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Comparisons of Health Care Systems in the United States, Germany and Canada

Goran Ridic¹, Suzanne Gleason², Ognjen Ridic³

Fall, Illinois, USA¹

ECON, Illinois, USA²

Sarajevo International University, Sarajevo³

Corresponding author: Goran Ridic, PhD, Fall, Illinois, USA. E-mail: oggi.ridic@gmail.com

REVIEW

SUMMARY

The purpose of this research paper is to compare health care systems in three highly advanced industrialized countries: The United States of America, Canada and Germany. The first part of the research paper will focus on the description of health care systems in the above-mentioned countries while the second part will analyze, evaluate and compare the three systems regarding equity and efficiency. Finally, an overview of recent changes and proposed future reforms in these countries will be provided as well. We start by providing a general description and comparison of the structure of health care systems in Canada, Germany and the United States.

Key words: health care systems, Canada, Germany, USA.

1. CANADA'S NHI – OVERVIEW, ORIGINS AND HISTORY

Canada has a national health insurance program NHI (a government run health insurance system covering the entire population for a well defined medical benefits package). Health insurance coverage is universal. General taxes finance NHI through a single payer system (only one third-party payer is responsible for paying health care providers for medical services). Consumer co-payments are negligible and physician choice is unlimited. Production of health care services is private; physicians receive payments on a negotiated fee for service and hospitals receive global budget payments (Method used by third party payers to control medical care costs by establishing total expenditure limits for medical services over a specified period of time).

Canada's health care system is known as Medicare (the term should not be confused with the Medicare program for the elderly in the U.S.) Canada's population is about 31 million people and the country is divided into 10 provinces and two territories. Most of the population lives within 100 miles of the United States border. From the American point of view, Canada provides a good comparison and contrast in terms of the structure of its health care systems. U.S. and Canada share a similar heritage in terms of language and culture; the two countries also share a long border and have similar economic institutions (Folland et al 542).

The origins of the current Canadian health care system can be traced back to the 1940's when some provinces introduced compulsory health insurance. The Canadian health care system began to take on its current form when the province of Saskatchewan set up a hospitalization plan immediately after WWII. The rural, low-income province was plagued by shortages of both hospital beds and medical practitioners. The main feature of this plan was the creation of the regional system of hospitals: local hospitals for primary care, district hospitals for more complex cases, and base hospitals for the most difficult cases. In 1956, the federal parliament enacted the Hospital and Diagnostic Services Act laying the groundwork for a nationwide system of hospital insurance. By 1961 all ten provinces and the two territories had hospital insurance plans of their own with the federal government paying one half of the costs. By 1971 Canada had a national health insurance plan, providing coverage for both hospitalization and physician' services. As recently as 1971, both the United States and Canada spent approximately 7,5 % of their GDP's on health care. Since 1971 the health care system has moved in different directions. While Canada has had publicly funded national health insurance, the United States has relied largely on private financing and delivery. During this period, spending in the United States has grown much more rapidly despite large groups that either uninsured or minimally insured.

The provisions of the 1984 Canada Health Act define the health care delivery system as it currently operates. Under the

Act, each provincial health plan is administered at the provincial level and provides comprehensive first dollar coverage of all medically necessary services. With minor exceptions, health coverage is available to all residents with no out of pocket charges. Most physicians are paid on a fee for service basis and enjoy a great deal of practice autonomy. Private health insurance for covered services is illegal. Most Canadians have supplemental private insurance for uncovered services, such as prescription drugs and dental services. As a result, virtually all physicians are forced to participate and each health plan effectively serves all residents in the province (Henderson 487).

Patients do not participate in the reimbursement process, and reimbursement exclusively takes place between the public insurer (the government) and the health care provider. The monetary exchange is practically non-existent between patient and health care provider. The ministry of health in each province is responsible for controlling medical costs. Cost control is attempted primarily through fixed global budgets and predetermined fees for physicians. Specifically, the operating budgets of hospitals are approved and funded entirely by the ministry in each province and an annual global budget is negotiated between the ministry and each individual hospital. Capital expenditures must also be approved by the ministry, which funds the bulk of the spending.

Physician fees are determined by periodic negotiations between the ministry and provincial medical associations (the Canadian version of the American Medical Association). With the passage of the Canada Health Act of 1984, the right to extra billing was removed in all provinces. Extra billing or balance billing refers to a situation in which the physician bills the patient some dollar amount above the predominated fee set by third party payer. For the profession as a whole, negotiated fee increases are implemented in steps, conditional on the rate of increase in the volume of services. If volume per physician arises faster than a predetermined percentage, subsequent fee increases are scaled down or eliminated to cap gross billings – the product of the fee and the volume of each service – at some predetermined target. The possible scaling down of fee increases is supposed to create an incentive for a more judicious use of resources. Physicians enjoy nearly complete autonomy in treating patients (e.g., there is no mandatory second opinion for surgery) because policy makers believe there is no need for intrusive types of controls given that the hospital global budgets and physician expenditure targets tend to curb unnecessary services (Santerre–Neun 38).

