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Do the Experiences of Other Health Care Systems Identify Incentives for a Cost-Effective Universal Health Care System in the United States?

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# DO THE EXPERIENCES OF OTHER HEALTH CARE SYSTEMS INDENTIFY INCENTIVES FOR A COST-EFFECTIVE UNIVERSAL HEALTH CARE SYSTEM IN THE UNITED STATES?

R. Daniel King

An Abstract Presented to the Faculty of the Graduate School of Lindenwood College in Partial Fulfillment of the Requirements for the Degree of Master of Science in Health Administration



Each health system used various incentives to achieve lower cost and better utilization of services. In some cases there was evidence that particular incentives demonstrated considerable success with no negative side-effects, while others were effective but introduced new problems.

The results of this analysis did support that other universal health care systems contained examples of proven *incentives* that if incorporated would benefit a universal health care system in the United States.

# DO THE EXPERIENCES OF OTHER HEALTH CARE SYSTEMS IDENTIFY INCENTIVES FOR A COST-EFFECTIVE UNIVERSAL HEALTH CARE SYSTEM IN THE UNITED STATES?

R. Daniel King

A Culminating Project Presented to the Faculty of the Graduate School of Lindenwood College in Partial Fulfillment of the Requirements for the Degree of Master of Science of Health Care Administration

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#### Chapter I

#### INTRODUCTION

# DO THE EXPERIENCES OF OTHER HEALTH CARE SYSTEMS IDENTIFY INCENTIVES FOR A COST-EFFECTIVE UNIVERSAL HEALTH CARE SYSTEM IN THE UNITED STATES?

America's health care system is in chaos. It is presently a consumption machine that is costly, cumbersome, and frustrating for providers, patients, governments and third party payers. Health care costs have spiraled upward at a rate of 12% plus per year since 1970 (Iglehart 964).

In 1992 U.S. health care expenditures were \$840 billion, representing 14 percent of total annual economic output. Despite spending the highest percentage of gross national product than any other industrialized nation there are still 36-37 million uninsured Americans with over half of these uninsured Americans employed. The composition of these uninsured individuals, according to the Employee Benefit Research Institute, is: 34.4% working heads of family; 26.0% children; 21.6% working dependent; 17.0% unemployed; and 1.0% elderly (Trim 3). Slowing down the projected cost of health care and insuring the uninsured

undoubtedly will be the central thrust of any reform proposal by the federal government.

Each participant in health care has come to the realization that systematic reform is essential to controlling the spiraling cost of health care. In order to have systematic reform, the present inefficient and chaotic health care industry needs to evolve into an efficient health care system. In the present design, the health care industry is not systematic; consequently, there is no health care "system". A system implies that all health care providers are interdependent and form a unified whole (Webster's 1175). The term "chaos" best describes the health care industry today because, as defined in Webster's New Collegiate Dictionary... "chance is supreme" (Webster's 184).

One immediate solution that receives substantial support is that the federal government should establish a nationalized health care system. This solution has two inherent problems. First, the United States cannot afford a nationalized health care system without first addressing cost. Secondly, nationalized "anything" in the United States is a systematic and financial disaster. The present Medicare and Welfare programs

are monuments to government's inability to administer health care programs either efficiently or effectively.

History has taught Americans that government controlled health care is expensive and unpredictable. Ever since the implementation of the Medicare and Medicaid programs in 1966, the growth of health care expenditures have consistently outstripped the growth in expenditures for all other goods and services in the United States (Iglehart 964). Expanding federally controlled health care programs to the entire nation and expecting cost reductions in the author's opinion just will not happen.

In 1965 when Medicare was first enacted, cost projections for Medicare in 1990 were \$9 billion.

Actual cost in 1990 was \$111 billion! In the first week of April 1993, President Clinton released projected Medicare spending for 1993 at \$134.7 billion.

This was \$2.0 billion more than he projected only two months prior. This demonstrates that government expenditure projections for health care , both short and long range, are not dependable (Merline 1-2).

Americans have had it with the health care system.

There is substantial distrust and anger by both

patients and third party payers including the

businesses that pay the premiums (Johnson 2). There is little doubt that these negative reactions are being transmitted strongly to Congress. It is inevitable that some type of change in the health care system will be initiated by the Congress. With few exceptions, the 545 members of Congress only respond to the crisis of the moment or the political polls, and health care is a major crisis at this moment. Consequently, the elected politician will pass "something" now and will continue to add more and more benefits in response to pressures from voters and special interest groups. This increase in benefits has been the history of the Medicaid program where the federal government mandates that more coverage be offered recipients (Albritton 109). The concept of selling the public on a basic "affordable" package and then, once passed, quietly increasing benefits is a tactic still used by Congress.

Senator Edward Kennedy has proposed a bill that guarantees basic health benefits for all Americans.

The bill is designed as a basic package to help insure that it will pass without great opposition from business. It is viewed by Kennedy as a "step forward" in health care for Americans. His ideal package would have lower copayments and deductibles and broader

coverage. He does not hide the fact that once a basic package is passed, additional benefits will follow (Nexon 111). Unfortunately this translates into more and more future tax dollars.

One can easily conclude that Hillary Rodham
Clinton's claim of only \$30-90 billion additional
annual cost for universal health care could easily
blossom into \$200-300 billion (Miller A7). It has been
demonstrated that government's cost projections are
very conservative and are ultimately multiples of the
original projected cost. Presently the United States
cannot afford this substantial increase, whether it is
financed by deficit spending or increases in taxes.
Before any universal health care system is implemented,
some of the excesses and waste of the present system
need to be addressed.

The United States is confronted with the problem of assuring all citizens access to the health care system while preventing the bankruptcy of the nation. The need for the nation's elected officials to establish a strategic plan that ultimately brings health care to all Americans is tantamount to implementing, overnight, an unproven universal health system. The impact of forcing the cost of health care

for all Americans on business and tax payers in the near future could be disastrous for a fragile American economy.

The primary cause of the present chaos in American's health care system is financial. The United States spends 14 percent of its Gross Domestic Product (GDP) on health care. This is substantially higher than the 7.4 percent average of 24 other major industrialized nations (White 14). The financial problems of the health care delivery system have been well articulated by all participants, but the solutions have been fragmented and accusatory. Most recent blame is directed towards the high profile providers such as physicians and pharmaceutical companies. In the April 5, 1993 Newsweek a survey indicated that 60% of Americans feel the physician is the main cause for today's health care crisis (Wyman 28). The physician, as the gatekeeper to health care services, is an easy target to blame as succumbing to the so-called moral hazard. The moral hazard is the excess use of health care services because of third party payers will pickup the tab. But patients are also guilty of demanding unnecessary medical services when covered by insurance.

Remedies such as price freezes, universal rates established by government agencies, a one payer national health insurance, taxing the traditional notfor-profit hospitals, "sin" taxes, global budgeting etc., have all been offered as partial solutions. All of these remedies have one thing in common, and that is each attempts to manage the spiraling increase in the cost of health care. Other nations have attempted to control health care cost with some of the above "solutions". The contributing factors to high health care cost in the U.S., in some respect, are strikingly similar to other national systems.

