African American 13.6%, American Indian 1.3%, Asian 6.1%, Hispanic or Latino 18.9%
- Religion: 46.5% of the residents identify as Protestant Christians. The other religions that make up society within the US are as follows: Unaffiliated (22.8%) Catholic (20.8%)
- Language: English, Spanish, Chinese, French, and Vietnamese

Canada

- Population: 37, 742, 154
- Ethnicity: 32.3% of Canadians considered their ethnic origin to be Canadian. Other major groups recorded were English (18.3%), Scottish (13.9%), French (13.6%), Irish (13.4%), German (9.6%) and Chinese (5.1%).
- Religion: Mostly Christian and Catholic, but there are multiple other religions practiced
- Language: English and French

Population and Demographics

America

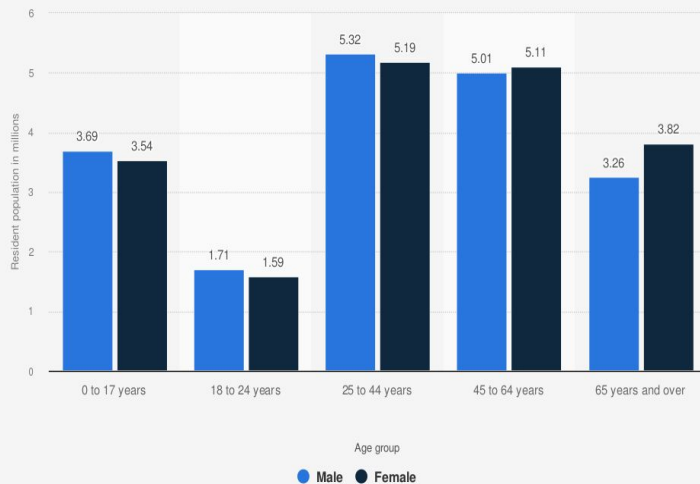
- Literacy: 79%
- Poverty: 11.6%
- Employment: 59.2%
- Government: Democracy

Canada

- Literacy: 99.0%
- Poverty: 11.0%
- Employment: 61.30%
- Government: Constitutional Monarchy and a Parliamentary Democracy



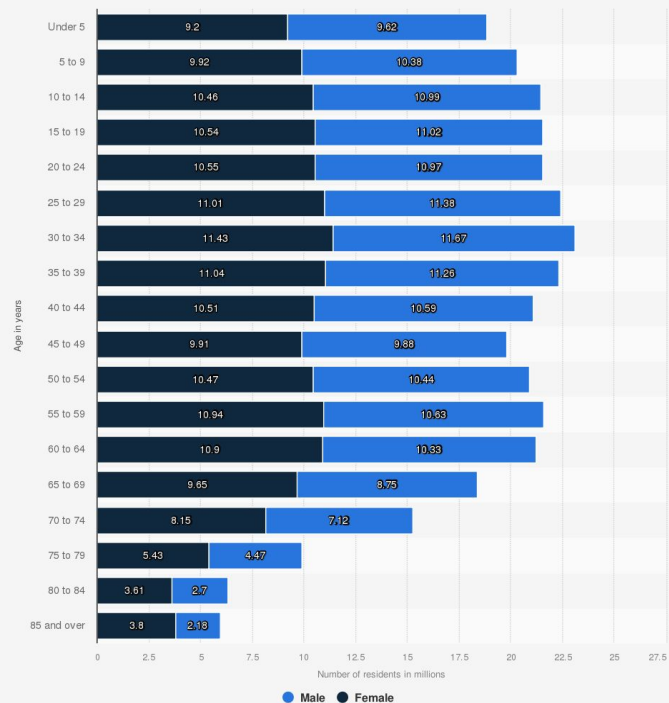
Resident population of Canada in 2021, by gender and age group (in millions)



Source:
StatCan
© Statista 2021

Additional Information:
Canada; July 1, 2021

Resident population of the United States by sex and age as of July 1, 2021 (in millions)



Source:
US Census Bureau
© Statista 2022

Additional Information:
United States; As of July 1, 2021

Canadian Healthcare History

- 1867 – Constitution Act of 1867
Healthcare was privately funded and delivered by the different provinces
- 1947 – first provincial hospital care system in Saskatchewan
- 1957 – Hospital Insurance and Diagnostic Services Act (HIDS) addressed healthcare costs in the country
- 1960 – Canadian Medical Association protested public health coverage alongside many other providers and healthcare employees
- 1962 – providers struck against the government-controlled insurance plan for about 3 weeks

Canadian Healthcare History

- 1966 – Medicare was passed meaning that healthcare was funded and provided by the different provinces
 - Citizens receive necessary care for “free”
 - Excluded services – dental care and some drugs
- 1984 – Canada Health Act set requirements for healthcare
 - Addressed extra billing and user fees
- 2003 – Accord on Health Care Renewal
 - Addressed key issues in Canadian healthcare (drug costs, diagnostic services, timeliness, etc.)
- 2007 – Patient Wait Times Guarantee
 - Offered alternate options to patients who could not wait for services to be provided

