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# Reinventing Primary Care: Lessons From Canada For The United States

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**ABSTRACT Canada is, in many respects, culturally and economically similar to the United States, and until relatively recently, the two countries had similar health systems. However, since passage of the Canada Health Act in the 1970s, that nation's health statistics have become increasingly superior. Although the costs of Canada's health system are high by international standards, they are much lower than U.S. costs. This paper describes several factors likely to be responsible for Canada's better health at lower cost: universal financial coverage through a so-called single payer; features conducive to a strong primary care infrastructure; and provincial autonomy under general principles set by national law.**

This paper compares the health system characteristics of Canada and the United States, as well as costs of care, population health status, and the degree of disparities in health and health services in the respective countries. The results of these comparisons and those with other industrialized countries are discussed in the context of recently enacted U.S. reforms.

## Similarities And Differences

In many ways, Canada is more similar to the United States than any other country is. The two countries share a history as British colonies, and both are Anglo-Saxon countries with the same primary language. Although smaller in population (about 33 million versus about 300 million), Canada is geographically vast—even larger than the United States. Their populations are similarly heterogeneous, including the percentage that is foreign-born: 20 percent in Canada versus 13 percent in the United States.

**TAXES AND FINANCES** From a financial and economic standpoint, there are also a number of similarities. The two countries' tax structures are similar: 36 percent of revenues raised come from personal income taxes in both countries, and the highest tax rate for personal income is 46 percent in Canada and 44 percent in the United States. The percentage from social security taxes is similar as well—17 percent in Canada and 21 percent in the United States. Approximately 10–11 percent is raised from corporate taxes in both nations, and maximum corporate tax rates are also similar—36 percent in Canada and 39 percent in the United States. The percentage of gross pay going to disposable income, or income after taxes and social transfers, is somewhat higher in the United States (89 percent) than in Canada (76 percent).[1,2]

**HEALTH SYSTEMS** When it comes to health systems, there are both similarities and differences between the nations. In 2007 the United States had 2.4 physicians per 1,000 population—growth from 1990 to 2007 of 1 percent—compared with Canada's ratio of 2.2 per 1,000 population and growth of 0.2 percent. In the United States, there are 50 percent more specialists than primary care physicians, compared with 10 percent more specialists in Canada.[3] In 2007 Canada had 99 general physicians and 94 specialist physicians per 100,000 population.[4] Comparable figures for the United States are 100 gen-

eral physicians (including family physicians, general pediatricians, general internists, and obstetrician/gynecologists) and 207 specialists per 100,000.[5] (These data may differ slightly from other data because of a very stringent definition of *specialists*.)

**MEDICAL EDUCATION** Medical education systems are similar in both countries. Some Canadian medical schools require only two years of university education, whereas others require three or four. All are accredited by the Joint Liaison Committee on Medical Education, which also accredits U.S. medical schools. Canadian and U.S. medical school curricula are virtually identical, as are the characteristics of residency programs. In the early 1990s, half of Canadian medical graduates went into family medicine,[6] but this percentage declined to 32 percent by 1998 and 24.5 percent by 2004.[7]

**FEDERAL SYSTEM STRUCTURE** One notable feature makes comparisons with Canada particularly apt for the United States. Canada's health care system has a strong federal structure but also allows considerable flexibility in health policy making at the provincial and territorial levels.

## The Provincially Based Canadian Health Care System

In contrast to the historical roots of health systems in many Western industrialized countries, Canada's health reform efforts are relatively recent—although old enough to have become stable. Before the 1950s, Canada's health care system resembled that of the United States today. Canada's current health care system can be traced to reforms enacted in Saskatchewan in 1947, when publicly administered hospital insurance was introduced. That was followed in the 1950s and 1960s by increasing public coverage of ambulatory services for Saskatchewan residents.