As Americans are blaming fee-for-service as a major contributor to the spiraling cost, both Canada and Japan exclusively use fee-for-service reimbursement and experience less growth in health care cost than the U.S. but are experiencing over utilization problems (White 15). Other contradictions exist such as length of stay in the hospital, average number of beds per capita and hospital admission rate, each of which has been suggested as contributing to the spiraling cost of U.S. health care. The United States average length of hospital stay in 1988 was 7.2 days as compared to an average of 9.2 days for 17 European nations. The

average number of beds per 1000 population in the United States was 3.8 as compared to 5.1 for the 17 nations. Only 12.8 percent of the total United States population in 1988 were admitted to the hospital as compared to a 16.3 percent average for 17 European industrialized nations (White 14). Consequently, one has to find additional reasons for the spiraling health care cost in the United States.

One area that the Government Accounting Office

(GAO) has identified as having potential cost savings

for the United States is administrative cost. These

costs in U.S. hospitals are 15 percent as compared to

Canada's nine percent. Other areas of savings could be

insurance and physician administrative cost (White 15).

The insurance administrative costs in the U.S. ranges

between 11.9 to 34.4 percent of benefit payments as

compared to 1 percent in Canada. U.S. physicians spend

between 25 and 48 percent of expenditures on

administrative and billing overhead as compared to

Canadian physician's 18-34 percent (Danzon 22).

In spite of its difficulties, the United States health care system does have some strengths over other national health care systems. These areas include medical innovation, emphasis on managed care, and

superior management information systems (White 15).

Since other nations have lowered some of their health care cost without managed care, it is my contention that the United States would be better served in applying these proven cost savings methods to the existing health care system before going to a universal health care system based on either managed care or managed competition.

The American Medical Association defines managed care as:

the control of access to and limitation on

physician and patient utilization of services
by public or private payers or their agents
through the use of prior and concurrent review
for approval of or referral to service or site
of service, and financial incentives or

penalties (Iglehart 965)

Many argue that a universal health care system based on managed care will restrict patient choice of provider and treatment alternatives. There are also questions of whether new technologies would be readily available. The financial impact of managed care may be only a one-time savings with no long term cost control benefit (Staines 256).

Managed competition is centered in the concept that both providers and consumers are both organized. Providers would be organized as mammoth full service groups. Consumers would be organized as large employers, clusters of small employers, or represented in mass by insurers. These large groups are supposed to possess sufficient leverage in negotiating lower cost with suppliers and providers. This concept assumes that cost will be lower because a large organized delivery system could provide health care for less than the expensive "ala carte" approach of the present fee-for-service system (Simmons 1527).

The Clinton Administration has been touting the benefits of a managed competition health care system, a concept that was conceived by the Jackson Hole Group. This group of health care professionals became known as the Jackson Hole Group because of their annual meeting at the home of Dr. Paul Elwood in Jackson Hole, Wyoming. These very informal annual meetings were attended by CEO's and other leaders in industries involved in the health care industry to discuss solutions to America's health care problems (Simmons 1527).

Presently, there is no existing example of a managed competition system in health care. At this time it exists only in theory and has two limitations. One limitation is time of implementation. The Jackson Hole Group does concede that the implementation will take years. Consequently, the managed competition movement has been labeled the "The 21st Century American Health System" (Simmons 1527).

The second limitation is that managed competition is designed for markets of 200,000 to 500,000 consumers (Simmons 1527). Consequently, managed competition is an urban health care system and would not apply to many areas of the country. Therefore, policy makers will have to look to other systems to address the health care needs of rural America and markets that do not meet these parameters.

There is speculation that managed competition will not successfully contain health care cost without budgetary limits (Aaron 204). Budget limits can be a highly sensitive issue to providers and consumers in that services could be under paid and/or rationing of services could result.

An effective health care system, whether it is called managed care or managed competition, needs to

address the infinite health needs of Americans with finite dollars. One of the three Canadian principles for financing health care is "system wide spending controls" (White 15). Because of the present weak American economy, there will be pressure to put spending caps on health care. This would benefit both business and the government in the short run, but in this author's opinion spending caps would creat shortages and lower quality. Spending caps also allows the government to make the decision of how much "it" wants to spend on "our" health care.

assesses how each entity views a managed health care system. The consumer views a managed health care system as finite dollars for infinite services. The provider views a managed health care system as infinite dollars for finite services. The third party payer views a managed health care system as infinite dollars for finite services. The third party payer views a managed health care system as finite dollars for finite care. And the government agrees and disagrees with all of the above views depending on the audience. Here the dilemma lies, rooted in the cost society is prepared to bear, whether through taxes or health care premiums, the decision should remain with society and not the government.

The health care dilemma can begin to be solved if all four entities are prepared to learn from the successes of other national health care systems. The four entities in health care are government, the health care providers, the third party payers and the consumer. The government is convinced that greedy providers overcharge and defraud the patients. Health care providers are convinced that they offer a high quality of care at a price less than "real" cost.

Third party payers are convinced that all providers overcharge and need to be micro managed. The consumer is caught in the middle and does not know who to believe, but he does know that something is wrong with cost and access in the current health care system.

It is the intention of this paper to address the question of whether the United States health care system can lower cost by adapting policies that have been successful for other national health care systems and avoid those that have failed. This paper will explore the policies that have created incentives resulting in cost savings in Japan, Canada, Germany, Hawaii and Rochester, New York, health care systems.

## Chapter II

#### LITERATURE REVIEW

The public perception of the health care problem differs substantially from that of the health care experts. The public perceives the problem to be a profit problem rather than a cost problem. The majority of the public is convinced that "profits" are at the root of unnecessary tests, physicians being over paid, hospitals being wasteful, drug companies overcharging, and greedy lawyers filing frivolous law suits (White 10).

A survey in 1992 by the Public Agenda Foundation identified many areas in which the public perception of the health care problem is greatly distorted. The survey showed that 54 percent of the public believed that people over the age of 65 have no health care coverage. This same survey found that 64 percent of the public believed that welfare recipients had "no" health care benefits. Not only does the majority of the public not understand the health care coverage available to Welfare and Medicare recipients, but they do not understand the phenomenon of more older people living longer. Consequently, it is going to be very difficult for the government to convince the public

that Welfare and Medicare programs are major contributors to the cost of health care. This is emphasized by the fact that the public, at present, is convinced that most Welfare and Medicare recipients pay the majority of their own health care cost (White 10).

Because of these broad perception gaps about the fundamental issues of health care reform, it will be very difficult for the Clinton Administration to reach a consensus in universally changing the health care system (White 11). The presence of this perception gap adds further credence to the need for systematically addressing the inefficiencies of the present health care system prior to a major overall of the entire system.