Many feel that it is inaccurate to characterize the Canadian system as “single – payer” because the provincial plans vary considerably. In spite of the differences it is fair to say that each provincial plan is a public – sector monopsony, serving as a single buyer of medical services within the province and holding down medical care prices below market rates. By U.S. standards, physicians’ incomes are on average low. In 1992 the average income of self employed physicians was \$104,000 adjusted for purchasing power parity, about five times the average Canadian worker, but less than two thirds that of the typical U.S. physician.

The key element in the Canadian strategy to control overall spending is the regionalization of high – tech services. Government regulators make resource allocation decisions. This control extends to capital investment in hospitals, specialty mix

of medical practitioners, location of recent medical graduates, and the diffusion of high tech diagnostic and surgical equipment. In 1997 Canada’s 53 MRIs meant one for every 572,000 citizens (contrast that figure to 2046 MRIs in the U.S., one for every 130,800 Americans). Access to open heart surgery and organ transplantation is also restricted.

That same year the 245 CT scanners in Canada meant one for every 123,500 citizens. The United States had 3667 CT scanners, one for every 73,000 Americans (Henderson 487).

Recent studies found Canadian deficits in several areas including angioplasty, cardiac catheterization and intensive care. Waiting lists for certain surgical and diagnostic procedures are common in Canada. Nationwide, the average wait for treatment is 13.3 weeks. The average waiting time in more than 80% of the procedures is one third longer than Canadian physicians consider clinically reasonable. If care required diagnostic imaging, waiting times are even longer. Canadians are sacrificing access to modern medical technology for first dollar coverage for primary care. Treatment delays are causing problems for certain vulnerable segments of the Canadian population, particularly the elderly who cannot get reasonable access to the medical care they demand, including hip replacement, cataract surgery and cardiovascular surgery.

Several lessons can be learned from the Canadian experience. When government provides a product “free” to consumers, inevitably demand escalates and spending increases. Products provided at zero price are treated as if they have zero resource cost. Resource allocation decisions become more inefficient over time and government is forced either to raise more revenue or curb services. A number of the provincial health plans are moving to reduce spending by dropping services from the approved list of the “medically necessary”. A second lesson from the Canadian experience is that everything has a cost. When care requires major diagnostic or surgical procedures, the “free” system must find some other mechanism to allocate scarce resources. The Canadian system delegates this authority to the government. Resource allocation is practiced, not through the price mechanism, but by setting limits on the investment in medical technology. Proponents will argue that using waiting lists as a rationing measure is reasonable and fair. Opponents find the lists unacceptable and an unwelcome encroachment on individual decision-making in the medical sector. Proponents of the single payer alternative must deal with the fact that Canadians face waiting lists for some medical services especially for high – tech specialty care. To avoid delays in treatment, many Canadians travel south to the United States for more advanced treatment.

Critics of the Canadian system must deal with the fact that most Canadians support their version of Medicare. The single most important defense of medical care delivery in Canada is that it works relatively well. Regardless of the problems faced by the system, critics must face the reality that the medical care system provides its residents with access to all “medically necessary hospital and physician services” at a fraction of the per capita cost of the U.S system.

2. GERMANY – SOCIALIZED MEDICINE—OVERVIEW, ORIGINS AND HISTORY

Germany's health care system has its origins in the "mutual aid societies" created in the early 19th century. The German system of social benefits is based on the concept of social insurance as embodied in the principle of social solidarity. This principle is a firmly held belief that government is obliged to provide a wide range of social benefits to all citizens, including medical care, old age pensions, unemployment insurance, disability payments, maternity benefits and other forms of social welfare. When Otto von Bismarck became Germany's first chancellor in 1871, hundreds of sickness insurance funds were already in operation. Bismarck saw the working class movement of that time as a threat. This concern led him to advocate the expansion of the existing sickness benefit societies to cover workers in all low wage occupations. In 1883, the Sickness Insurance Act was passed, representing the first social insurance program organized on a national level.

After WWII Germany was divided into two separate entities by the Allies. The German Democratic Republic (East Germany) was under the influence of the former Soviet Union and adapted the socialist form of government. The Federal Republic of Germany (West Germany) maintained its connections with the West and continued to utilize the pre-war economic system including the health care delivery system. East and West Germany were reunited in 1990 and since that time the former East Germany has been subjected to most West German laws including legislation relating to the medical insurance system. With the combined population of 82 million people, Germany is divided into 16 provinces (Laender), each with a great deal of independence in determining matters related to health care. Over the past 130 years the system has grown to the point where virtually all of the population is provided access to medical care. All individuals are required by law to have health insurance. Those earning less than \$35,000 (1995) must join one of the sickness funds for their health care coverage (Henderson 495). Sickness funds are private, not-for-profit insurance companies that collect premiums from employees and employers. Those earning more than this limit may choose private health insurance instead. Approximately 74% of the population is compelled to join a sickness fund. Another 14% are members who join voluntarily even though their income exceeds the statutory cutoff. Of the remaining portion, 10% is covered by private insurance and 2% by police officers insurance, student insurance and public assistance. One of every 10 Germans covered by sickness fund insurance also purchases private supplementary insurance to cover co-payments and other amenities.

Individual health insurance premiums for workers are calculated on the basis of income and not age or the number of dependents. Premiums are collected through a payroll tax deduction; the average contribution was 13.4% of workers gross salary in 1993. The social insurance component is organized around some 500 localized sickness funds. The sickness funds are independent and self-regulating. They pay providers directly for services provided to their members at rates that they negotiate with individual hospitals. Regional groups of funds negotiate with regional doctors' and dentist' associations for

payment for ambulatory and dental care. Payment from these funds represents about 70% of health care spending (Folland et al. 537).

