CANADIANS WRITE A NEW RX FOR HEALTHCARE

Canada's Healthcare System Is Not a Panacea, But It Raises Interesting Issues for the United States

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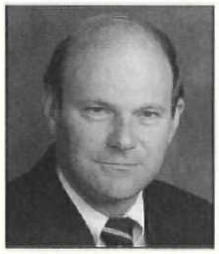

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As the U.S. Congress aggressively debates the Clinton administration's proposal to reform our healthcare system, legislators will turn considerable attention to Canada's achievements. Operating under global budgets set by provincial governments, the Canadian health system has hospital per capita expenditures that are a fourth less,[1] and Canadian hospitals have average discharge costs of $2,720 less, than those of their U.S. counterparts.[2] Proponents of the Canadian global budget approach[3] argue that if U.S. hospitals had been able to emulate the efficiencies of Canada's acute care facilities in 1990, the United States would have saved $84.4 billion.

Although these potential cost savings are impressive, it is naive to think that the Canadian health system could be transplanted to the United States. This plan has evolved during the past 35 years in a demographically, culturally, and constitutionally different environment from the United States.[4] Although they have been successful in providing universal access for a comprehensive range of services and in controlling costs, the Canadian provincial governments are now struggling with healthcare reform. They are dissatisfied with their reputation as the second-most expensive health system in the world.

As the United States moves toward restructuring the organization and financing of its delivery system, U.S. policymakers and healthcare services managers can learn much from Canada's experience in more effectively and efficiently providing comprehensive healthcare services to all citizens. In particular, why do such significant cost differences exist between hospitals in Canada and the United States? And what steps will be needed in the United States to achieve a universal comprehensive health plan?

THE CANADIAN HEALTH PLAN

The Canadian health plan has evolved from principles in the Hospital and Diagnostic Services Act of 1957,[5] which set forth guidelines under which Canadian healthcare institutions and professionals must function. Although the plan is national, most of its effectiveness lies in the fact that it is managed and is accountable to the public through each of its provinces. Translated into

Summary The Canadians have been impressive in delivering universal healthcare access and high-quality care. Operating under global budgets set by provincial governments, Canadian hospitals have prudently managed available resources to meet community needs. A weakness of this single-payer system, however, is its inability to effectively coordinate and integrate services delivered by hospitals, physicians, and other providers.

As the U.S. health system faces stringent cost containment with President Bill Clinton's proposal, significant savings are expected of U.S. hospitals. New alliances constrained by global budgets might require healthcare services managers to operate under a disparate set of assumptions and incentives. Before making such a transition, we can learn from the experiences of our Canadian colleagues.

The challenges for both nations in the remaining years of this century will be drawn primarily from the effective macromanagement controls of the Canadian system and the lessons being learned from the U.S. managed care networks. This will occur as each nation strives to provide a more effective, less costly, integrated delivery of healthcare services.

current U.S. terms, the Canadian approach is akin to healthcare reform laws that mandate universal access and implement cost containment, which a number of state legislatures have passed or contemplate passing.[6]

When Canada modified its plan in 1977 and established a tax-based system to finance all hospital services, it replaced an approach similar to what currently exists in the United States. Each provincial minister of health became responsible for establishing a global budget for healthcare services, which included a fixed payment to each acute care facility. These global budgetary grants typically represent 85 percent of Canadian hospitals' total capital and operating revenues. Under this system, hospitals are expected to deliver healthcare within these allocated dollars to meet their communities' needs. This global budget approach has proven effective in constraining the inflationary trend in Canadian healthcare expenditures,[7] as well as in other Western industrialized nations.[8]

The Canadian system's effectiveness may come largely from the fact that a provincial ruling party and its prime minister must show political accountability for the plan's fiscal integrity and for the outcomes of the delivery of healthcare services as measured by the voting public's level of satisfaction.[9] The health system is the most popular government program, making the financing and effectiveness of healthcare services important to anyone seeking public office.

By setting the fiscal controls at a macro level with total dollar expenditures for each sector (e.g., hospitals, physicians, pharmaceuticals), the Canadian healthcare system has been able to hold its total gross domestic product (GDP) expenditure for healthcare at 10.0 percent (1991).[10] The Canadians have accomplished this while avoiding large bureaucracies that micromanage healthcare professionals' and institutions' patient care decisions.