For any type of universal change in the health care system to be effective, there has to be a consensus not only among the public, but also among the members of Congress. At the present, the Democratic Party leadership remains convinced that the existence of a Democratic president is the most powerful factor in achieving a consensus on health care issues. Most Congressional leaders believe that the purpose for health care reform is first, to control cost; second,

to assure access to good quality health care; and third, to provide preventive health care (Burke 16).

The most commonly mentioned means to control health care cost by the Congress has been global budgeting. There are mixed conclusions as to whether the effects of global budgeting would be a positive reform. Some feel that managed care cannot work without a global budget; others feel that global budgeting could lead to unworkable price controls, rationing and possibly denial of access (Burke 17). This difference of opinion on the impact of global budgeting offers one example of the difficulties facing the Congress in agreeing on a specific solution to universal access to health care.

The Clinton administration maintains one advantage in that the public clearly wants a change in the health care system. This consensus for change is in spite of the fact that there is no preference for a particular health care system. Sixty percent of the public does believe that whatever the change, the federal government should have the primary role in assuring access and controlling cost in the health care system (White 11). The federal government presently is pondering three proposals for financing health care.

They are: "play-or-pay"; "single-payer," or the Canadian model; and market reform (White 11).

The "play-or-pay" proposal would require all employers to either provide health insurance for their employees who qualify ("play") or pay a "tax" to a public insurance pool to cover the uninsured ("pay"). A version of this proposal has support from the Democratic leadership and the American Hospital Association (AHA). The Bush Administration adamantly opposed the "play-or-pay" proposal as expensive and unstable. Their fears were that it would mean higher taxes, fewer jobs, and eventually would evolve into a totally controlled government system (White 11).

The Washington, DC-based Urban Institute was contracted by the Labor Department to estimate the impact of a "play-or-pay" tax. With a nine percent payroll tax, 39 percent of the population would be enrolled in public insurance. A drop to seven percent payroll tax would increase the percentage to 52. In both cases the remaining population would be enrolled in an employer funded health care plan (White 12).

Not only is there deep division among the interested groups concerning the potential effects of "play-or-pay", but there is division within each group.

Small business owners see it as disastrous, yet other business leaders see it as a means to hold health care premium costs down (White 12).

The single-payer system or Canadian system has the federal government as the sole payer of health care. The government negotiates with health care leaders in order to set a global health care budget. The health care delivery system remains private with all financing done through public taxation. This proposal has some political support but produces fervent debate and disagreement among health care policy analysts (White 12).

The market reform proposal is an incremental approach to reform. This proposal would maintain the private, flexible system of choice that most Americans have come to expect. It also does not endorse one particular remedy as much as it is a blanket term for proposals that encompass the following options:

- \* promote managed care to control health care cost
- \* promote small-group market reform to help small businesses afford insurance for their employees,
- \* promote other insurance reforms to provide
  stability and increase access

- \* make changes in the tax code to provide incentives to buy insurance
- \* malpractice tort reform
- \* evaluate other options that would control access and cost (White 12).

There is clearly no consensus between the public and the health care experts on the causes for the continuing excessive health care cost. There is no clear consensus among political parties or businesses as to the best way to finance health care reform.

There is consensus for universal health care and controls on the cost of health care. Further laboring the merits of the multitude of untested solutions for health care reform will not bring about U.S. health care reform in a timely manner. It is this author's contention that resources and human energies would be better utilized by evaluating proven solutions to the health care problems. Examples of these solutions are available in the health care systems of other countries and states in the United States.

The two most frequently mentioned health care systems that the United States could possibly emulate are the Canadian and the German health care systems.

In addition, the Japanese health care system has also

achieved universal access and controlled cost. Within the U.S. health care system there have been two systems that have achieved universal recognition. These are the State of Hawaii's health care system and the health care system of the City of Rochester, New York. The author contends that these five health care systems offer examples of incentives that would provide cost containment in the present U.S. health care system.

The Canadian Health Care System

The Canadian health care system began in 1948 in the form of the federal government offering cost sharing grants for hospital construction. In 1957 public hospital insurance was introduced, followed by a public medical insurance in 1966. The federal government imposed several conditions on each province that chose to introduce public health insurance to its citizens. Consequently, it took until 1971 before all ten provinces had introduced public health insurance (Coyte 104). The fact that each province has authority over its health care system contradicts the notion of one health care system. In essence, each province's health care system is like an HMO, although the systems lack the control mechanisms that have made the HMO's economically viable in the United States (Fulton 49-

50). The Canadians have experienced the same problems that the United States has, with health insurance coverage steadily increasing through the 1960s and 1970s, along with the share of the Gross National Product (GNP) devoted to health care expenditures (Coyte 104).

By 1977 the Canadian government began to address the problems of rising cost of health care and introduced incentives to the provinces to contain costs (Coyte 104). The most recent problems being experienced by the Canadian System are hospital user charges and extra-billing by physicians. These are old "small" problems that have taken on a new dimension (Coyte 105).

The Canadians discovered early that national insurance plans, whether private or public, are a double-edged sword. The insurance plans help the consumer by reducing premium cost and guaranteeing specified services but these assurances and savings have the consequence of three moral hazard effects.

Moral hazard effects are the results caused by the presence of health insurance which changes the behavior of the consumer and/or provider. The first effect is from the consumer who demands more services because his

out of pocket expense is minimal. The second effect is also consumer based. Here the consumer has no financial incentive to stay healthy because the cost of health insurance is cheap. The third effect is caused by the consumer's lack of knowledge about the health services needed, consequently the consumer depends on the provider. Since the services are covered by insurance, the consumer has no incentive to question necessity or cost of the services "ordered" by the provider. The Canadian system has realized that these three moral hazard effects have added unnecessary cost to the health care system. However, to date there has not been any attempt by Canada's Public Health Insurance Plan to correct these moral hazards. The introduction of coinsurance and deductibles have been suggested as effective means to address these moral hazards (Coyte 107).

The Canadians have also instituted the global budget method of reimbursing hospitals. Each year a hospital must negotiate for a fixed operating budget, which results in a single payment provided by the government; this payment remains the same no matter how many patients are treated or how expensive their care. Hospitals are allowed to receive adjustments to their

base budgets to account for volume increases in outpatient and emergency services (Barnhill 40).

Global budgeting, to date, has not led to cost containment. This has been attributed to the fact that hospitals have carried insurance policies that insure against over-runs. Over-run policies fill the gap between the actual hospital expenses and what is allowed in the global budget. Consequently, the incentive for cost containment has been lost (Coyte 111).

Canadian physicians are reimbursed in a similar method to the United States Medicare program. A physician can charge a patient more than the negotiated fee, but has to collect the entire fee from the patient. The patient, in return, collects payment from the provincial insurance program. The only stipulation requires the physician to notify the patient of the higher fee prior to treatment (Coyte 113).

Physician fees are set each year as a result of negotiation between each province's medical association and the insurance company administering the provincial health insurance program. Even though physicians are allowed to charge patients more than the negotiated fee (extra-billing), patients are not allowed to have

supplemental insurance to compensate for the difference. It was the conclusion of the Canadian government that this restriction would limit the growth rate in extra-billing (Coyte 113).