The sickness funds are required by law to provide a comprehensive set of benefits. These include physician ambulatory care provided by physicians in private practice, hospital care, home nursing care, a wide range of preventive services and even visits to health spas. Patient cost sharing is minimal. The funds, like disability insurance also provide additional cash payments to those who are unemployed as a result of illness. The system is weak in several areas. In particular, public health services and psychiatric services are minimal. As for reimbursement, ambulatory providers are paid on a fee for service basis, hospitals on a prospective basis. Both public and private (including for profit) hospitals exist, though the public hospitals account for about half the beds. Hospitals tend to use salaried physicians, and unlike the United States physicians in private practice generally do not have admitting privileges. Thus, many doctors have invested in elaborately equipped clinics to compete with hospitals by being able to perform a wide range of procedures.

The German experience is especially relevant to the United States. Coverage is provided through a large number of relatively small and independent plans. In this sense, the delivery of health care is similar to that found in the United States where, for the most part, large numbers of employee groups, independent insurers, and providers reach agreements without direct government intervention. Many Americans propose mandated coverage for the working uninsured. Germany relies on a mandated approach where coverage for certain conditions is required by law. Germany also introduced cost controls similar in principle to prospective payment under the U.S. DRG mechanism.

2.1. Government Role and Involvement

In the German health care system, each level of government has specific responsibilities. The central government passes legislation on policy and jurisdiction. State governments are responsible for hospital planning, managing state hospitals, and supervising the sickness funds and physician associations. Local governments manage local hospitals and public health programs. Decentralization is extensive. The sickness funds and physician associations have considerable administrative autonomy. Despite this autonomy, government intervention is extensive and has been increasing steadily. Expenditures of the sickness funds grew rapidly in the 1960's and early 1970's. As a result, the Cost Containment Act of 1977 introduced a fixed budget for payments by the sickness funds to the physician associations. In essence, this program is similar to prospective payment schemes developed in the United States. The Health Care Reform Act of 1989 introduced more major changes. These were directed at attempts to further reduce the growth of health expenditures through means familiar to those in the United States. The changes included greater cost sharing, a strategy increasingly favored in Germany's many reform efforts. The act also attempted to control hospital costs through reductions in hospital capacity, hospitals inpatient admissions, and hospital expenditures on capital equipment.

As costs continued to rise for the sickness funds at a rate faster than the rise in incomes, the call for reform continued. In 1993 the Health Care Reform Act was passed which intro-

duced supply-side competition. These reforms gave members the freedom to choose among a range of sickness funds whose revenues would be determined by the risks of their members. The reforms further changed the hospital payment system from a per diem payment to a DRG – styled prospective payment basis.

Germany's success in controlling costs can be attributed to the institutional framework of the system itself. By linking medical expenditures to the income of sickness fund members, the success of the strategy depends upon the continued growth in wages and salaries and the success of the negotiations between the sickness funds and medical practitioners. The cost containment measures have resulted in a dramatic decrease in the relative salaries of primary care physicians, which have fallen from 5.1 times the average for wage and salary workers in 1975 to 2.7 times that average in 1990. By U.S. standards, physician's salaries are relatively low. In 1993, the average German physician earned \$75,700 with general practitioners receiving \$64,300 on average and orthopedic surgeons receiving \$107,600. More than 100,000 students attend one of the 29 medical schools run by the state. After completing the six-year curriculum, physicians must first practice in a hospital setting for five years before they are allowed to enter private ambulatory practice. Hospitals also have less high technology diagnostic, therapeutic, and surgical equipment than is available in the typical urban hospital in the United States. Germany has 22.6 percent fewer MRI units per million compared to the United States. The one area where Germany has more technology is CT scanners, where they have 17.1 per million population compared to 13.7 per million in the United States (Henderson 497).

The German system suffers from several problems that bring into question its ability to contain costs over the long term. Possibly the biggest problem with the system is its reliance on third party payment providing virtually no role for the cost-conscious consumer. Patients have no incentive to limit their demand and medical providers have no incentive to limit their supply. Nothing would lead competitive forces to reduce costs. The only competition is among medical practitioners to attract more patient volume. The ability of the system to control costs depends solely on the relative bargaining power between sickness funds and medical providers. Another problem with the system is its tendency to use resources inefficiently. Incentives promote the provision of invasive acute care procedures and discourage the provision of personal services. Based on the latest available OECD figures, Germans see their doctors more often, are provided more prescription drugs, have a higher hospital admission rate, and stay in the hospital longer than citizens of the major developed countries in the OECD. The average lengths of stay in the hospital are much longer in Germany than in the United States (12.0 days compared to 7.1 days). Significant excess capacity in the number of hospital beds relative to the population means 9.3 per 1000 population in Germany compared 3.7 per 1000 in the United States.