Some proponents for a Canadian-style system in the United States focus on its single-payer approach[11]; however, much of its quantitative effectiveness may come from its global budgetary constraints. Many nations with multipayer systems and similar macromanagement controls have outperformed Canada in holding down healthcare expenditures. In 1991 France maintained healthcare expenditures at 9.1 percent of GDP,[12] Germany at 8.5 percent,[13] and Japan at 6.8 percent.[14]

> Canadians view healthcare foremost as a public service to be universally accessible.

Many elected officials, policymakers, and healthcare professionals in the United States have expressed concern that Canadian hospitals offer less sophisticated medical technology[15] and have longer queues for tertiary services.[16] Most Canadians, however, believe that services should be provided when needed rather than when wanted, and healthcare providers are therefore not organized and managed to respond to buyer demand as in the United States.

The Canadian approach does reward efficiency: Hospitals that implement effective, consumer-friendly services may attract more patients and thereby eventually secure more resources through the global budget process. Canadians view healthcare foremost as a public service to be universally accessible and provided at a uniformly high standard for all persons.

Canadian Hospitals' Performance

Comparative studies have demonstrated that Canadian hospitals have outperformed their U.S. counterparts in operating effectiveness.[17] Donald A. Redelmeier and Victor R. Fuchs reported that "after all adjustments, the estimates of resources used for inpatient care per admission was 24 percent higher (1987) in the United States than in Canada and 46 percent higher in California than in Ontario."[18] In 1990 Canadian hospitals provided 61.3 percent more patient days than did U.S. hospitals. In addition, Canadian hospitals experienced 8.8 percent more admissions, 83.5 percent more emergency department visits, 6.9 percent more outpatient visits, and 24.5 percent more surgeries. Even with these higher volumes of ambulatory care services, the average Canadian operating expenditure per discharge was $2,720 less than in the United States.[19]

Although the average length of stay in Canadian hospital (10.8 days) tends to be 50 per-

cent longer than in the United States, Canadian facilities are able to manage with 11.3 percent fewer paid hours per discharge. When analyzed on a per-discharge basis, Canadian hospitals tend to provide professional services and registered nursing hours[20] comparable with what U.S. acute care facilities provide.

An analysis (1988-89) of 229 Canadian and U.S. medium-sized and teaching hospitals focused on how Canadian acute care facilities have generated a significantly lower average operating cost per discharge and per day. Based on this study's findings, it is estimated that in 1989 U.S. hospitals would have incurred these annual savings if they had been able to manage their acute care facilities with Canadian "norms": administrative and fiscal, $13.6 billion; interest and depreciation, $8.9 billion; support services, $7.5 billion; professional services, $7.0 billion; nursing services, $6.2 billion; and pharmacy and drugs, $3.1 billion.

Canadian hospitals are almost uniformly able to provide more care for less cost than U.S. facilities. But how do Canadian healthcare services managers accomplish this?

> Most Canadian specialists do not need primary care cases to "fill out" a practice.

Why Canadian Hospitals Are More Efficient

A number of programmatic, managerial, fiscal, and cultural factors enable Canadian hospitals to deliver care at a lower cost per discharge and per day than in the United States.

Simple Payment System

Canadian hospitals are managed under a more simplified method of prepayment. With a global budget payment, hospitals are able to streamline their business and related functions. For example, a Canadian hospital with an average daily census of 200 patients had 48 full-time equivalent (FTE) employees for administrative and fiscal affairs (1988-89). The same activities in a similar-sized U.S. facility required an average of 132 FTEs.[21]

The **Table** below compares staff and cost of several business and finance functions at a 700-bed teaching hospital in Chicago and a two-unit, 1,200-bed in Toronto. In the U.S. facility, the administrative and fiscal departments had more