As previously mentioned, each province had four conditions to qualify for federal cost-sharing: 1) comprehensive coverage for all physician and hospital services that are deemed medically necessary; 2) uniform terms and conditions have to be universally available to all insured residents; 3) each provincial medical insurance plan must be accountable to the provincial government and publicly administered; and fourth, each health care plan must be portable between provinces (Coyte 114).

In addition to these four basic principles, it was also stipulated that at least 95 percent of all eligible residents had to be covered by the provincial health insurance plan. This condition was to encourage private health insurance companies to discontinue offering health insurance policies. It is the Canadian government's contention that competition in the insurance market would raise health care expenditures. This conclusion is based on the assumption that to compete, insurance companies increase policy benefits

in order to be more attractive to a potential policyholder. The effects of this practice ultimately result in other companies increasing their benefits, and in time premiums also increase (Coyte 114).

Although the Canadian health insurance was developed as a national health care program, each of the ten provinces has introduced variations. These variations address the different methods each province chooses to finance their share of the program, the degree of balance-billing and the level of user charges. The sources for funding the health insurance programs vary from province to province. Some charge monthly premiums in addition to general taxation, others finance just from general taxation, and one uses a payroll tax on employers in addition to general taxation (Coyte 114-115).

The Canadian government passed the 1977 Fiscal
Arrangements Act which was intended to limit its fiscal
responsibility to each province's health insurance
program and to increase each province's incentive for
cost containment. This new Act illuminated any
relationship between a provinces health care
expenditures and what they could expect from the
federal government. Prior to this act the central

government matched the health care expenditures of each province. Between 1970 and 1976, provincial health care expenditures per capita increased eight percent. After the act was enacted, the increases for the next six years averaged 4.6 percent. This new cost-sharing arrangement between the federal and provincial governments did increase the provincial governments incentive to contain cost and increase efficiency (Coyte 121-122).

The 1977 Act did lower the hospital revenues which presented a problem for the acute care industry. The introduction of user fees was a means to increase hospital revenue to offset the effects of the Act.

Each patient was charged when accessing hospital care.

These fees are minimal at a cost of approximately \$6.00 (\$2.00 for seniors) depending on the province. In reality, this is like a poll tax on the patient (Coyte 125).

The charging of user fees by hospitals and extrabilling by physicians is still a debated policy.

Critics conclude that user fees are really a tax that affects the poor and that physicians would not have to employ extra-billing if they were adequately compensated (Coyte 131-132).

There are several lessons to be learned from the Canadian system. The first cautions that cost will not be controlled if moral hazards are not addressed. In addition, once government introduces a universal health care system, it achieves only a mechanism for the redistribution of income from the wealthy to the not-so-wealthy. Finally, over time federal and local financing of health care will become a financial burden, and patients will be assessed additional costs such as user charges or extra-billing.

The Canadian system contains both advantages and disadvantages, depending upon the evaluator. However, these changes will not be easily introduced into the United States. The United State's malpractice situation is unlike Canada's, with malpractice premiums in some instances being only one tenth of the premium paid by United State's physicians. Canadian physicians have substantially more clinical freedom as compared to their counterparts in the United States who are continuously harassed by third party payers.

Consequently, the Canadian physician has a larger takehome pay than their colleagues in the United States.

Canadians also have twice as many hospital beds per

1,000 population as compared to the United States, and these beds run at 100% occupancy (Fulton 50).

Even though the United States looks towards Canada for a solution, some Canadian provinces see solutions to their problems in the present U.S. system. Many provinces are assessing the use of a diagnosis related group(DRG) system to address the over utilization of hospital beds. Other areas being assessed are questions of governance, patient rights, hospital privileges for nontraditional providers, financing, and qualifications for administrators. At the present, the Canadian health care system remains the most costly of all other nations in the world with publicly funded universal health care (Fulton 50).

The highly politicized Canadian system presents a new problem for the American hospital administrator.

Exceptional management skills will be necessary to succeed in this political atmosphere. There have been surveys taken that indicate that the United States hospital administrator differs from his Canadian counterpart. The surveys conclude that U.S. hospital administrators are more task-oriented than general business managers, as demonstrated by the Canadian administrator. Consequently, the survey concluded that

the United States administrator may lack the basic key personality attributes associated with success in management (Fulton 50).

As the United States evaluates whether to adopt the Canadian health care system, it cannot avoid the present cost and utilization problems that currently challenge the Canadian health care system. In addition, the strengths of the present United States health care system should not be lost with the introduction of a new system. The U.S. health system has demonstrated strengths in the areas of research, innovation, the use of technology in clinical care, in addition to better utilization of services and management of prescription medications (Fulton 51).

Since the Canadian health care system has been in the forefront, more information has been accumulated to dispel some of the myths that Americans have, in thinking it is the final answer. Consequently, some are beginning to think that the Canadian system is not the final answer, and the Republic of Germany's health care system may hold the answer.

#### The Federal Republic of Germany's Health Care System

The German health care system began in 1883 when the country's first chancellor, Otto von Bismarck,

mandated that a sickness fund called the country's Krankenkasse be made available to all workers. In the beginning, only 10 percent of the German population was covered. Presently, over 90 percent are covered by sickness funds, with the remainder covered by private insurance or civil service. In Germany today there are 1,150 of these Krankenkassens, which is a decreas of almost half in number since 1960 (Henke 145-146). In comparison, the United States has 120 insurers that cover 90 percent of its group accident and health care policies (Stevens 148).

German law requires that all Germans belong to a fund. This can be achieved either by joining a fund offered through an employer, trade union, local group, or professional association. This includes all retired, unemployed, poor, and homeless. The selfemployed can opt to purchase private insurance if they earn more than 4,700 deutsche marks (or about \$36,000 a year). The option of private insurance becomes available to anyone who meets this minimum income requirement. Only about 10 percent of the population exercise this option (Stevens 150).

The Krankenkasse system receives funds from both the employer and the employee, with each contributing

fifty percent of the premium cost. The government makes the contributions for the retired and the unemployed from a government social insurance fund. The total contribution by employer and employee amounts to an average of 12.2 percent of gross income. The variation in contribution varies from industry to industry with the least expensive industry fund charging only 10.72 percent to the most expensive fund charging 12.62 percent (Klaus 152).

The level of benefits available to the German citizen is relatively generous, covering complete medical, preventive care and unlimited hospital care (Henke 149). Benefits include complete coverage for dental and eye care, as well as drugs and medical equipment. The coverage even includes up to two weeks at a health spa, and freedom to choose any general practitioner or specialist registered under the sickness fund (Henke 149 and Stevens 150).

The German health care system gets poor marks for the care of the mentally ill. The institutionalized elderly, at the present, are not included in either public or private health insurance coverages. For those patients who lack the sufficient funds for long term care, the local welfare programs become responsible (Klaus 150).