After examining the performance of the German system, we may question whether it is the United States or Germany that has the better system. Surveys of public opinion indicate that Germans by and large are satisfied with their health care system (as opposed to the U.S. where a large portion of the population thinks that system needs substantial changes). The inability to contain costs in the 1990's is partly an artifact

of Germany's reunification. The former East Germany added considerably to Germany's health care spending without adding much GDP. The German health care system also faces additional cost pressures from having a much older population than the United States does. Germany has achieved a favorable rating along other criteria. It has a publicly funded system with virtually universal coverage but has avoided queues and extensive government intrusion. Both patient and provider have considerable autonomy. Germany has managed to achieve cost control by establishing an explicit trade off between volume and price. When utilization is higher than anticipated, fees are lowered proportionally. In addition, spending caps instituted in the mid 1980s as a temporary cost containment measure have become permanent. New laws adopted in 1993 and 1997 designed to increase competition among sickness funds, lowered pharmaceutical prices and physicians' fees, increased required co-payments, and placed more regulations on hospital billing practices, all to reach desired spending targets. Even with all these new changes, support for the system remains high, in part because wealthy Germans have a private insurance safety valve and the ability to buy more physician time and better services.

On the other hand, the German health system faces a new challenge. The German population is aging rapidly, causing a demographic change that will place severe pressure on its social security and health care programs.

3. UNITED STATES – PRIVATE MARKETS & PLURALISM

The United States has no single nationwide system of health insurance. Health insurance is purchased in the private marketplace or provided by the government to certain groups. Private health insurance can be purchased from various for-profit commercial insurance companies or from non-profit insurers. About 84% of the population is covered by either public (26%) or private (70%) health insurance. Approximately 61% of health insurance coverage is employment related, largely due to the cost savings associated with group plans that can be purchased through an employer (Santerre and Neun 46). Employers voluntarily sponsor the health insurance plans. Rather than purchasing an insurance policy from an external party (commercial insurance company) employer and employee premiums sometimes fund an internal health insurance plan. The fully self-insured firm assumes all the risk for its employees' health care costs. A partially self-insured firm limits the risk it assumes by purchasing "stop loss" insurance coverage, which protects it from incurring costs over a specified maximum amount. In either case, the firm usually contracts with a third party to administer the health insurance program.

A conventional health insurance plan, which allows unrestricted choice of health care provider and reimburses on a fee for service basis, presently covers less than 30% of all employees. Even these plans provide some type of utilization management program (e.g. preadmission certification, concurrent review of length of stay, and mandatory second opinions for surgery). Traditional plans differ depending on the medical services that are covered and the co-payment and deductible amounts. Rather than enroll employees in a traditional insurance plan, most employers have turned to managed care health insurance plans. Managed care organizations are defined as "systems that

integrate the financing and delivery of appropriate health care services to covered individuals by means of: arrangements with selected providers to furnish a comprehensive set of health care services to members; explicit criteria for the selection of health care providers; formal programs for on going quality assurance and utilization review; and significant financial incentives for members to use providers and procedures associated with the plan” (SBHID 167).

There are basically two types of MCOs: Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs). About 70 percent of employees are currently enrolled in MCOs. HMO is a health care delivery system that combines the insurer and producer functions. HMOs are pre – paid and in return provide comprehensive services to enrollees. PPOs are a third party payer that offers financial incentives such as low out – of – pocket prices, to enrollees who acquire medical care from a preset list of physicians and hospitals. A PPO is also a prepaid type of MCO that combines the insurer and producer functions.

In addition to private health insurance nearly 26% of the U.S. population is covered by public health insurance. The two major types of public health insurance, both of which began in 1966 are Medicare and Medicaid. Medicare is a uniform national public health insurance program for aged and disabled individuals. Administered by the federal government, Medicare is the largest health insurer in the country, covering about 13 % of the population. The Medicare plan consists of two parts. Part A is compulsory and provides health insurance coverage for inpatient hospital care, very limited nursing home services and some home health services. Part B the voluntary or supplemental plan provides benefits for physician services, outpatient hospital services, outpatient laboratory and radiology services and home health services. Part A of Medicare is funded by a Medicare tax that is similar to the Social Security tax, and Part B is financed by monthly premiums (25%) and general taxes (75%). The Medicare patient is also responsible for paying a deductible and a co-payment for most part B services and for long-term hospital services under part A. Many Medicare recipients also choose to purchase Medigap insurance, a private health insurance plan offered by commercial insurance companies that pays for medical bills not fully reimbursed by Medicare (Hoffman et al. 180).

The second type of public health insurance program, Medicaid, provides coverage for certain economically disadvantaged groups. Medicaid is jointly financed by the federal and state governments and is administered by each state. The federal government provides state governments with a certain percentage of matching funds ranging from 50 to 77%, depending on the per capita income in the state. Coverage under Medicaid varies because states have established different requirements for eligibility. Individuals who are elderly, blind, disabled or members of families with dependent children must be covered by Medicaid for states to receive federal funds. Additionally, although the federal government stimulates a certain basic package of health care benefits (e.g. hospital, physician and nursing home services), some states are more generous than others. Following that, individuals in certain states receive a more generous benefit package under Medicaid than those in others. Medicaid is the only public program that finances long – term nursing home stay. Medicaid covers approximately 12%

of the population.