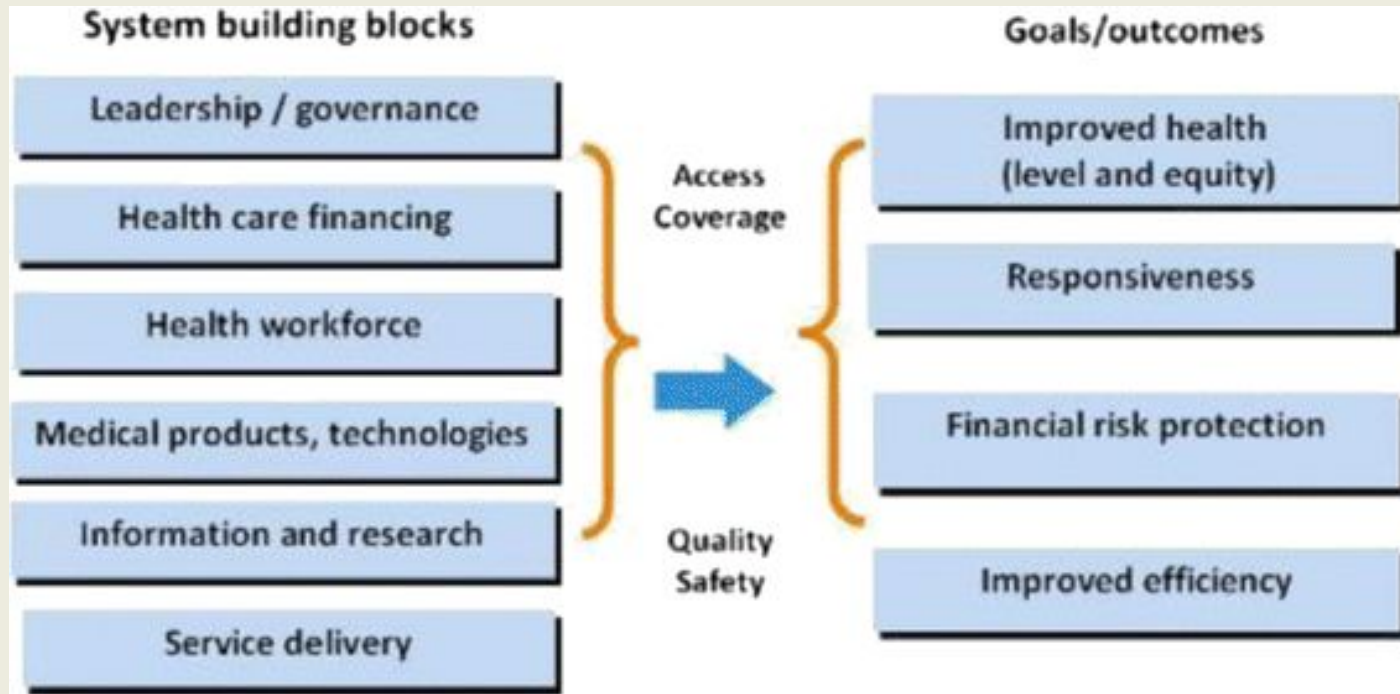
American Healthcare History

- 1912 – Teddy Roosevelt endorse social insurance as part of his platform & the NCIC developed the first model of state law to regulate health insurance
- 1929 – Baylor Hospital introduced a pre-paid hospital plan
- 1929–39 – The Great Depression
- 1934 – FDR creates a committee to help medical care and insurance as well as secure employment and retirement after The Great Depression
- 1935 – Social Security Act passed by Congress
- 1939 – Physicians begin organizing the first Blue Shield plans to cover costs of care and the Department of Health and Human Services is born
- 1943 – Wagner–Murray–Dingell bill introduced which would move the SS system to a “cradle to grave” sort of insurance

American Healthcare History

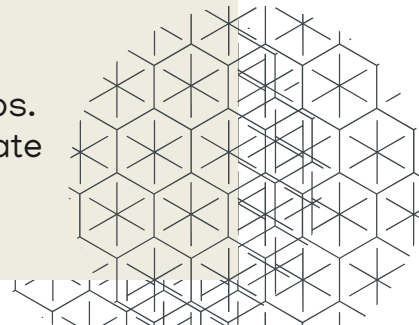
- 1948 – AMA launches campaign against national health insurance proposals
- 1956 – Military "medicare" program enacted
Provided government health insurance for dependents of those in the Armed Forces
- 1957 – First year that the National Health Interview Survey was conducted
- 1965 – Medicare and Medicaid programs are signed into law
- 1970s – First looks at a single-payer system in healthcare
- 1990s – Health Security Act
President Clinton made national health reform a priority in his presidency
- 1996 – Health Insurance Portability and Accountability Act (HIPAA)
- 2010 – Affordable Care Act passed
- 2022 – Inflation reduction act