One by one, other provinces followed Saskatchewan's example. By 1972 the advantages of such coverage were sufficiently well accepted to lead to the passage of the Canada Health Act, which made universal coverage available to all citizens across the entire country.[8] Canada's national health care system included features that offered strong support for primary care—for example, no copayments for primary care visits, coupled with incentives to seek comprehensive care from generalists.[9]

**LIMITED PRIVATE INSURANCE** In Canada, private health insurance for medical care services is not permitted for services covered by the governmental health insurance, which covers hospital, ambulatory, and nursing home care. The Canada Health Act mandates that all "necessary care" be provided without charge to patients. (Pharmaceuticals, private rooms in hospitals, dental care, home care, physiotherapy, and chiropractic care are not covered by the act.)

**PUBLIC INSURANCE PLANS** Public insurance plans are administered by ten provincial and three territorial governments, which may add services to those covered by the national government. Consolidated government financing of health comes partly from the federal government, which has been decreasing its share of the funding from 25.2 percent in 2005 to 21.4 percent in 2009. The remainder is generated by provincial and local governments through a variety of taxes.[10]

Details of administering public health plans are set by the provincial governments and vary across provinces. For example, there are major differences from one province to another in who qualifies for admission to a nursing home. Prescription drug benefits also vary, as provinces can set their own payment rates and policies regarding such issues as use of generic drugs and deductibles or copays.[11]

**PRACTICES AND HEALTH CENTERS** As in most countries, private practitioners and specialized health centers continue to exist in Canada. The Canada Health Act prohibits these doctors and clinics from participating in the governmental insurance plan if they accept private insurance for covered services.

Most hospitals and nursing homes are government financed but operated by community and regional boards. Ambulatory services are provided by physicians who bill primarily by fee-for-service—in Canada, this is called the assessment fee system—with rates set by negotiation with provincial medical associations. Specialists are paid more for a visit made on referral—paid through consultation fees—than for a nonreferred visit. This acts as a deterrent to direct access to specialists for services that should be provided in primary care.

In 2005 the Supreme Court in Quebec ruled for a physician who argued that prohibiting private insurance jeopardizes the well-being of people urgently needing treatment. Since then, the provincial government of Quebec decided to pay for key procedures such as cancer surgery, heart surgery, joint replacement surgery, cataract treatment, and certain tests such as mammography in private centers. The situation is in considerable flux, as other provinces contemplate similar changes.

**COSTS** At least until now, the administrative simplicity of the Canadian national health insurance has been partly responsible for much lower costs of health care in Canada. In recent years, those costs have been approximately $2,500 less per person per year than in the United States,

with a growth rate of about 3.5 percent per year in Canada versus a U.S. rate of about 5 percent. The system enjoys the support of the vast majority of Canadian citizens.[12]

**CARE SEEKING** Joseph Ross and Allan Detsky[13] contend that Canadians arguably have more choice in access to providers and services. There are no restrictions on Canadians' choice of physicians or hospitals, whereas Americans are often restricted in such choices by the terms of their insurance plans.

Although the Canadian system provides incentives for seeking care from primary care physicians rather than from specialists, patients can see any specialist on referral as well as directly. If patients consult specialists directly, these specialists can be paid for a nonreferral visit at the lower "assessment" fee. In contrast, 40 percent of Americans report difficulties in seeing a specialist. Of those who report difficulty, 40 percent cite long waiting times, 31 percent cite a denied referral, and 17 percent say they cannot afford private insurance.[13]

**AVAILABILITY OF TECHNOLOGY** Although there is a much greater supply of the most sophisticated technology, such as magnetic resonance imaging (MRI), in the United States than in Canada, Canadians' waiting times for such diagnostic services are relatively short. Virtually all high-tech diagnostic services are available in Canada, and for those services required but not available, patients are referred to the United States with reimbursement by Canadian health insurance. There is little elective use of U.S. services by Canadians[14] and no copayments to deter use.

**USE OF SERVICES** An international comparison of physician use—both the likelihood of seeing one or more physicians and the frequency of visits to physicians—found that low-income people in the United States have many fewer visits than wealthier people. However, in Canada the differences among income groups are smaller, even after differences in self-reported health are controlled for. Also, in Canada the frequency of visits to primary care physicians is "pro-poor," meaning that there are more visits by needier populations[15]—at least in part as a result of the absence of copays and better distribution of primary care physicians.[9] Within Canada, a study in Ontario found that family income was not independently associated with less use of either primary or specialist care, even after higher illness rates among lower-income people were controlled for. There are differences by education level in frequency of use of specialist visits and number of nonreferred specialist visits,[16] which may suggest that highly educated Canadians are able to persuade specialists to grant them an appointment without a referral.