The amounts of reimbursement paid to providers varies between the different Krankenkassens. Patients are not responsible for any unpaid balances and there are no co-payments or deductibles for the majority of care (Stevens 150). An example of a few exceptions for co-payments are dentures, eyeglasses, prescription drugs, a small daily charge for the first 14 days in the hospital and a daily charge for inpatient rehabilitation treatment. Most health care experts estimate that approximately five percent of total health care expenditures are co-payments (Klaus 152).

The Germans use a national relative-value scale similar to the United State's new Medicare Resource Based Relative Value System (RBRVS) fee schedule to reimburse office-based and ambulatory-care physicians. All private physicians are paid on a fee-for-service basis and all hospital based physicians are salaried. Hospitals are paid on a per diem rate for inpatient care (Stevens 150). The hospital per diem rate is fixed prospectively between the hospitals and the sickness funds. The per diem has to cover all operating costs of the hospital including the salaries

for hospital-based physicians. In negotiating the per diem rate cost and services, comparable hospitals are used in addition to recommendations from hospital and insurance carrier associations. Even though the present system of hospital reimbursement is designed for cost containment, the Germans are aware that additional reform is necessary. The diagnostic related groupings (DRG) that have been successfully used in the United States are seriously being evaluated by the Germans as a means to bring more cost-consciousness to the hospitals (Klaus 154).

For the past six years, Germany has attempted to contain health care cost by capping overall medical spending increases to the same rate of increase in workers' wages. Predetermined expenditure caps for physician services are established based on anticipated volume. The actual volume of services is evaluated on a quarterly basis. If volume of physician services is unexpectedly up, the conversion factor is automatically reduced. The system isolates these controls to physicians, but authorities contend the need to evaluate similar guidelines for hospitals and pharmaceuticals (Stevens 151).

The German government does not take an active role in the negotiation of fees that physicians receive. Instead government has passed extensive regulations that guide the negotiations between providers and payers (Stevens 151). This allows sickness funds to negotiate with the medical associations or their federal and regional sub-organizations respectively for ambulatory service's fees (Henke 148). The government is involved in the setting of the relative values of the national fee schedule, which are conducted with the Federal Association of Physicians, Dentists, and Sickness Funds. It also takes an active role in establishing the level of payroll contributions (Stevens 151).

The German government established the Concerted Action, a national conference that functions in a capacity similar to the United State's Physician Payment Review Commission. The Concerted Action, in conjunction with government, addresses issues concerning health care policies and cost containment. Concerted Action has a broad based representation with members from the sickness funds, private insurance companies, physicians, dentists, employers and trade unions (Stevens 151).

The role of local physician associations presents a unique aspect of the German health care system.

These associations negotiate with payers for fees, handle disbursement to member physicians and perform peer review on members, including prescription utilization. There is also mutual sympathy between the medical community and the insurance industry.

Consequently, physician and insurers do not spend time trying to put frustration in each others life (Stevens 151).

These physician associations have established detailed physician practice profiles that far exceed any data available to their American peers. These standards of practice are used to judge the patterns of all physicians. If a physician's utilization exceeds 50 percent above the average, he may experience a decrease in reimbursement. If prescription utilization is considered inappropriate for a patient, the physician has to reimburse the Krankenkasse for the overage, in cash (Stevens 152).

Even though the Canadian and the German health care systems have been evaluated as possible examples of solutions to the United States health care problem,

the Japanese have also had success in establishing a cost efficient universal health care system.

### THE JAPANESE HEALTH CARE SYSTEM

Since 1961 Japan has provided its entire population with a health care system that provides universal access to virtually all medical facilities. This is achieved at half the cost of what the United States spends for personal health care services. The Japanese, who thrive on capitalism, have established a health care policy that is based on two basic beliefs:

- If equity and universality of access to health care are goals, then cross-subsidization must occur between citizens of different economic means.
- 2. Government must regulate the process.

In achieving this goal, the Japanese health system has been able to retain patient freedom in choosing a private physician; create an employment-based, nonprofit health insurance industry; and create a delivery system operated on laissez-faire principles (Ikegami 88).

The Japanese have established a relatively successful preventive care program that may or may not have had a significant impact on the national health

In using macro-outcome measures to compare status. health care systems, Japan ranks very favorably. Life expectancy is 77 years, which is higher than the United States at 75 years, and Germany at 73 years. Japan's infant mortality per 1,000 live births also ranks very favorably at seven, as compared to the United State's 12 and Germany's 13 (Henke 161). There are questions that the health care system may not be solely responsible for Japan's success. Some argue that the greater cultural and ethnic homogeneity of Japan's citizens, the more equitable distribution of income, and the lower unemployment rate as compared to the United States, may be of even greater importance (Ikegami 88). This argument weakens somewhat since the Germans possess similar traits, yet Germany ranks below both the United States and Japan in life expectancy and infant mortality.

Japan is approximately the size of Montana and has a population of 122 million. The majority of its citizens live in the urban metropolis stretching from Tokyo through Osaka to northern Kyushu, making Japan one of the world's most densely populated nations. Since World War II the Japanese per capita income has been one of the world's highest (Ikegami 89).

The Japanese health care system has some similarities to the U.S. health care system.

Approximately 80 percent of the hospitals in Japan are privately owned as are 94 percent of the medical practices. The Japanese system has no restrictions on capital development except for a recently imposed ceiling on the number of hospital beds by region.

Consequently, Japan has the highest per capita number of computerized axial tomography (CT) scanners in the world. Patients choose their own primary care physician who is reimbursed on a negotiated fee-for-service basis (Ikegami 89).

In contrast to the United States health care system, Japan's health care system is more loosely organized and far less functionally differentiated. Virtually all medical practices are solo practices owned by the physician. The majority of the hospitals are also physician-owned, free standing facilities that are by law not-for profit and are headed by a physician. The Japanese recognize that hospital administration is poor; therefore, their mismanagement aggravates hospital financial problems. There are 9,403 hospitals in Japan of which 441 are national, 1,370 are public, and 7,692 are private (Tanaka 171-

172). The most prestigious hospitals are usually large, public institutions with medical teaching programs (Ikegami 89).

A unique aspect of the Japanese health care system is that one third of the medical practices are clinics with their own inpatient beds. One significant reason for this is that a primary care physician cannot admit to local hospitals. The distinction between medical clinics and hospitals is primarily legal with the differentiation based on the number of beds. A facility is considered a clinic if it has fewer than twenty beds and a hospital if it has twenty or more beds. Both facilities compete for the same patients (Ikegami 89). There are 777 national clinics, 3,602 public clinics, and as many as 74,175 private clinics (Tanaka 172). Hospitals attempt to attract patients from large ambulatory care facilities, and clinics strive to keep their patients from being admitted to a hospital (Ikegami 89).

In addition to acute care patients, hospitals admit long term care patients, often offering both services on the same floor. Consequently this skews the average length of stay in a Japanese hospital which is 52 days. The Japanese have 13 beds per 1,000

citizens which is also substantially higher than the United States at 3.73 beds (Ikegami 90).