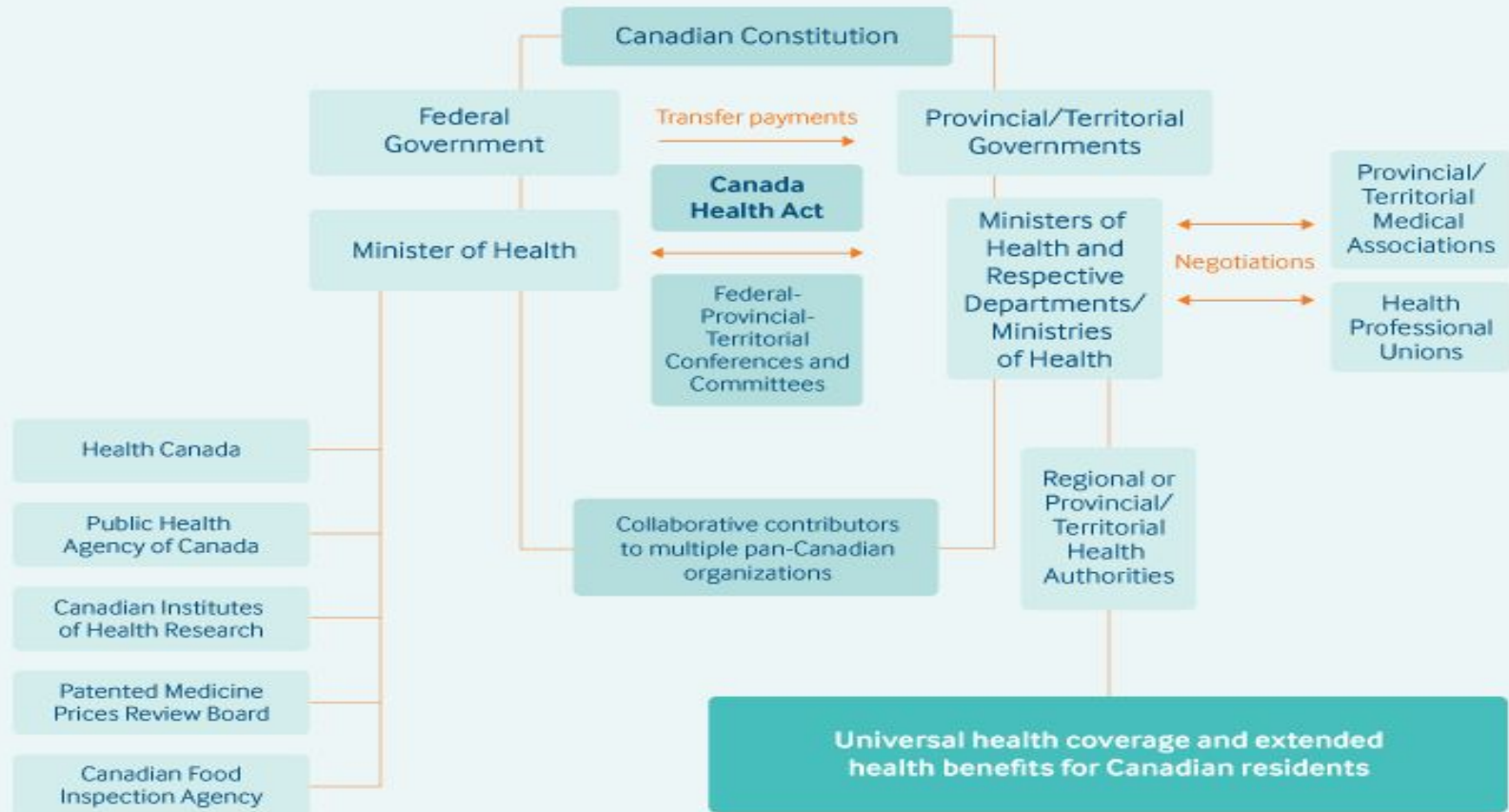
The Building Blocks of Healthcare



Canada's Leadership and Governance

- Canada is a constitutional monarchy and a parliamentary democracy, founded on the rule of law and respect for rights and freedoms. The government acts in the name of the Crown but derives its authority from the Canadian people.
- Canada has a decentralized, universal, publicly funded health system called Canadian Medicare. Health care is funded and administered primarily by the country's 13 provinces and territories. All citizens and permanent residents, however, receive medically necessary hospital and physician services free at the point of use. To pay for excluded services, including outpatient prescription drugs and dental care, provinces and territories provide some coverage for targeted groups. In addition, about two-thirds of Canadians have private insurance.



ORGANIZATION OF THE HEALTH SYSTEM IN CANADA

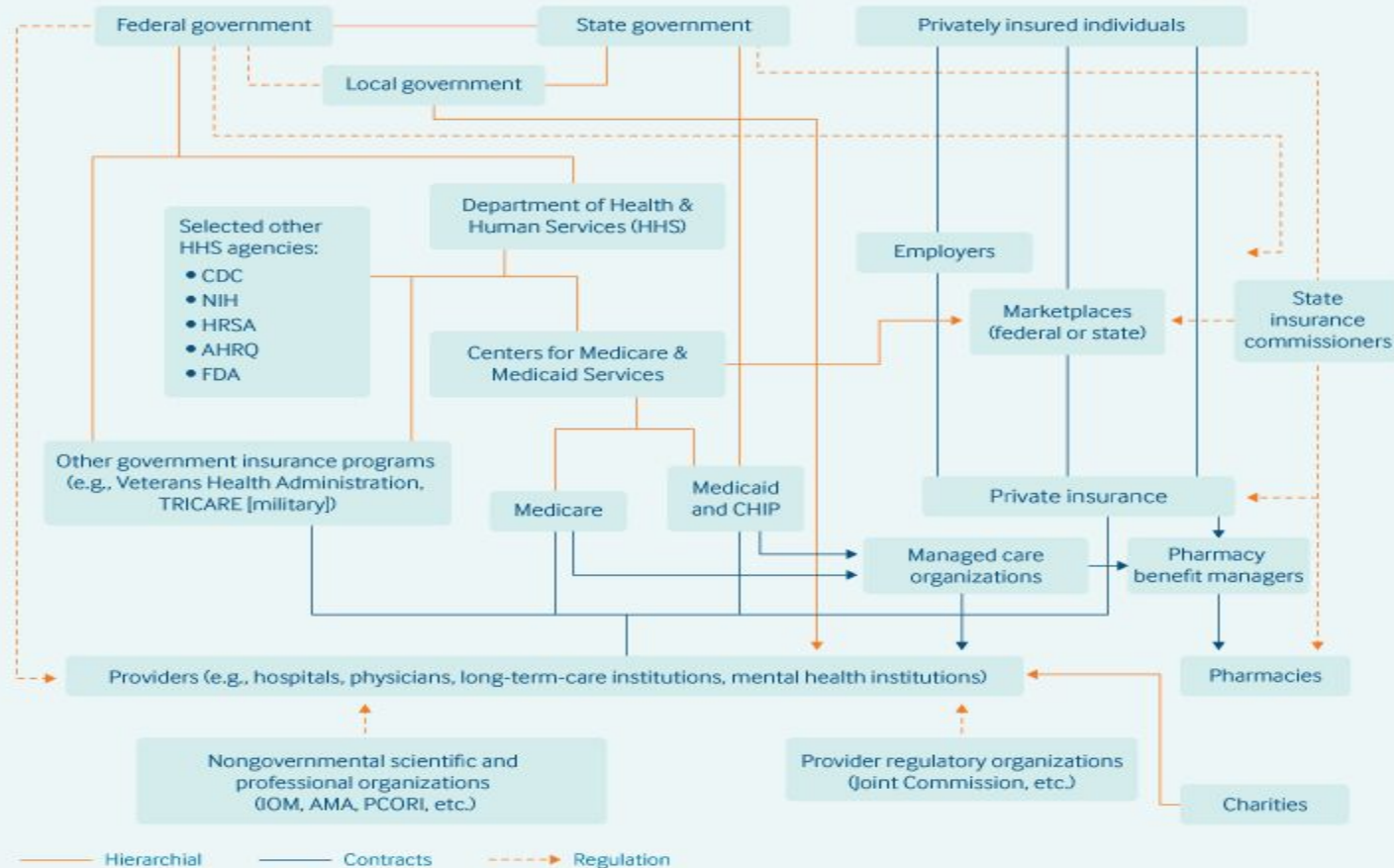
America's Leadership and Governance

- The United States federal government is divided into three branches: the executive, legislative, and judicial whose powers are vested by the U.S Constitution in the Congress, the President and the federal courts.
- America has both privately and publicly insured healthcare financing. Healthcare policies in the United States are dictated by the federal, state, and local governments. This all contributes to the incredibly complicated American healthcare system.
- America has an ever-changing healthcare system. Because of the nature of the government, each administration brings its own goals and priorities to guide the healthcare system.