## Health Status Comparisons

Canada differs greatly from the United States in terms of health status and health system characteristics.

**INTERNATIONAL RANKINGS** Exhibit 1 shows how the United States and Canada rank among industrialized countries for major indicators of health. Of the twelve indicators, Canada has better rankings than the United States for ten, thus confirming findings from the 1990s. The earlier study examined health outcomes, costs of care, and the primary care orientation of thirteen Organization for Economic Cooperation and Development (OECD) countries. Canada ranked third on costs of care, behind the United States

**EXHIBIT 1**

**Health Outcomes: How Canada And The United States Rank Among Organization For Economic Cooperation And Development (OECD) Countries, 2009**

| | Canada (rank) | U.S. (rank) |
|---|---|---|
| Life expectancy at birth | 9 | 25 |
| Life expectancy at age 65 (males) | 4 | 8 |
| Life expectancy at age 65 (females) | 4 | 14 |
| Potential years of life lost (age 70) | 13 | 21 |
| Ischemic heart disease mortality, males | 7 | 5 |
| Ischemic heart disease mortality, females | 7 | 9 |
| Stroke mortality, males | 2 | 4 |
| Stroke mortality, females | 3 | 6 |
| All cancer mortality, males | 12 | 7 |
| All cancer mortality, females | 22 | 23 |
| Infant mortality | 24 | 26 |
| Asthma mortality, ages 5–39 | 18 | 21 |

**SOURCE** OECD health data, 2009. **NOTE** Age-standardized where appropriate.

and Germany. In all thirteen health indicators in the earlier study, Canada ranked well above—in other words, better—than the United States, consistent with its much higher primary care services rating and ranking.[17]

**HEALTH STATUS RANKINGS** Exhibit 2 provides death rates for major causes of death in the two countries. The OECD data are also consistent with a variety of studies showing that Canadians, on average, are healthier than Americans, with lower rates of mortality, mobility limitations, obesity, hypertension, diabetes, and respiratory disorders. These differences have been attributed to better access to health services and fewer social disparities overall.

The United States does marginally better on five-year survival from cancer.[18] In women, the survival figure is 61 percent in the United States versus 58 percent for Canada. Comparable figures for men are 57 percent U.S., 54 percent Canada.[19] Part of the slight U.S. superiority here may be a result of more rapid availability of new drugs,[20] some of which may be major advances. However, these figures do not control for possible differences in detection at earlier stages, which would artificially elevate short-term survival in the United States.

Studies of deaths from treatable conditions also show better performance of the Canadian health system compared with that of the United States, and the differences are not a result of existing racial disparities. That is, the worse health of the U.S. population compared with that of Canadians is found even when comparisons are restricted to the white population.[8] Long-term comparisons show that the life expectancy of Americans has been worse than that of Canadians since the beginning of the twentieth century, but that most of this difference was a result of lower life expectancy among African Americans. However, this situation changed in the 1970s, when Canadian life expectancy rose even above that of white Americans.

Differences in death rates have increased over time, with Canada improving in rank and the United States declining in rank.[21] Differences by cause of death for conditions amenable to medical care are on the order of 25–60 percent lower in Canada than among U.S. whites and have increased over time since the 1980s. In particular, death rates from cervical cancer, hypertension and stroke, ischemic heart disease, tuberculosis, appendectomy, cholecystectomy (gall bladder removal), and hernia declined in both countries but to a greater extent in Canada.[8]

Survival rates from various cancers (summarized by Stephen Kunitz and Irena Pesis-Katz)[8] showed few if any differences in the survival of various income groups in Canada but substantial differences in the United States. Their analysis also found that survival of poor people in Canada is better than in the United States for both African American and white populations. What's more, it showed that there are few, if any, differences in survival among middle- and upper-income people in the two countries but better survival among lower-income Canadians than among lower-income Americans.