The Japanese consume more drugs per capita than any other country in the world. This can be attributed to the fact that Japanese physicians both prescribe and dispense pharmaceutical products. In 1986 dollars the Japanese consumed \$146 of drugs per capita compared with the U.S. per capita figure of \$128. This results in drugs consuming 30 percent of the Japanese personal health expenditures, down from a high of 38 percent (Ikegami 90).

The financing of health care in Japan has some similarities and some differences compared to the United States health care system. There are multiple insurance plans that are involved in administering health care reimbursement. Consumers do not have any real choice in selecting their health insurance plan and are required to join the one plan that is offered by their employers. The self-employed have access to insurance plans either through trade associations or local governments (Ikegami 90).

Premiums are paid to the multiple insurance plans in one of three ways. First, the insurance system for employees and dependents generally have premiums

equally shared by the employee and the employer. The premium payments are deducted on a progressive incomerelated basis from the employees paycheck as part of the Social Security payment; within this plan are subdivided plans that are based on the type of employment. For each of these plans there are copayments involved, with a 10 percent and 20 percent copayment for inpatient care for employees and dependents respectively. Outpatient care is reimbursed with a 30 percent copayment for both. This system covers approximately 63 percent of the working population (Ikegami 91).

The second system is designed for the selfemployed and their dependents. In this instance,
premiums are calculated on the basis of income, the
number of dependents, and assets. The plans are either
community-based and administered by the local municipal
government or are national health insurance
associations. Under this system, all inpatient and
outpatient services for both employee and dependents
have a 30 percent copayment. Approximately 37 percent
of the working population is covered by the latter
(Ikegami 91).

The third system was created by the Geriatric Health Act in 1983. This system centralizes a pooling of funds to cover all health costs incurred by the elderly, or people age seventy and over. Exceptions exist for anyone who qualifies as bedridden and at least 65 years of age. In this instance the patient can qualify as a participant in the fund. The pooling of funds comes from each of the insurance plans who contribute an amount based on the national ratio of elderly citizens in society. By using this approach each plan avoids bearing a disportionate burden of the contribution to the central fund (Ikegami 92).

The medical benefits offered by each plan are relatively uniform with comprehensive medical benefits, including medications, long-term care, dental care, and some preventive care. Providers file their claims with the respective insurance plan. Virtually all medical care is reimbursed under a nationally "uniform" fee schedule. The term "uniform" has significant meaning in that every provider, regardless of the patient, is paid the same reimbursement no matter if the service is done in a rural clinic or a tertiary hospital. This also pertains to the highest qualified specialist or a recently licensed physician. There is no negotiation

of fee schedules allowed by the Japanese government (Ikegami 90).

The Japanese have prided themselves on maintaining the world's most equitable single-tiered health care system. No evidence exists that indicates an individual's level of income affects the rate of utilization or the health care expenditure per individual. A small percentage of individuals (0.4) refuse to seek medical help because of cost. Out-ofpocket expenses in Japan in the form of copayments amounts to approximately 12 percent of the total health care expenditure. The reason for equity in the health care system is attributed to the government's central role in managing and subsidizing the plans that insure the financially disadvantaged. Of the 63 percent of the population covered by employee/employer plans, government manages 27 percent and contributes 16 percent to the fund. In the self-employed and pensioner funds, the central government contributes over half of the total expenditures (Ikegami 91-92).

According to the Organization for Economic
Cooperation and Development (OECD) the Japanese have
the lowest expenditure as a percentage of gross
national product (GNP) than any other industrialized

nation. At 6.8 percent it is almost half that of the United States. The Japanese attribute this difference to the high prevalence of people in the U.S. who abuse alcohol and drugs, engage in criminal practices that lead to death and injury, or have been diagnosed with acquired immunodeficiency syndrome (AIDS). In 1990, the Japanese reported only 195 cases of AIDS versus a U.S. total of 180,000 (Ikegami 93-94).

The Japanese are not without their own health problems. Over 60 percent of the males over the age of twenty are smokers. The daily Japanese diet has a high salt content (12.2 grams) which has contributed to a high incidence of cerebralvascular disease. The Japanese have about the same percentage of their population (12%) as the United States over the age of 65. The institutionalized rate for Japan's elderly surprisingly matches the United State's rate of six.two percent. Of those institutionalized, 75 percent are in hospitals or clinics (Ikegami 94).

In Japan individuals designate only three.seven percent of their income for health care premiums and out-of-pocket expenses. This is very low when compared to Germany's five.three to six.three percent employee contribution. One reason the employee's contribution

towards premiums is low is attributed to the nationally uniform fee schedule, which is considered the primary mechanism for containing health care expenditures. Supporters argue that it establishes both the scope and standard of services that can be provided. Since neither the provider nor the payer can negotiate individually, there is no cost shifting, no under payments and no "gouging", as the Clintons tend to expound on. Since government has a substantial role in subsidizing the health care system, there is an incentive to keep cost down (Ikegami 95).

Some argue that the retrospective review of claims by Japan's insurance plans positively impacts on controlling health care cost. Each fund designates a panel of physicians to review claims. Payment can be denied if the panel concludes there were excessive services ordered for the patient. All claims over \$38,000 are reviewed by a panel at the national level (Ikegami 97).

Because of the large volume of claims, the review panel utilizes "less than one second" to review each claim, which seems to be a totally ineffective approach. Believe it or not, electronic billing is not permitted in Japan! It is difficult for this author to

conclude that Japan's review system is effective. In reality, it appears that the panel identifies the more questionable providers and concentrates more effort in monitoring their charging patterns. Ultimately, only one percent of the claims are denied as providing excessive services. The Japanese conclude that the sentinel effect of peer review may be greater than what the 1 percent suggests (Ikegami 97).

There are three structural reasons that contribute to the success of cost containment in the Japanese health care system. The first is economic incentives, the second is the emphasis on clinics over hospitals, and the third is low administrative costs.

The Japanese physician has a financial incentive to practice primary care, as primary care physicians have twice the income of specialists. In contrast, in the United States it is commonly known that the specialist achieves a higher income than the primary care physician. This is not the case in Japan.

Because the primary care physician is able to offer additional services such as medications, laboratory tests and x-rays, his income is rewarded accordingly. In comparison to the specialist, it is doubled. Some argue that by allowing primary care physicians to equip

their clinics to compete with tertiary hospitals, the physician is given the *incentive* to keep the patient away from the specialist. It is also true that clinic-based physicians cannot admit patients to the hospitals. This is an additional *incentive* in keeping patients from being admitted to the hospital.

Consequently, if a physician wants a higher income, he or she will have to practice primary care.