ORGANIZATION OF THE HEALTH SYSTEM IN THE UNITED STATES

Public Financing

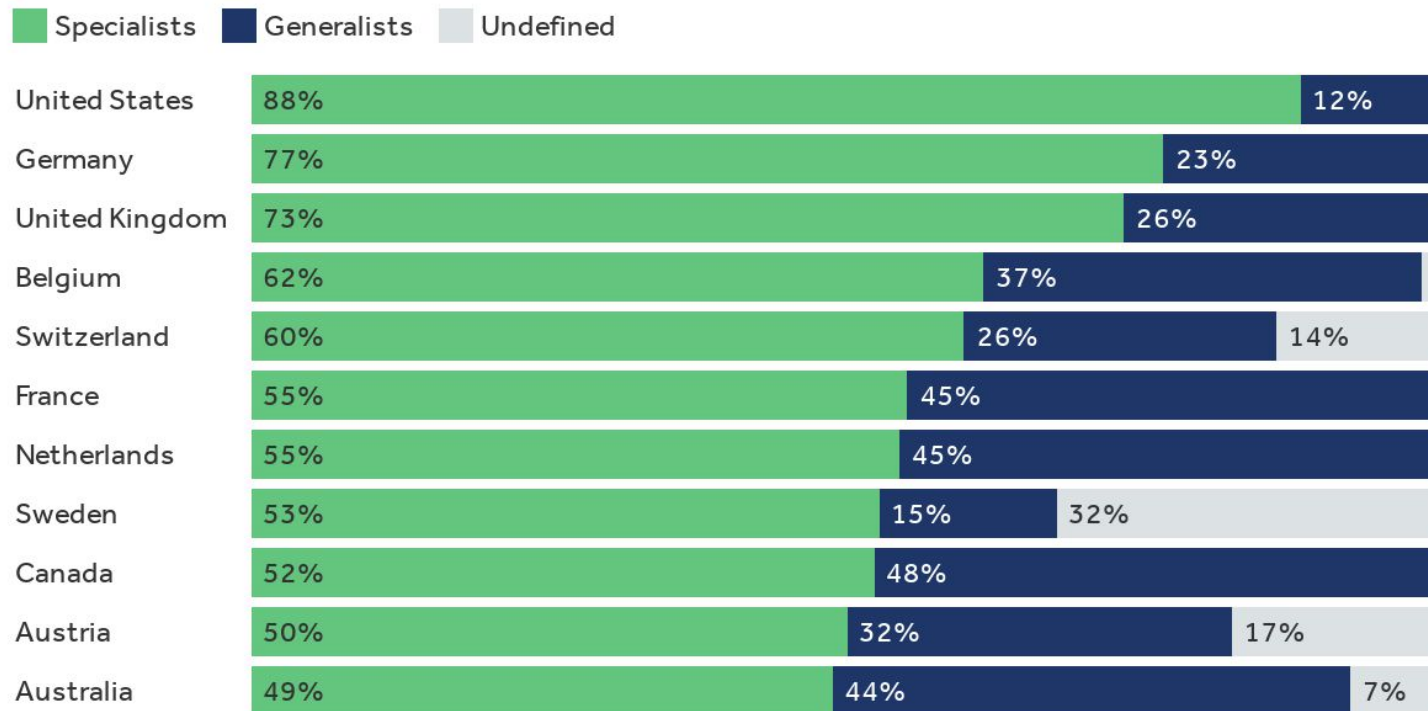
Private Financing



Canada's Health Care Workforce

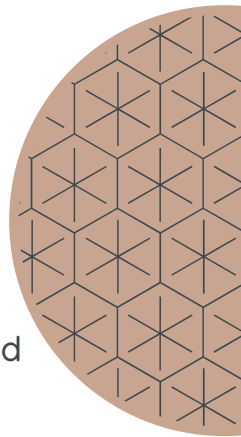
- Practicing in 2020...
 - 304,558 registered nurses
 - 92,137 physicians and rising
 - 44,094 pharmacists and rising
- About 95% of dental assistants, dental hygienists, dietitians, midwives and genetic counsellors are female and about 30% are under 30 years of age
- COVID-19 worsened Canada's shortage of workers
- All consumers are provided with necessary care from Medicare, but must pay privately for specialists (i.e., dental, vision, prescription costs, etc.)
 - The Canadian government program pays for about 70% of total healthcare
- Hospitals are owned by government and have certain rules and regulations to follow, yet still, Canada chooses to focus the most on patients rather than regulations.
 - If these strict regulations continue to grow, less people will be willing to practice in the healthcare system.
- Most lengthy wait times are for specialists, not general, necessary care
- Burnout and low wages have pushed many healthcare workers away from Canada, especially nurses, which are arguably the most important. Shortages have only gotten worse in the past couple of years making burn out an even larger problem.
- General occupations tend to make less money than specialized occupations

Share of practicing physicians that are specialists and generalists, 2018



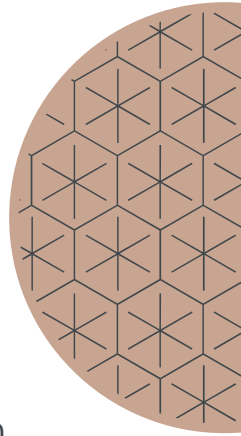
America's Health Care Workforce

- Practicing Providers as of August 2022
 - Internal Medicine: 204,548
 - Family Medicine: 144,949
 - Pediatrics: 90,946
 - Obstetrics & Gynecology: 55,467
 - Geriatrics: 1,438
 - Total Primary Care: 497,348
- Its predicted that the continuing demand of physicians will not be satisfied by the supply causing a shortage between 46,000 to 121,000 by 2032
 - This shortage will be caused by the growth in supply of PAs and APRNs
- The rapid growth of the population and aging are another key factor in shortages and the rise in demand for healthcare providers. The under 18 age group is expected to grow by 3.5% while the 65 and over population is projected to grow by 48%



America's Health Care Workforce

- Specialty Areas:
 - Psychiatry: 56,536
 - Surgery: 54,636
 - Anesthesiology: 51,520
 - Emergency Medicine: 59,317
 - Radiology: 48,639
 - Cardiology: 33,146
 - Oncology: 21,035
 - Endocrinology, Diabetes, and Metabolism: 8,430
 - All Other Specialties: 237,417
- The US historically had disproportionate numbers of specialist physicians in comparison to primary care physicians
 - “Between 1965 and 1992 the 65% increase in physicians was almost entirely in specialist areas” (*Rice T, Rosenau P, Unruh LY, Barnes AJ, van Ginneken E*)
- Thus growth has since slowed; however, there has not been a significant increase in primary care physicians either.
- The workforce of physicians in 2015 was made up of 37% general primary care physicians, 11% primary care subspecialists, and 52% non–primary care specialists.