**EXHIBIT 2**

**Health Data For Canada And The United States, 2004–2006**

| | Canada | U.S. |
|---|---|---|
| Life expectancy at birth (years) | 80.7 | 78.1 |
| Life expectancy at age 65, males (years) | 18.2 | 17.4 |
| Life expectancy at age 65, females (years) | 21.4 | 20.3 |
| Potential years of life lost, age 70, males | 4,168 | 6,291 |
| Potential years of life lost, age 70, females | 2,554 | 3,633 |
| Acute myocardial infarction deaths, males | 58.3 | 53.8 |
| Acute myocardial infarction deaths, females | 28.1 | 29.5 |
| Stroke mortality, males | 33.9 | 37.2 |
| Stroke mortality, females | 30.9 | 36.2 |
| All cancer mortality, males | 204.6 | 193.5 |
| All cancer mortality, females | 162.9 | 148.6 |
| Infant mortality | 5.0 | 6.7 |
| Diabetes mortality, males | 23.2 | 23.4 |
| Diabetes mortality, females | 14.7 | 17.6 |
| Deaths from respiratory disease, males | 57.1 | 70.4 |
| Deaths from respiratory disease, females | 34.3 | 49.7 |

**SOURCE** OECD health data 2009. **NOTES** Mortality is rate per 100,000. Data for specific years for individual listings may differ from those in Exhibit 1.

Women of low socioeconomic status have poorer age-adjusted survival from breast cancer in the United States (compared to women of higher socioeconomic status) but not in Canada. This relative advantage in breast cancer survival in Canada is primarily in the nonelderly population. Among U.S. low-income women older than age sixty-five, breast cancer survival rates are similar to those in Canada, most likely due to U.S. Medicare coverage.[22]

Confirmation that the U.S. health disadvantages are not due to racial and ethnic differences is provided by a comparison of health status in the United States and England, in which only the non-Hispanic white U.S. population was included.[23] This study stratified the two populations according to social status and found consistently worse health—as measured by self-reports as well as lab tests—at all U.S. social levels. Although social policies may contribute to these differences, the much stronger primary care infrastructure in England, as in Canada, is a factor.

The 2002–03 Joint Canada/United States Survey found higher rates of obesity, more poor health among low-income groups, similar rates of dental services among those with dental insurance, and more medication use among those ages 45–64 in the United States than in Canada. Having any type of insurance in the United States was associated with higher likelihood of identifying a usual source of care.[24] The relative superiority of health in Canada, especially below age sixty-five, increased after the provincial plans and Canada Health Act were passed.

## Useful Lessons From Canada And Elsewhere

Differences in health—both overall and regarding social disparities—in two countries that are otherwise quite similar are attributed to the important effect of two related phenomena: achievement of important health-system characteristics and a strong clinical primary care infrastructure in Canada.[17] Several international studies have confirmed the importance of three health-system characteristics of countries that achieve better health at lower cost: government attempts to distribute resources, such as personnel and facilities, equitably; universal financial coverage either through a single payer or regulated by the government; and low or no cost sharing for primary care services.[17,25,26]

The benefits of health insurance are widely known. Less well known is that a major function of health insurance is to facilitate access to primary care services.[27,28] Within the United States, states and areas with better primary care resources have better health status, as measured by many health indicators, including life expectancy. Additionally, there is no clear relationship between insurance characteristics—such as the extent of population coverage and cost of premiums—and supply of primary care physicians at the state level.[29,30]

**PRIMARY CARE** U.S. policy achieves none of the three structural characteristics of good health systems.[31,32] Canada achieves all three. At the same time, although Canada's efforts to distribute resources equitably have been more extensive and successful than in the United States, Canada's are less adequate than in other countries, such as Sweden, Finland, Denmark, the Netherlands, Spain, and the United Kingdom.[9]

The important clinical features of primary care include person-focused, rather than disease-focused, care over time; easy access to facilitate first-contact use of services; comprehensiveness of services within primary care settings; and coordination of care when people seek care elsewhere. These features are all reflected in the joint principles[33] of the U.S. primary care organizations.

The U.S. neglect of primary care is reflected in differences in people's reported experiences with their care. In 2007, fewer than one in eight Canadians believed that their health system needed rebuilding, compared with more than one in three Americans. Similarly, fewer than one in eight reported forgoing care in Canada compared with more than one in three in the United States. Fewer than one in eight Canadians thought that they received unnecessary care, compared with one in five Americans.