However, another category of individuals exists: those who are uninsured. Approximately, 16 % of the population is estimated to lack health insurance coverage at any point in time. This does not mean these individuals are without access to health care services. Many uninsured people receive health care services through public clinics and hospitals, state and local health programs, or private providers that finance the care through charity and by shifting costs to other payers. Nevertheless, the lack of health insurance can cause uninsured households to face considerable financial hardship and insecurity. The uninsured often find themselves in the emergency room of a hospital after it is too late for proper medical treatment.

The U.S. health care system is much diversified in terms of production methods. Government, not – for – profit, and for – profit institutions all play a role in health care markets. Primary care physicians in the United States function in the private for – profit sector and operate in group practices, although some physicians work for not – for – profit clinics or in public organizations. In the hospital industry, the not – for – profit is the dominant form of ownership. Not – for – profit hospitals control about 70 percent of all hospital beds. A different picture can be seen in the nursing home industry, where 70 percent of all nursing homes are organized on a for – profit basis (Santerre and Neun 52).

Up to the early 1980s most insured individuals had full choice of health care providers in the United States. Consumers could choose to visit a primary care giver or the outpatient clinic of a hospital, or see a specialist if they chose to. The introduction of various Managed Care Organizations and such new government policies as selective contracting (a situation when a third party contracts exclusively with a preselected set of medical providers) have limited the degree to which consumers can choose their own health care provider. For example, those individuals belonging to a staff HMO must receive their care exclusively from that organization; otherwise they are fully responsible for the ensuing financial burden. The primary care giver acts as a gatekeeper and must refer the patient for additional care. The lower premiums of a staff HMO compensate consumers at least to some degree for the restriction of choice. Even those individuals belonging to the less restrictive PPO face a financial penalty when choosing health care providers outside the network.

3.1. Reimbursement process

Unlike in Canada and Europe, where a single payer – system is the norm, the United States possess a multiplayer system in which a variety of third – party payers, including the federal and state governments and commercial health insurance companies are responsible for reimbursing health care providers. Reimbursement takes on various forms depending on the nature of the third party payer. The most common form of reimbursement is fee – for – service, although prospective payment (a method of payment used by third – party payers in which payments are made on a case by case basis) and prepaid health plans are becoming more popular. Most traditional health insurance plans reimburse health care providers on a fee for service basis. Health care providers contacting with most MCOs are paid on a fee – for – service basis.

Physician services under Medicare (and for the most part

Medicaid as well) are also reimbursed on a fee for service basis, but the fee is fixed by the government. Traditionally, the fees were based on the “usual, customary and reasonable fee”. This means the fee was limited to the lowest of the three charges: the actual charge of the physician, the customary charge of the physician, or the prevailing charge in the local area. Since 1992 physician services to Medicare patients are reimbursed according to a point system called the “Resource Based Relative Value Scale” RVS system. Various physician services are assigned points based on resource costs, such as the time and intensity of the physician’s work, practice expenses and mal-practice insurance expenses. The RVS is transformed into a schedule of fees when it is multiplied by a dollar conversion factor and a geographic adjustment factor that allows fees to vary in different locations (Santerre and Neun 49).

Under both Medicare and Medicaid, the physician can choose to accept assignments of patients. If the physician accepts the assignment, he or she agrees to accept the government determined fee in full and cannot charge the patient an additional amount beyond the normal 20 percent co-payment. The physician must also agree to treat all Medicare patients for all services. A physician who does not accept assignment can charge patients a price higher than the Medicare fee and accept patients on a case-by-case basis. Without assignment, a patient pays the actual physician charge and receives reimbursement for 80 % of the Medicare fee.

In contrast to the fee – for – service method, some health care providers are paid on a fixed – fee or prospective basis. For example, the consumer prepays the staff HMO, and physicians are paid on a salary basis. The consumer also prepays the individual practice association HMO, however, health care providers are usually paid on a fee – for service or capitation basis.

Since 1983, the federal government has reimbursed hospitals on a prospective basis for services provided to Medicare patients. This Medicare reimbursement scheme, called the “diagnosis related group” (DRG) system, contains around 500 different payment categories based on the characteristics of the patient (age and sex), primary and secondary diagnosis, and treatment. A prospective payment is established for each DRG. The prospective payment is claimed to provide hospitals with an incentive to contain costs. Beginning in the early 1980s, many states instituted selective contracting, in which various health care providers competitively bid for the right to treat Medicaid patients. Under selective contracting, recipients of Medicaid are limited in the choice of health care provider. Moreover, to better contain health care costs and coordinate care, the federal government and various state governments have attempted to shift Medicare/Medicaid beneficiaries into MCOs. As of 1997, about 48% of all Medicaid recipients and roughly 15% percent of all Medicare beneficiaries are enrolled in MCOs (Santerre and Neun 50).

3.2. Equity and efficiency – Analysis and Evaluation

The advanced state of technology is the greatest strength of the U.S. health care system. Premature babies for example, face relatively good chance of surviving if they are born in the United States because of the state of technology. A relatively high life expectancy after age 80 is another reflection of the advanced state of health care technology in the United States.

People 80 years and older in the U.S. tend to live longer than their counterparts in most other countries because of the abundance of advanced medical technology. Also the United States continues to be the world leader in pharmaceutical innovation. These products save, extend and improve the quality of lives.