Canada

INSURANCE COVERAGE (% OF POPULATION)

0%

50%

100%

Public coverage: 100%

Universal, automatic coverage through Medicare, funded and administered primarily by provinces and territories

Private complementary coverage: 67%

Mostly employment-sponsored group policies for vision, dental, prescription drugs, allied professionals, private rooms in hospitals



America

INSURANCE COVERAGE (% OF POPULATION)

0%

50%

100%

Any private or public insurance: 91.5%

Public (Medicare, Medicaid, CHIP, military): 34%

Private (employer plans, direct purchase): 67%

**Uninsured
8.5%**

Multiple sources of coverage: 15% of insured

Source: Current Population Survey, 2018 Annual Social and Economic Supplement Bridge File and 2019 Annual Social and Economic Supplement, as published by the U.S. Census Bureau, Current Population Reports, Issued Nov. 2019.

Canadian v. American Financing

Canada

- In 2022 Canada expects to amass \$331 billion in health spending.
- This anticipated spending would represent about 12.2% of the GDP in Canada.
- Hospitals, physicians, and drugs account for more than half of the spending.
 - Hospitals: 24.3%, about \$2,084 per person
 - Physicians: 13.6%, about \$1,164 per person
 - Drugs: 13.6%, about \$1,163 per person
- In 2022, 4.4% of total health spending in Canada was in relation to COVID-19.
- Each province has its own insurance plan and receives monetary assistance from the federal government on a per capita (population size) basis.

America

- The total health care expenditure is \$3,207 billion
- Most of the American health expenditure is spent on hospital care, physician and clinical care, and prescription drugs. Other minor areas include dental services, nursing homes, and home health services
- Healthcare expenditures account for 19.7% of the United States Gross Domestic Product (GDP)
- The per capita health spending was \$11,945 in 2020, which was over \$4,000 more than any other high-income nation

Canadian v. American Financing

Canada

- Canadian Medicare is funded by public taxes and the extra private insurances are covered by employers and out-of-pocket spending.
 - 24% from Canada Health Transfer
- It's predicted that 28% of Health Spending will be paid by the Private sector and the other 72% by the Public
- The private sector can be split into two main sections out of pocket (14.3%), private insurance (11.4%)
- Physicians cannot charge above predetermined fees (chargemaster)
- Outpatient drug plans help cover costs
 - Usually for vulnerable groups
- After spending 3+% of income or CAD 2,288, consumers have 15% tax credit for healthcare expenses

America

- The American healthcare system is funded mostly by federal taxes. These funds are used to provide Medicare, Medicaid, CHIP, and military health insurance programs
- Among the entities responsible for financing the health care bill, the federal government and households each accounted 28% of health care spending (the largest shares) followed by private businesses (20%), state and local governments (17%), and other private revenues (7%) in 2018.
- The United States does not have a single payer system or universal coverage

Canadian v. American Financing

Canada

- 24-hour telephone service for healthcare advice from an RN
- In public LTCs, provinces pay for extra commodities for vulnerable populations.
- Publicly financed services: hospital care, necessary physician, and inpatient drugs
- Privately financed services: vision/dental care, outpatient prescription drugs, rehab, mental health, hospice, and private rooms
- Public service options are determined by each province and medical providers
- Most providers are paid with fee-for-service agreement
- Fee schedules are negotiated with medical associations
- Most hospitals are not-for-profit
- Staff can either be on salary or bill directly to province

America

- Private insurance: Benefits in private health plans vary based on provider
- Public Insurance
 - Medicare Part A covers inpatient care which includes hospice and short-term skilled nursing facility care.
 - Medicare Part B covers physician services, durable medical equipment, and home health services
 - Medicaid covers inpatient and outpatient hospital services, long-term care, laboratory and diagnostic services, family planning, nurse midwives, freestanding birth centers, and transportation to medical appointments.
- Healthcare providers are paid through insurance reimbursement for services.

Canadian v. American Medical Products, Vaccines and Technology

Canadian

- As of 2021, total health expenditure in Canada is 308 billion.
- Patients are provided pharmaceuticals at no cost under the Canada Health Act.
- Canada imports most of their medical devices from other countries
 - 32% - US
 - 20% - China
 - 9% - Mexico
 - 4% - Germany
- Covid caused a big impact in the market by increasing the demand for technology to help in the treatment and diagnosis of COVID-19
- Market breakdown: respiratory (22.3%), surgical (19.4%), diagnostic (18.1%), spinal (11.7%), diabetes monitors (6.3%)

American

- The pharmaceutical expenditure in 2020 was 348.4 billion dollars
- The pharmaceutical companies have the ability to determine their own prices. They determine the cost of a drug by measuring the cost of production and adding a percentage on top to produce a profit.
- Alex Evans explained the price discrepancy when he said, "Lack of price regulation, price negotiations at every stage, complex reimbursement systems, and numerous methods of payment, like cash, insurance, discount cards, and reduced-cost drug lists" — all of these factors play major roles in drug pricing variability

Canadian v. American Health Information System

Canadian

- Exceptional and growing medical device industry
- Obtain a lot of devices from imports
- Current increase in demand for medical technology due to aging population and chronic disease prevalence
- Most technology and financing is allocated towards hospitals and larger provinces like Ontario and Quebec
- Large growing telehealth industry
- Focus on efficiency
 - Ex: administrative centralization and agency consolidation
- Using video language apps to reduce language barriers
- Increasing use of telehealth and public health initiatives

American

- Medical technology saves lives, improves patient outcomes and helps lower the overall cost of health care
- There are an estimated 5,000 medical supply companies in the United States.
- Telehealth is a growing industry due to COVID-19.
- Since 1980, there has been a 60% decrease in the number of patient-days spent in hospitals thanks to medical technologies.