1991 STAFF AND COST COMPARISONS AT TWO TEACHING HOSPITALS*

	700-Bed U.S. Hospital		1,200-Bed Canadian System	
Department	FTEs Per 100 Occupied Beds	Cost Per Occupied Beds	FTEs Per 100 Occupied Beds	Cost Per Occupied Beds
Medical records	9.4	$ 4,418	8.1	$3,246
Finance	8.5	6,420	4.0	1,485
Billings and collections	8.3	7,215	2.0	592
Utilization review	2.1	941	0.3	136
Information system	15.7	12,976	2.2	2,100
TOTAL	44.0	31,970	16.6	7,559

*Values are in U.S. dollars. Canadian dollars were converted to U.S. dollars at a purchasing-power-parity exchange rate of $1.315 Canadian to $1.00 U.S.

than two and a half times as many FTEs per 100 occupied beds as did the Canadian two-hospital system and spent more than four times the dollars to operate these departments. Average salary cost per business office FTE cannot explain these differences, since the payroll expense for most positions in Canada is slightly higher.[22] Operating under the Canadian system, the U.S. hospital could have saved an estimated $12.7 million, or 63.2 percent of its costs in these areas (based on the application of the Canadian operating rates to the total actual expenditure of the U.S. hospital for the departments studied).

System Abilities Other factors that partially explain these cost differences are the Canadian system's ability to:

- Provide easy access to inexpensive primary care services
- Control the number of physician specialists and subspecialists trained
- Avoid the proliferation of competing ambulatory care centers that offer a variety of specialized diagnostic and treatment services
- Receive outright grants from the government for capital projects

Since Canada has three times as many primary care physicians per capita as the United States, relatively inexpensive preventive services and access to healthcare are readily available. Canadians choose their own primary care physicians and can change doctors as often as they wish. Most Canadian specialists do not need to take on primary care cases to "fill out" a practice. Because there are fewer Canadian specialists, the number of higher-cost procedures is also constrained.

In Canada, only acute care facilities operating under the global budget system are authorized to provide sophisticated ambulatory care services. This eliminates competition for limited resources among freestanding ambulatory surgery centers, radiology facilities, or similar outpatient centers, as in the United States. Even as the sole providers of many ambulatory services, Canadian hospitals provide only 6.9 percent more outpatient visits (excluding emergency departments[23] and ambulatory surgery) per capita than do U.S. hospitals.

When the single payer is in fiscal distress, it puts the entire health system in jeopardy.

Whereas American hospitals are used to borrowing to finance construction and to replace or expand capital equipment, Canadian acute care facilities can incur only a limited amount of debt. Canadian hospitals must first receive provincial approval for capital projects, which are primarily financed through government grants matched with community fund-raising and reserves generated through operating efficiencies. This approach, while slowing down the addition and replacement of capital investments, has limited Canadian hospitals' operating costs for principal and interest payments.

Limited High-Cost Services The Canadian health system has limited the availability of high-cost, specialized services (see **Table**, p. 36). High-technology programs, such as open heart surgery and organ transplantation, have been centralized in Canadian academic healthcare centers, where medical students, residents, and fellows perform a sufficient number of procedures to ensure high-quality outcomes.[24] Although cost in U.S. hospitals has increased as tertiary services have been added beyond those which communities may require, the Canadian system has not permitted this to occur.

Centralizing tertiary resources allows teaching hospitals to use expensive equipment and trained personnel more efficiently. On the other hand, patients and families awaiting sophisticated services suffer inconveniences and heightened anxiety. Canadian healthcare services managers must continually balance the availability of scarce resources, the benefits offered by such services in improving healthcare, and the optimal use of all assets available. Unlike U.S. health executives, however, Canadian managers can face these decisions knowing that they do not need to compromise their institution's bottom line in the process.

Cultural Differences Finally, when explaining why hospital costs are far less in Canada than in the United States, it is critical to keep in mind the distinct cultural differences between these two nations. There are three times as many homicides

and AIDS cases per capita in America as in Canada.[25]

In general, Canadians look to their government to solve social problems and have a positive regard for government services. Canadians take an egalitarian perspective, and they support the allocation of health resources for the public good. Americans' staunch individualism, independence, and suspicion of government add to the cost of delivering hospital, physician, and related services.

Canadian Problems

For all its positive attributes, the Canadian health system is in need of reform. Recently, its percentage of cost increases has nearly matched that of the United States.[26] This, coupled with a sluggish economy, has resulted in healthcare costs becoming a major concern of Canadian officials.