Unfortunately, the U.S. health care system is not without weaknesses. Its most glaring weakness is exemplified by the fact that more than 42 million people are without health insurance. The lack of health insurance creates medical access problems and subjects a family’s income to the vagaries of health status. The inability to successfully control costs is another major weakness of the U.S. health care system. The growth of health care costs continues unabated, although the pace has slowed in recent years mostly due to the influence of managed – care organizations. Whether managed care can continue to slow the growth of health care costs remains questionable. Eliminating the weaknesses while maintaining the strengths is a challenge faced by any plan for changing the U.S. health care system.

	1998	Canada	Germany	United States
Population (mil.)		30.2	80.2	270.3
GDP per capita		\$ 23,368	\$ 22,951	\$ 30,625
Health care spend. per capita		2,312	2,424	4,178
Health care spend. (% of GDP)		9.5	10.6	13.6
# of physicians (per 1000)		2.1	3.5	2.7
# of hospital beds (per 1000)		4.7	9.3	3.7
Avg. length of stay (days)		8.4	12.0	7.1
CT Scanners (per million)		8.2	17.1	13.7
MRI Units		1.8	6.2	7.6
Lithotriptors		0.5	1.7	2.3

Table 1. Empirical Evidence and International Comparisons. Source: OECD Health Data 2000, OECD, Paris, 2000

From the table we can see that the United States has the largest GDP per capita and the largest health care spending per capita. The number of physicians per 1000, number of hospital beds per 1000 and average length of stay (days) are largest in Germany. The United States is ranked at the bottom of the list in terms of hospital beds per 1000 at 3.7 beds and average length of hospital stay at 7.1 days.

Medical care spending in the U.S. is the highest in the world, both in per capita terms and as a percentage of gross domestic product.

Country (1998)	Males	Females	Males	Females	Infant Mortality Rate
U.S.	73.9	79.4	16.0	19.1	7.2
Canada	75.8	81.4	16.3	20.1	5.5
Germany	74.5	80.5	15.3	19.0	4.7

Table 2. Life Expectancy at Birth and Life Expectancy at Age 65. Source: OECD Health Data 2000, Paris: Organization for Economic Cooperation and Development, 2000.

Comparative Health Care System statistics (1998) for these three countries show that the United States has the highest infant mortality (7.2) per 1000 and Germany has the lowest rate (4.7). The mortality rate in Canada is (5.5) per 1000. The percent of population greater than 65 years according to 1996 data is 12.1 % in Canada, 12.2 % in the U.S., and 15.3 % in Germany.

4. CONSUMER SATISFACTION WITH HEALTH CARE SYSTEMS IN 3 COUNTRIES

One interesting question is whether people in various nations are satisfied with their current health care system. From the data several conclusions are worth mentioning. The first is that Canadians are most satisfied with their health care system. The Canadian health care system offers national health insurance financed by taxes, private production of health care services, and regulated budgets and fees for health care providers. Approximately 56% of the respondents in Canada believed the health care system requires only minor changes, and only 5% thought the system needs complete rebuilding.

The second conclusion to be drawn is that people in the United States are the least satisfied with their current health care system. Only 10 % of the respondents believed that the present health care system could be improved with minor changes, and an overwhelming 60% thought the system needs fundamental changes. In addition, 3 out of every 10 respondents in the United States believed the health care system requires a complete restructuring. The surveyors speculated that the dissatisfaction with the present U.S. health care system is due to the financial insecurity caused by inadequate insurance protection and high out-of-pocket costs. The third conclusion is that the presence of a national health care (or socialized medicine) plan does not guarantee high levels of consumer satisfaction. In Germany for instance 48 % of those surveyed indicated that the system either needed fundamental changes or needed to be rebuilt completely.

1990	Minor Changes Needed	Fundamental Changes Needed	Completely Rebuild System
Canada	56 %	38%	5%
W. Germany	41%	35%	13%
United States	10%	60%	29%

Table 3. Changes needed to improve health care systems in Canada, Germany and USA. Source: Robert J. Blendon, Robert Leitman, Ian Morrison, and Karen Donelan, "Satisfaction with Health Systems in 10 Nations," Health Affairs 9 (summer 1990) Exhibit 2

The data suggests that the Canadian and German systems appear to be more effective than the U.S. system in several respects. Costs are lower, more services are provided, financial barriers do not exist, and health status as measured by mortality rates is superior. Canadians and Germans have longer life expectancies and lower infant mortality rates than do U.S. residents. However, the comparisons do not tell the whole story, nor do they necessarily imply that the United States should adopt the Canadian or German approach. Some have argued that a system that is manageable for a population of 30 or 80 million people cannot easily be adapted to a more pluralistic, heterogeneous country with a population of nearly 280 million.

5. RECENT DEVELOPMENTS—CANADA

Many Canadians are no longer confident that the provinces will be able to afford their current systems. As a result of unprecedented federal deficits the Canadian government has

reduced substantially its cash transfers to the provinces. Growing complaints about long lines for diagnosis and surgery, as well as widespread "line-jumping" by the affluent and connected, are eroding public confidence in Canada's national health care system.

A recent government study indicated that 4.3 million Canadian adults – or 18 % of those who saw a doctor in 2001 – reported they had difficulty seeing a doctor or getting a test or surgery done in a timely fashion. 3 million Canadians are unable to find a family physician, according to several private studies, producing a situation all the more serious since it is the family doctor who refers patients to specialists and medical testing.