Canadian v. American Health Services

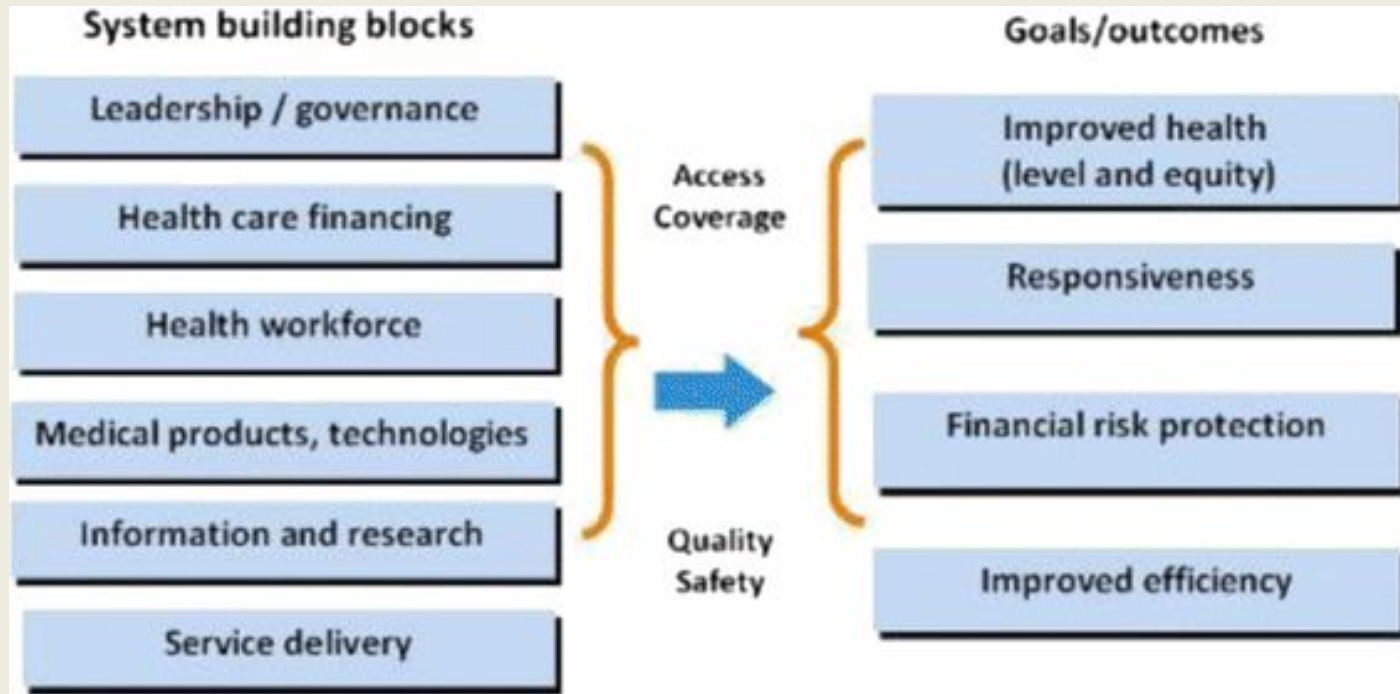
Canadian

- Primarily public healthcare facilities alongside various private specialty practices
 - I.e., mental health facilities, dental clinics, eye care offices, rehab services
- Hospitals, physician offices, surgical offices, long term care facilities, and home-care services receive public funding, but long term plans may cost more out of pocket.
- Healthcare setting and services often differ based on province or territory

American

- The main primary healthcare facilities in the U.S. are acute care hospitals
- Mostly public
- There are also clinics, surgical centers, birth centers, blood banks, and cancer centers also available for patients
- The most common facilities in the United States besides hospitals are dental offices and mental health facilities.

The Building Blocks of Healthcare



Canadian v. American Goals and Outcomes

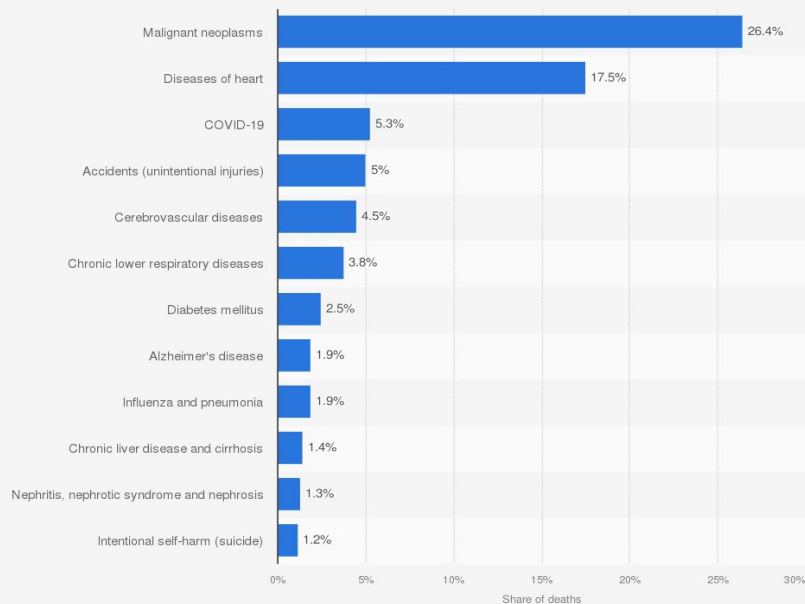
Improved Population Health

- Cardiovascular disease and cancerous tumors were the leading causes of death in 2020 responsible for about 44% of total deaths in Canada.
- Infant mortality rate
 - 4.4 in 2020
- Under 5 mortality rate
 - .5% in 2020
- Adult mortality rate (15–60)
 - 12% in 2020
- Life expectancy
 - About 82 years old
- Years of lost life (premature deaths)
 - 2,705,425 in 2012
- Prevalence of disability
 - About 20%

- Cardiovascular disease and cancer were the most common deaths in the United States at 696,962 and 602,350 in 2020
- Infant mortality rate
 - 5.42
- Under 5 mortality rate
 - 22.7
- Death rate
 - 1,027.0 deaths per 100,000 population
- Life expectancy
 - 77 years
- Years of lost life (premature deaths)
 - 84.2 per 100,000
- The prevalence of disability
 - About 25.7%