There are other arguments as to why the primary care physician does so well financially as compared to the specialist. One argument emphasizes the superior organization of the primary care physicians as compared to the disorganized specialists. The reason for the disorganized specialists reflects the political process of their appointments. Each specialist receives their appointment through the patronage of the chiefs of the medical school clinical departments. This informal approach in evaluating candidates for the much-sought-after hospital posts has inhibited the development of specialty boards. Specialty Boards could serve as an organized power base for their members (Ikegami 98).

The Japanese encourage patients to utilize outpatient services by eliminating deductibles, which becomes a financial *incentive* for the patient.

Therefore patients would rather avoid the deductible cost of a hospital admission. Japans emphasis of outpatient or ambulatory care over inpatient care results in twice as many outpatient visits when compared to the United States, half as many hospital admissions and one fourth the number of surgical operations. The emphasis on outpatient or ambulatory care results in a significant difference between the two systems (Ikegami 99).

The third financial incentive in the Japanese system to be conducive to lowering cost is its uncomplicated administrative system. This is achieved for a number of reasons. First, different payers and providers do not have to enter into any negotiations because there is only one fee schedule. Second, health care coverage is mandatory, and consumers have no choice in health plans. Consequently there is no marketing cost. Furthermore, the universal fee schedule also lowers the cost and time of collecting accounts receivable, and bad debts are virtually eliminated (Ikegami 99-100).

In financing their health care the Japanese are very conscious of the potential burden it can put on business. Consequently, the system is designed to be

very equitable and not burden any business. This lack of burden is reflected in Japanese businesses not being responsible for the health insurance of their retired employees. Separate insurance plans are responsible for financing the retirees health program using revenue from the workers premiums; in this way the cost is spread out. The Japanese government supports this system in order to give their corporations an advantage over foreign competitors (Ikegami 102).

Even though the Japanese conclude that the single fee schedule has helped in lowering cost, they do recognize that it creates its own problems. Because of the set fee, physicians will attempt to maximize their revenue by seeing as many patients as possible. The average number of patients seen per day in Japan is 49. Due to the short amount of time the patient spends with the physician, patients make repeat visits to ultimately address their medical problem. This adds to cost (Ikegami 103).

The Japanese also recognize a problem with excessive use of laboratory tests and medications which produce additional revenue for the physician. In recent years the Japanese have substantially lowered the reimbursement for laboratory tests. The

consequences have been more tests ordered with the efficacy of the test being questioned (Ikegami 103).

The Japanese system lacks incentives that address quality of care. Consequently no formal quality assurance program exists, nor do specialty boards contribute to this issue. This has caused a problem for a quality-oriented population which perceives that the large public and teaching hospitals give higher quality than the clinics. Consequently there are long lines at these health care institutions. The problem of long lines has introduced a black market effect, where money is given to caregivers for immediate treatment (Ikegami 104).

The Japanese recognize the need for some changes in their health care system but are confronted with strong opposition. The Japanese Medical Association opposes any change in the reimbursement system that would pay fees based on qualifications and facility standards. The government hesitates to change what might be viewed as giving hospitals and physicians more power. Some conclude that because hospitals have no problems filling their beds, they concentrate more on the political than the economical area to maintain their competitive edge. Through the political process,

hospitals compete for subsidies for high-technology medicine that is under priced in the single fee schedule. The Japanese are not convinced that micromanagement has any benefit in lowering cost since the program cost may be more than the savings (Ikegami 104).

The Japanese use cross-subsidization in order to create some equity in availability of care. subsidizing the health care spending for employees of small enterprises and the self-employed, these businesses avoid a financial burden. The Japanese government requires that its corporations pay for the disadvantaged through higher corporate taxes and/or more Social Security benefits for their employees. This contrasts with the United States where the crosssubsidized burden will be the sole responsibility of U.S. corporations (Ikegami 107). One consequence of government subsidies is that government can lower or stop subsidies at random. Recently the Japanese government has limited government expenditures which has put some strain on the system. This has added to the already deteriorating financial performance causing health institutions to go bankrupt (Tanaka 170).

The Japanese system offers the United States an outline of the financial advantages of emphasizing outpatient/ambulatory care services over inpatient care. It also addresses concerns for the U.S. corporation's ability to stay competitive in international markets and how to attract physicians for primary care.

The United States is not without examples of successful universal health plans within its own borders. Both the State of Hawaii and the City of Rochester, New York have successfully implemented universal health care systems and have also controlled cost.

# The Rochester, New York, Health Care System

The United States does not have to look solely to foreign countries to find health care systems that work. In Rochester, New York there has been a community effort to control cost and increase access since the early 1940's. Over the years, the partnership between the health care industry and the community has moderated the growth of health care expenditures and has provided the community greater access to health care services than any other community in the nation (Hall 58). Even with cost controls,

medical technology remains current and readily available to patients. The number of magnetic resonance imaging (MRI) machines available to Rochester citizens is equal in proportion to the cities of New York and Los Angeles. When one equates the cost of health care as a percentage of the area's gross domestic product(GDP), it is only nine percent. If the U.S. health system were able to duplicate Rochester's success, it would reduce the U.S. health care expenditures by \$285 billion per year (Easterbrook 23).

There is no single feature of the Rochester health system that can be identified as responsible for its success. In addition to a long history of community-based health planning with corporate involvement, the system has relatively few insurers. Blue Cross/Blue Shield of Rochester insures more than 70 percent of the area residents. Because of this commanding position, Blue Cross/Blue Shield has been able to implement community rating. Community rating establishes a premium based on the experience of the entire community rather than the demographic characteristics or the health status of smaller groups of enrollees (Hall 58).

In 1992 the Rochester health care system held cost lower than any other community health care system in

the country. Using annual insurance premiums and employee cost sharing as a means to measure overall health care cost, the Rochester health system experienced a \$2,378 cost per employee for health care in 1991. This was two-thirds the national average of \$3,573, and approximately 55 percent of the New York State average of \$4,361. In addition, only six percent of Rochester's population lacks medical insurance as compared to national estimates ranging between 14 and 24 percent. The level of satisfaction that the Rochester community has with its health care system remains higher than the national average at 84 percent versus 71 percent respectively (Hall 60).

Significant cooperation was established among the area hospital with the introduction of the Rochester Area Hospital Corporation. Through this organization area hospitals self imposed caps on inpatient revenues. The goal was to give each hospital the incentive to use outpatient services in lieu of inpatient services. Hospitals that did not reach their cap in expenditures was allowed to retain the surplus. This incentive was instituted to promote efficiency (Hall 64).

Area Rochester hospitals reached another significant statistic by maintaining a 87.8 percent in the average level of hospital occupancy, which stands higher than almost any other American community. The national occupancy average in 1991 was 66.7 percent. The number of beds per thousand population was 3.18, which was less than the 3.73 national average and less than the 4.14 New York state average. The number of full-time equivalent staff per occupied bed was also significantly less at 3.28 than the United States average of 4.20. Hospital cost per capita was held at \$775 as compared to New York state's \$1,064 and the United States average of \$811. There is no evidence to indicate that all of these savings have come at the expense of quality of care. In fact, the data supports the opposite conclusion (Hall 61).