Overworked technology is one reason for the long lines; others include a shortage of nurses and inefficient management of hospital and other health care facilities, according to several studies (Krauss 3).

Waiting times have also increased because an aging population has put more demands on the system, while the current generation of doctors is working fewer hours than the last. Waiting can occur at every step of treatment. A study by the conservative Fraser Institute concluded that patients across Canada experienced average waiting times of 16.5 weeks between receiving a referral from a General Practitioner and undergoing treatment in 2001 – 2002, a rate 77 percent longer than in 1993. The recent Senate report noted that waiting times for MRI, CT and ultrasound scans grew by 40 % since 1994.

In an effort to reduce waiting lists, some Canadian provinces (Alberta, Nova Scotia and Ontario) have established about 30 private MRI and CT clinics, some of which offer non emergency services to be paid for by private insurance.

6. RECENT DEVELOPMENTS—GERMANY

Like other countries, Germany's health care system faces growing demands from an aging population and advances in medical technologies. But in the context of slower economic growth, stagnant incomes, and a consensus that labor costs cannot rise much more without disastrous effects on competitiveness and employment, payroll based financing is not a sufficient revenue based (Giaino 145). Even if payroll taxes were permitted to rise, the resultant unemployment and inactivity could, in the end, lead to a financing crisis of the social insurance system.

A number of proposals aimed at putting health care financing on a sounder and more equitable footing were presented in the late 1990s. These included raising the income ceiling for contributions, bringing civil servants and the self employed into statutory health insurance, and bringing non-wage income and assets under the contribution levy. Other proposals would have simply shifted costs from employers to employees. One such proposal would have fixed employers' share of the contribution and let employees side float, with the latter financing the difference. A more radical option suggested the abolition of contribution-based insurance and its replacement with compulsory individual insurance, while compensating employees with a "wage subsidy". However, there was no real political support for this proposal and the immediate outcome was political paralysis.

Future German governments face difficult choices in continuing to ensure that all individuals have access to high quality care at an affordable cost. Thus far, however, the political and sectoral configurations underlying German health politics have impeded radical changes in governance or financing. Most stakeholders still want to maintain the status quo. However, the situation is dynamic, not set in stone. The power of preferences of politicians could change in the future in ways that would tolerate a bolder departure from the present governance system or radical changes in financing. Such changes could either expand or undermine solidarity – or they might prompt a search to redefine it. Given the presence of powerful countervailing forces in the health sector and in the political arena, successful adjustment will likely hinge on forging a consensus with these stakeholders over a new conception of solidarity that continues to ensure broad provision, spreads the burden of adjustment fairly, and shelters the most vulnerable from harm (Giaimo 147).

United States – Recent Developments

From the discussions that were presented above we can see that the prices and expenditures on various medical services continue to rise in the US, although at a slower rate than in the past. The transition to managed care health care system has helped to promote some cost savings in various medical care markets but has also resulted in some rationing of care. Choice of physician, physician autonomy and income, hospital inpatient admissions, and selection among pharmaceutical products have all been greatly limited by the movement to a managed care health care system in the United States. These limitations pertain not only to private managed care insurance plans but also to managed care plans under the auspices of the Medicare and Medicaid programs. Moreover, it seems that competition in the health care sector may have sown the seeds of its own destruction. For instance, benefit denial and cherry picking behavior take place in the private health insurance industry because of competition. Induced demand in the physician services industry and the medical arms race in the hospital industry are argued to occur because of competition (Santerre and Neun 560).

In the discussion, it is important to compare the US health care system with health care systems in other advanced industrialized countries. Canada and Germany involve a single payer system rather than a multiple payer system like that of the US. Their health care systems provide nearly universal access to medical care services and involve a greater financing and regulatory role for the federal government and less reliance on competition in health care matters. The available data suggests that the US spends more on medical care as a fraction of GDP than to the other two countries. In fact, as a fraction of GDP, the US spends slightly over 35% more than Germany, the next biggest spender. Comparatively high health care expenditures coupled with low medical utilization rates have led some to believe that medical prices must be significantly higher in the US than in the other two countries. The quality of medical services may be higher in the US and account for the alleged higher medical prices. Evidence suggests that waiting times are shorter for most medical services in the United States. In addition, the government in the US is responsible for financing about 44% of all health care spending. The comparable figure for other countries is well over 90% (Anderson, 1997).

Many analysts have concluded that health care costs and infant mortality are lower in other countries because a government plays a more dominant role in the health care sector and because there is universal access to health insurance. Many health care policy analysts believe that a similar approach can produce better results in the US.

Many people in the US are dissatisfied with the performance of the health care system. The cost of health care in the United States is alleged to be rising faster than in any other country. Many worry that the health care monster will continue to devour an increasingly large slice of the economic pie. Moreover, at any one point in time, critics note that one out of every six non-elderly citizens lacks insurance coverage for acute care. Many others in the US are seriously underinsured or lack proper long-term care insurance coverage. A number of health care analysts and policy makers are searching for ways to improve the American health care system.

Various groups have advanced a large number of health care reform plans. The plans differ in a number of respects, especially concerning the role the individual, employer and government play in the financing of medical insurance and the functions the government and marketplace serve in the allocation of health care resources.