Leading Causes of Death

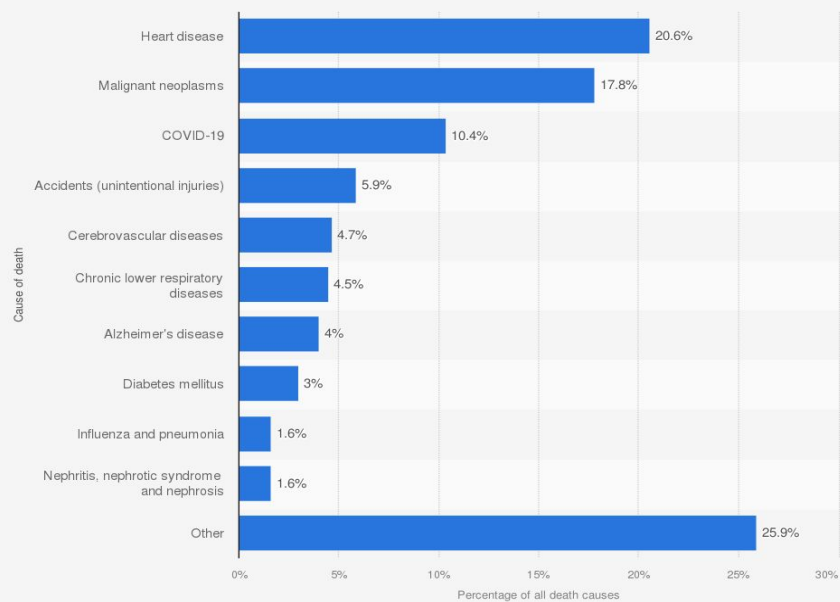
Distribution of the leading causes of death in Canada in 2020



Source
StatCan
© Statista 2022

Additional Information:
Canada; StatCan

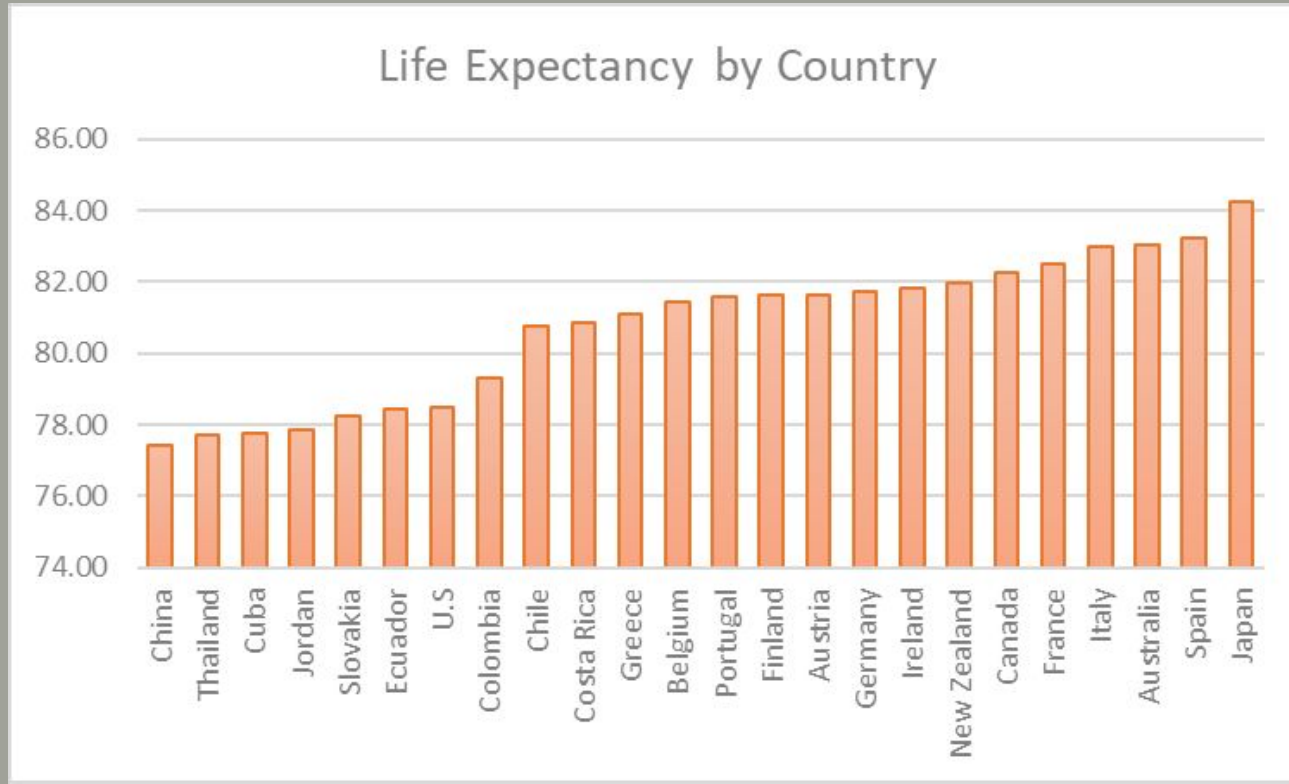
Distribution of the 10 leading causes of death in the United States in 2020



Sources
CDC; NHCS
© Statista 2022

Additional Information:
United States; CDC; NHCS

Life Expectancy Comparison



Canadian v. American Goals and Outcomes

Responsiveness

- Disparities amongst disadvantaged social, political, and economic groups, especially Indigenous people
- Pan-Canadian Health Inequalities Reporting Initiative, Public Health Agency of Canada, the Pan-Canadian Public Health Network, Statistics Canada, and the Canadian Institute for Health Information
- Measurement, monitoring, and reporting is used to study health determinant indicators
- Smoking, housing, environment, etc.
- Specifically, indigenous people use a holistic approach so Canadian agencies are trying to incorporate western medicine into their care while being respectful of their beliefs and resources
- Canada adopts the WHO's "Health in All Policies" to improve population health

- "health disparities are differences that exist among specific population groups in the United States in the attainment of full health potential that can be measured by differences in incidence, prevalence, mortality, burden of disease, and other adverse health conditions" (NIH, 2014)
- In the United States we see two kinds of disparities in healthcare:
 - racial and ethnic disparities
 - gender disparities