There are few differences in accessibility to primary care among those with insurance in the United States and Canada, whereas there is greater accessibility to specialist care in the United States. Similar levels of coordination-of-care problems are found in both countries. Yet Canadians are more likely than Americans overall to report positive experiences with patient-centered care.[34] Canadians also are less likely than Americans to report a variety of medical, medication, and lab errors.

Canadians with chronic illnesses spend less out of pocket for drugs, use fewer drugs, are less likely to see many specialists, and report less conflicting advice, compared to their U.S. counterparts.[35] Because Canada does not do as well as other countries on various aspects of primary care, the even poorer U.S. experiences in these areas are more striking.

Declines in the primary care workforce in the past decade in Canada are being addressed. The effort includes reallocation of funds to increase the number of instructional hours for family physicians in the first two years of postgraduate

training and to provide for family medicine support groups.[36] In contrast, the United States continues to follow a long pattern of rising production of specialists with falling supplies of primary care physicians. Unless there is concerted action to rebuild the U.S. primary care workforce, only about 16 percent of entering residents are likely to embrace primary care.[7,37]

**UNIVERSAL SYSTEM** The United States is the only OECD country to lack a universal, publicly accountable health insurance system and the only one to rely on employer-based health insurance for the nonelderly population. Of seven OECD countries that are commonly thought to provide lessons for U.S. health reform, three—Canada, the Netherlands, and the United Kingdom—have no cost sharing for primary care (although the Netherlands is instituting copayments for certain insurance options).

France protects patients with chronic illnesses from coinsurance fees. Germany does not impose cost sharing for preventive services for children and for those who identify a regular source of care. Germany also limits yearly copays to 1–2 percent of annual income for people with chronic illnesses or low incomes.[38] Both Australia and New Zealand require copayments, with exceptions for some low-income patients.

The Netherlands, New Zealand, and the United Kingdom require patients to register with a general practitioner, who acts a gatekeeper to specialists.[34,35] The pharmaceutical review process is stronger in Canada than in the United States by virtue of reviewing both the clinical and cost-effectiveness of drugs compared with alternative therapies (instead of just placebos). Several countries make concerted efforts to distribute resources across their populations according to different degrees of need.[17]

The United States also is the only industrialized country to lack a national strategy to address important building blocks of a strong primary care system, including services delivery, workforce, information systems, medical products, vaccines, technology policy, financing, leadership, and governance.[39] International experiences demonstrate that national stewardship, financing, and generation of resources are important for an adequate primary care infrastructure.[40]

Universal health insurance alone is not sufficient to raise a country's health levels to match those of countries with the best levels.[17] Within the United States, there is a greater relationship between the presence of a good supply of primary care physicians and life expectancy than there is between either broad insurance coverage or affordability of coverage and life expectancy.[29,30] Universal coverage alone, particularly if not organized through a single payer with uniformity of benefits, could expand access to inappropriate services.

## Conclusion

Canada's experiences show how these critical features of health systems can be achieved in the context of a federal structure with decentralized administrative control. Although Canada has achieved better health levels than the United States has for many decades, the gap has widened over time, following the development of the different provincial plans that culminated in national legislation in the early 1970s.

Comparisons of OECD data since the 1970s indicate U.S.-Canadian gaps. These have widened from one or two international rankings in the 1970s to as many as fifteen—depending on the health indicator. This has occurred even as Canadian ranks dropped for some indicators after some moves to reduce federal support for the provinces.[41]

Despite persistently higher rates of unemployment, lower gross domestic product (GDP), and a lower percentage of GDP spent on health, Canadian policies provide better social support, including health services, than is the case in the United States. Thus, Canadian policies can inform U.S. policy with regard to access to and use of appropriate primary care–oriented medical services, social welfare, public support of education, and increasingly progressive labor legislation.[42] Although Canada has not yet achieved levels of health commensurate with those of several other industrialized nations, its cultural, political, and economic similarities and historical background make its experiences relevant to U.S. efforts to improve health services without increasing their cost. ■

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**NOTES**

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