Several distinctive new approaches and plans have been proposed to improve and reform the US health care system. Four different approaches have surfaced in recent times; those include medical savings accounts, individual mandates, managed competition and national health insurance (Santerre and Neun 565). Medical savings accounts programs are not designed to achieve universal coverage. However, health insurance premiums should become more affordable when they become tax deductible and apply mainly to catastrophic plans. Tax credits and subsidies are used to make health insurance more affordable for poor individuals. The plan is financed primarily out of individual contributions to medical savings accounts. The government expenditures on Medicare and Medicaid would end and the deficit should diminish accordingly. Because consumers pay for most health care expenditures out of their own “Medisave” accounts, they have the incentive to minimize waste and shop around for competitive prices. A reduction in administrative expenses also translates into cost savings.

The individual mandates plan is implemented through mandated insurance coverage and a guarantee by the government that basic medical coverage is available across the country. Tax credits and subsidies are available to make coverage affordable to all. Under this plan near universal coverage would be attainable. The plan is financed largely by premium payments by consumers either directly or through employers. A tax increase is necessary which negatively affects the budget deficit. Under this plan, both Medicare and Medicaid would be eliminated. Costs are contained through the maintenance of a highly competitive medical insurance market. Private insurance vendors are disciplined by the market place to provide competitive prices to consumers.

Under managed competition plan employers are required to provide medical coverage to all full time workers. Subsidies are provided to make it possible for low-income families to purchase medical insurance. Medicaid and Medicare are maintained and almost universal coverage should be possible. Medical coverage is financed primarily through employer man-

dates so employees most likely pay through foregone wages. Government expenditures are paid through a payroll tax. The impact on the deficit should not be too significant. Cost containment results from the maintenance of a highly competitive private insurance market. A uniform benefit package is offered, and employers are required to pay for 80% of the representative plan. The remaining 20 % provides an incentive for consumers to shop wisely. This plan would likely have a significant effect on employment because employer mandates may create substantial distortions in labor markets, especially among low – wage workers.

Finally, a national health insurance system would provide universal coverage for all citizens. Medical coverage is financed out of an income tax. In addition, funds for Medicare and Medicaid are diverted to partially offset the cost of the plan. An employer tax equal to the cost of employer – financed medical insurance is levied. Costs are contained through the utilization of a single payer system that decreases the administration and billing costs that are the byproduct of a multi-payer system. Moreover, global budgeting is used to establish a constant relation between gross domestic product and health care expenditures. Employment effects will be concentrated in the private insurance market and health care administration (Santerre and Neun 572).

In addition, the states in the US have taken a very active role in health care reform. Almost every state has initiated, or is contemplating, health care reform. Despite the fact that the policies vary immensely across states, the goal is always the same: simultaneously contain the growth of health care costs while improving access to quality care.

7. CONCLUSION

In this research paper we have examined different health care systems in Canada, Germany and the United States. Variations exist in terms of financing, provider payment mechanisms, and the role of government, including the degree of centralization. The United States stands out as the country with the highest expenditures on health care. It would appear that systems that ration their care by government provision or government insurance incur lower per – capita costs. On the other hand, in the largely private system in the United States, waiting times tend to be shorter than in rationed systems, a conclusion that follows simply from theory as well as from observation. Americans have been more dissatisfied with their health system than Canadians or Germans have been with theirs. Many characterize the main gap in the American system as the problem of the uninsured – more than 40 million people. While this does not mean that they go entirely without care, the uninsured consume only half as much health care on average as the insured.

Among three countries, the United States is by far the biggest spender in absolute per capita terms. It is also the biggest spender as a share of GDP. Germany manages to provide a health system that delivers universal health insurance while avoiding queues that often trouble government systems. However, costs per capita have been increasing faster than the incomes per capita, a problem leading to strenuous reforms in the 1990s.

Many Americans feel that Canada has successfully developed a comprehensive and universal national health insurance

program that is both cost effective and popular.

Compared to the US system, the Canadian system has lower costs, more services, universal access to health care without financial barriers, and superior health status. Canadians and Germans have longer life expectancies and lower infant mortality rates than do US residents.

Part of the gap between US and Canadian health care costs may be explained by a failure to account for Canadian hospital' capital costs, larger proportion of elderly in the United States and higher level of spending on research and development in the US.

One should mention that data from different countries may not be directly comparable for several reasons and therefore, should be accepted with some skepticism.

For instance, no standard taxonomy exists across countries. Also in practice it is often very difficult to draw a line separating medical services such as acute and long-term care services. In addition, monetary values for health care expenditures and gross domestic product must be converted to a common denominator such as US dollars, before meaningful comparison can be made. Any conversion factor, such as purchasing power parities or currency exchange rates is not without measurement error (Santerre and Neun 561).

Finally, most Canadians and Germans think that their health care systems need minor to moderate changes, while in the United States a substantial portion of the population thinks that large and fundamental changes are needed. Each health care system analyzed above is experiencing a continuous process of changes and improvements and all three systems fight the never-ending battle of cost containment, provision of quality services and maintaining and expanding access to health care. This goal is one that they can only hope to attain or come close to. Large portions of the economic pie are consumed by the health care systems in these three countries and the importance of health care is likely to have an even greater significance in the years to come. Consequently, it will be fascinating to observe the future developments and improvements in the health care systems of Canada, Germany and the United States.

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