When the single payer—in Canada's case, the government—is in fiscal distress, it puts the entire health system in jeopardy. In response to its economic problems, Ontario, for example, limited increases in its hospital global budget to 2.7 percent for fiscal year 1992-93 and has reduced its payments by 3.0 percent for fiscal year 1993-94. Hospitals' typical responses have been to critically examine each department's ability to deliver more effective and efficient services, to collaborate more with other institutions, to consolidate services when possible, and to do whatever is necessary to reduce operating costs, including decreasing inpatient utilization.

Since most Canadian physicians are paid on a fee-for-service basis, the incentives (or constraints) applied to their hospitals can run counter to those of the medical staff. Hospitals, operating within their global budgets, must act as physicians' gatekeepers. An acute care facility thereby balances the interest and needs of the community and those of its medical staff. Like physicians in the United States, Canadian physicians get paid for procedures, visits, and admissions; however, in Canada the hospital (rather than a third-party payer) must apply limits. Hospitals do this by carefully limiting the medical staffs' size and composition and limiting specialized facilities and services. With the divergence of interest between hospitals and physicians, it is understandable why they are not developing integrated relationships in Canada as they are in the United States.

As the provincial governments separately administer global budgets for physicians; acute care hospitals; and extended, chronic care, and mental health facilities, providers have had limited incentives to implement vertical integration of care on a community level. Managed care, managed competition, and global budgets for multispecialty medical school faculty plans are among options now receiving increased attention.[27]

MEDICAL TECHNOLOGY USAGE COMPARISONS

Medical Technology	Canada (1991-92) Number of Hospitals	Canada (1991-92) Units Per Million Population	United States (1991) Number of Hospitals	United States (1991) Units Per Million Population
Cardiac catheterization	49	1.84	1,457	5.80
Computed tomography scanner	200	7.50	3,633	14.42
Lithotripsy	11	0.41	370	1.47
Magnetic resonance imaging	32	1.20	1,036	4.11
Radiation therapy	127	4.79	969	3.84
Open heart surgery	33	1.24	867	3.44
Organ transplanation	28	1.08	555	2.20

From Canadian Coordinating Office for Health Technology, Ottawa, Ontario, August 1992; American Hospital Association, *Hospital Statistics, 1992-1993*, Chicago, 1992. NOTE: The U.S. data exclude such technology located outside the aegis of an acute care facility.

Fiscal incentives will be required to bring these providers together. This is complicated by the fact that Canadians would view the development of competing panels of physicians as inconsistent with social equity and unlimited choice of doctors and hospitals.[28]

> Providers that can best deliver value under a fixed budget will succeed.

What We Can Learn

U.S. policymakers and healthcare services managers can glean much from the Canadian health system and the operations of its hospitals. We believe, however, that a wholesale adoption of their system for U.S. healthcare reform, as others have recommended,[29] would be unwise. As the United States moves forward to restructure its own health delivery system, the following lessons are important to consider from the Canadian experience.

Global Budgets Can Be Effectively Implemented to Constrain U.S. Healthcare Expenditures The federal and provincial global budgets established within the Canadian health plan have created the "boundaries" within which the delivery of services must function.

The United States has been unable or unwilling to establish similar fiscal limits. Global budgets, as used in Western industrialized nations, have different fiscal incentives than price controls and state rate setting[30] of healthcare services, both of which have been fraught with political and operational difficulties and have generally functioned poorly. Although the Clinton proposal might favor managed competition to constrain costs,[31] its use of national budget targets would force difficult decisions to achieve the goals of healthcare reform.

By establishing spending targets at federal and state levels, U.S. elected officials would be forced to assume broader accountability for the overall performance of our health system. In the past, government-funded or -managed healthcare programs have been designed and implemented to limit public expenditures. No elected official wants to be responsible for the negative effect of cost shifting when it comes to arriving at equity decisions in paying for healthcare costs. Healthcare reform plans providing universal access and comprehensive healthcare benefits for all citizens would require that the legislative and executive branches—and all those publicly responsible for the system—be accountable for the quality as well as the cost of healthcare services.