Canadian v. American Goals and Outcomes

Financial Risk

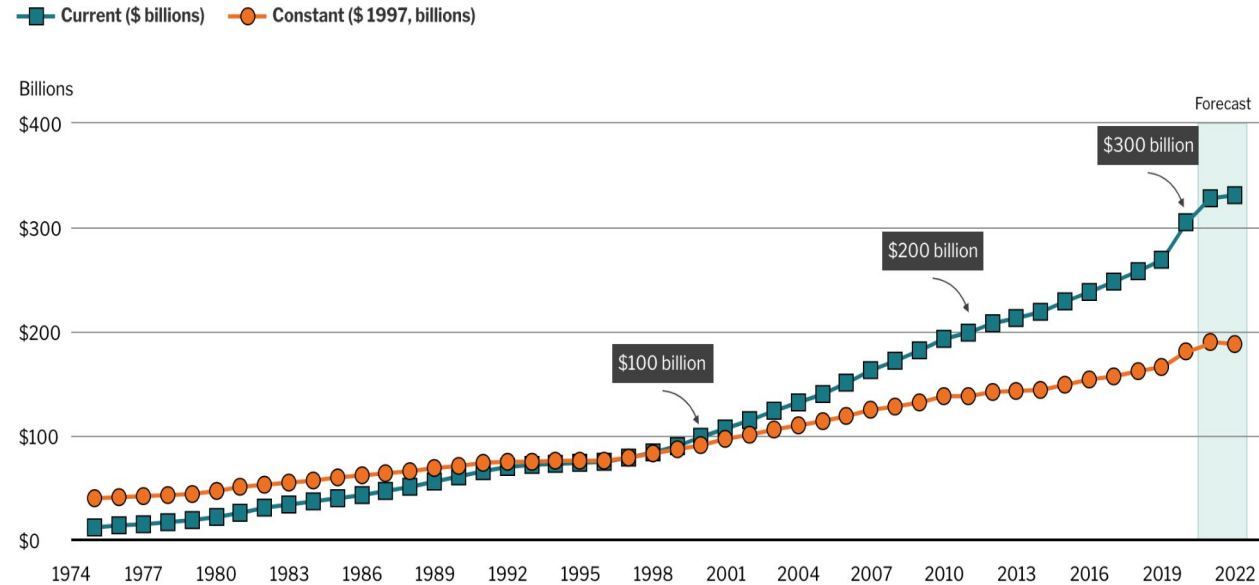
- The total Canadian health expenditure is expected to climb to \$8,563 per Canadian citizen in 2022. Total health spending for 2022 in Canada is expected to reach \$331 billion (CIHI 2022).
- Canadian medically necessary hospital and doctor services are provided on a prepaid basis, without direct charges at the point of service.
- The Canadian provincial and territorial governments fund these services with "assistance from federal cash and tax transfers," allowing for the most accessible and inclusive healthcare for Canadian citizens (Canada 2019).

- "National health spending is projected to grow at an average annual rate of 5.4 percent for 2019-28 and to reach \$6.2 trillion by 2028." (CMS, 2022)
- The United States has the highest per capita healthcare spending at \$11,172
- Private insurers have introduced several demand-side levers to control costs,
- Other cost containment efforts include price negotiations, selective provider contracting, risk-sharing payments, and utilization controls.

Data and Graph

How much will Canada spend on health in 2022?

1975 to 2022 (forecast)



Line chart of total health expenditures in current and 1997 constant dollars from 1975 to 2022. It shows the trending of health expenditure in the last 40+ years.

Canadian v. American Goals and Outcomes

Improved Efficiency

- The Canadian Health system has made healthcare accessible to all of its citizens by providing them with free of cost care and access to needed drugs and technological services.
- This debt-free policy also applies to its doctors.
- They have promoted and guaranteed the same care and quality of service as other countries such as the US minus the extra charge.
- Some quality programs being implemented include
 - An increased access to high-quality mental health services for Canadians, and ensure that the universal health care system treats mental health equal to physical health.

- The Center for Medicare and Medicaid Services (CMS) continuously seeks ways to improve the quality of healthcare.
- CMS manages quality programs that address many different areas of healthcare.
- These programs encourage improvement of quality through payment incentives, payment reductions, and reporting information on healthcare quality on government websites.

Health Policies in Canada

- Beginning in 2019, a policy was introduced to reduce the cost of innovative drugs, but did not go into effect until July 2022 due to the pandemic.
- Prior, innovative drug prices were compared to other countries but removed the US from the comparison due to its excessively high health expenditure.
- The policy was set to lower spending on new, patented drugs by also looking at seven other comparable countries and deciding pricing from them.
- Better affordability
- Since then, people have shot back saying that this disincentivizes people to innovate and create and therefore reduces the productivity of healthcare.



Health Policies in the US

- On October 21, 2022 the One Health Security Act was introduced
- The One Health Security Act created a federal council charged with preventing, detecting and responding to biological threats that significantly impact our national health, economy, and national security.
- This policy was implemented to strengthen global health security.



Canadian v. American Strengths and Weaknesses

- Canadian Strengths
 - Inclusive. Provides over 15 different health care systems
 - Same medication for less
 - Results in a higher life expectancy for their citizens
 - Very little doctor debt
- Canadian Weaknesses
 - Urban areas receive better care than rural areas due to location
 - Involvement of politics
 - Higher taxes to make up for vast, public healthcare
- Value patient care over revenue.

- United States Strengths
 - Rapid technological growth
 - Patient choice
 - Great research opportunities
- The United States Weaknesses
 - Has the highest rate of hospitalization and deaths from preventable causes
 - Highest spending
 - Lowest life expectancy in comparison with other developed countries
- There is a clash between experience and values

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- *National Health Expenditure Trends*. CIHI. (n.d.). Retrieved December 4, 2022, from <https://www.cihi.ca/en/national-health-expenditure-trends>
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- *Professionally active specialist physicians by Field*. KFF. (2022, September 29). Retrieved December 4, 2022, from <https://www.kff.org/other/state-indicator/physicians-by-specialty-area/?currentTimeframe=0&selectedRows=%7B%22wrapups%22%3A%7B%22united-states%22%3A%7B%7D%7D%7D&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D>