The United States, unfortunately, has lacked the unifying set of principles that have guided the Canadian health system. Without a clearly articulated and generally agreed-on national policy regarding healthcare services, reform may be left to undue influence of various vested interests and short-term political and economic shifts in the landscape of other domestic and possibly international issues.

The Implementation of Clinton's Proposals for Purchasing Cooperatives and Competing Provider Networks May Help the U.S. Health System Emulate and Function Like Canada's Global Budget Approach If Congress adopts a plan similar to what the president has proposed, the focus of the healthcare field will shift to a new reality, where resources for healthcare services are finite. With this change, providers that can best deliver value under a fixed budget will succeed.

For hospitals, integration and close collaborative relationships among hospitals, physicians, and other providers will become essential to ensure that resources are best used for communities' benefit. As in the Canadian system, U.S. hospitals will strive to optimize their services and to coordinate their resources with other providers. Under managed competition, however, the winners will be those acute care facilities or healthcare systems which can integrate their managers and fiscal incentives with physicians and other providers in the community. The result should be more comprehensive, fully integrated care at an affordable cost.

Since a state agency must approve a purchasing alliance's benefits and premiums, U.S. healthcare providers might quickly find themselves regulated through "managed competition under a global budget." This approach requires simplification and constraint to avoid a new expensive layer of bureaucracy.

For the foreseeable future the United States will likely retain its multipayer approach with its purchasing cooperatives and competing provider

networks, and it will increasingly rely on stringent global budgets. As these state-administered payments become more controlled and ratcheted down, our prepayment plans will function more as a single-payer system.

In the meantime the challenge for U.S. healthcare providers will be to achieve some of Canada's operating efficiencies. Much can be learned from a microlevel examination of Canadian hospital operations and their ability to effectively provide services with greater cost constraints than is typical in the United States.

As the global budget approach is implemented, U.S. healthcare services managers will place less emphasis on maximizing their organizations' operating surplus and more emphasis on enhancing productivity and effectiveness within the healthcare system. With uniform mandated benefits in place, hospitals will be free to focus more on the needs of the previously underinsured and uninsured and tailor services to the needs of all those they serve. These changes could increase hospitals' overall utilization patterns as formerly underinsured and uninsured Americans are afforded the same access to services as the remainder of the population.[32]

The United States Must Downsize Its Healthcare Resources, Labor Force, and Expenditures to Become More Economically Effective While Canada has achieved its lower cost position by constraining new technology, eliminating duplication of facilities and services, simplifying prepayment, and minimizing administrative overhead, the United States has been burdened with these expenditures, which must be eliminated.

The Rochester, NY, model[33] is frequently cited as a successful example of establishing a health alliance that provides universal access (only 6 percent of the region's population is uninsured) and constrains costs. In 1990 hospital expenditures per capita were $775 in Rochester compared with state and national averages of $1,064 and $811, respectively. As a result of community planning efforts during the 1960s, there are now fewer hospital beds, admissions, and FTEs per occupied bed in the Rochester region than the averages in New York state and nationally.

Members of the Rochester Area Hospital Corporation manage with 21.9 percent fewer FTEs per adjusted average daily census than the national average. If U.S. acute care facilities were to implement the staffing norms found in the Rochester region, 800,000 of the 3.3 million hospital FTEs would be laid off—more than the 600,000 FTEs added to these organizations' payrolls during the 1980s.

Healthcare System Should Mirror Our Concerns

Healthcare services managers' challenges for the rest of this century will be to use the best parts of our procompetitive approach and to restructure our systems of rewards and incentives to improve health status as measured by patient outcomes and by cost-effective care. We have the distinct advantage of having resources (many of which are nonexistent in Canada) that can be used or reengineered to restructure our healthcare delivery system. U.S. providers have better data bases and information systems than Canadian providers to help manage the internal operations of our healthcare facilities and services.

Under a new paradigm of care, healthcare services managers should be able to use these findings to restructure and to downsize the various elements of an integrated delivery system to meet forthcoming healthcare reform measures. As Canada's system reflects its unique cultural, political, and social values, so must the new U.S. healthcare system mirror citizens' attitudes and concerns. □

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