Innovation and cooperation seem to be ever present in the Rochester health care plan with changes that constantly address cost, and with strong support by the community. In 1989 the system adopted an all-payer DRG payment system. As much as 65 percent of the employed population are enrolled in managed care programs, principally individual practice associations (IPA) and model health maintenance organizations (HMOs). Because only two major insurers offer IPA/HMO plans destructive competition becomes less significant here than in some

other major markets (Hall 65). This attitude towards competition is similar to that of the Japanese.

Another aspect of the Rochester health care system which parallels the Japanese system centers on the organization of community-based primary care providers in small groups. Sub-specialists are more closely aligned with the hospitals. There are no large feefor-service multispecialty groups in the Rochester area. As in the German system, the Rochester physician community maintains a high level of communication with insurance staffs. This same level of communication is maintained with the hospital administrative staff (Hall 65-66).

Another example of "community" in Rochester's health care system is that multihospital staff privileges for physicians is the rule and not the exception. In addition each hospital has an academic affiliation with the university medical school. More than half of the community's physicians have a meaningful part-time faculty appointment at the University of Rochester School of Medicine and Dentistry (Hall 66).

The success of the Rochester health care system leaves health care planners with three main

characteristics for success, that are often lacking in other community health care systems. These three characteristics are health care planning, community-rated health insurance and cooperation and innovation. Transferring these characteristics to a national health policy will be the challenge facing the political leaders and the health care industry during the 1990's.

The only state health care in the United States that has received some attention for successfully lowering health care cost is Hawaii. Hawaii has been recognized for establishing a system that covers the majority of its citizens at a reduced cost, when compared to the rest of the states.

### THE HAWAII HEALTH CARE SYSTEM

The State of Hawaii's health care program covers 95 percent of the citizens. Under the Pre-paid Health Care Act, enacted in 1974, all businesses in the state are required to provide health insurance for their employees who work at least 20 hours per week. Under this act, the employee becomes responsible for paying half of the health care premium that amounts to about one.five percent of their monthly wage. The remaining balance is paid by the employer, and dependent coverage is optional (Burke 32).

The employer has to offer the state's standard health care benefit package. The employee has a choice of either a fee-for-service plan or an HMO. The employer has the option of self-insuring as long as the state's minimum benefit package is met (Burke 32).

The system limits the number of insurers as compared to rest of the United States. Their two main insurers are Blue Cross/Blue Shield, which insures over 50 percent, and the Hawaii Medical Services Association (HMSA). The Kaiser Permanente plan offers the HMO model (Burke 36). This means that the majority of provider bills are paid on a fee-for-service basis.

Hawaii insurance rates for business and their employees are substantially lower than any state in the continental U.S. Comparably these rates can be 30-50 percent below other states. A main contributer to these low rates is mandated insurnace coverage. These low cost are also attributed to greater employer participation but Hawaii still experiences the same rapid increase of 10 to 12 percent annually. One reason for this growth results from the escalation of health benefits beyond the initial basic package (Tanouye B7).

A significant difference between Hawaii residents and mainland U.S. residents results from the infrequent use of expensive medical services. Emergency room visits in Hawaii average less than half of mainland U.S., and there are 40 percent fewer surgeries and 10 percent less hospital usage (Tanouye B7).

Hawaii spends 9 percent of its gross domestic product (GDP) on health care in 1992. Even though Hawaii spends 5 percent less of its GDP on health care as compared to the U.S. as a whole, its hospital and physician costs are comparable to mainland U.S (Tanouye B7).

The state has funds available for employers that cannot afford the entire premium or who are not able to provide insurance. In addition there are funds available to help workers whose employer has gone out of business. In the past 17 years, only five businesses have applied for funds to help pay for the mandated health care benefits (Burke 32,36).

Approximately 88 percent of Hawaii's citizens have health insurance, seven percent have Medicaid and 5 percent are uninsured; this amounts to 30,000-35,0000 citizens. Within this uninsured five percent, the state has what it calls the "gap group". The state

initiated the State Health Insurance Program (SHIP) to address the medical needs of the gap group. SHIP has a minimal benefit package which is less than the state's required package. It does cover immunizations, wellness checkups, and other preventive care. In addition, 12 physician visits per year are allowed and five days in the hospital to a limit of \$2,500 per person. To date, the program helps approximately 11,000 citizens (Burke 32).

Over half of SHIP's members have incomes below the poverty level with the balance below the 150 percent of the federal poverty line. Almost half of SHIP's members are children (Burke 32).

All is not perfect with the Hawaii system, and changes to the system are constantly being evaluated. The state recognizes the need to coordinate the benefits offered under the Prepaid Health Care Act, Medicaid, SHIP and Medicare. The need for a single standardized billing form is also recognized. Even though three insurers have the majority of the citizens, insurance premiums are not based on community rating. This matter is presently being considered (Burke 32,34).

Business is beginning to feel the financial burden of mandated health care benefits for its employees. Some businesses estimate that their next year premiums will increase between 30 and 70 percent. A poll taken of businesses indicates that 35 percent would not choose to locate in Hawaii because of the mandated health benefits and 24 percent more were considering closing down for the same reason.

It is my contention that each of the above outlined health care systems have successful examples of approaches that can be incorporated into a cost efficient universal health care system for the United States.

## Chapter III

### SELECTIVE REVIEW AND EVALUATION OF RESEARCH

In evaluating the major cost containment aspects of the five health care systems for implementation into the United States health care system, one has to be conscious of the problems some methods have already presented. The following is an overview of major cost containment methods used by the five health plans reviewed in the previous chapters. Both the strengths and weaknesses of the five health care systems will be addressed in an attempt to determine which incentives could be introduced into the United State's health care system and which should be avoided.

### COINSURANCE AND DEDUCTIBLES

The Canadian health care system has experienced the financial consequences of moral hazards. Coyte attributes this to a universal health care system which requires little cost to the patient. Peter Coyte in CANADA successfully argues the need for the Canadian health care system to introduce health care policies with deductibles and coinsurance. This approach is believed to be an efficient one in addressing the moral hazard factor and maintaining some level of cost containment (Coyte 105-106).

The German health care system also lacks any significant use of coinsurance and deductibles. At the present, coinsurances and deductibles only represent approximately 5 percent of total health care expenditures (Klaus 152). Consequently, the German people lack the *incentive* to be cost conscious (Rublee 40).

As previously mentioned, the Japanese health care system does incorporate coinsurance and deductibles. The use of deductibles for inpatient care but not outpatient care gives the patient the *incentive* to use outpatient care. This has been relatively effective when comparing the Japanese outpatient physician consultations of 12.8 per capita to the U.S.'s five.three per capita. This contrasts sharply with the hospital admission rate of seven.five percent of the Japanese population as compared to 14.7 percent of the U.S. population. The United States does substantially more surgeries at 91 per 1,000 population than the Japanese at 22 per 1,000 (Ikegami 99).

The problem of adverse selection can result from a universal health care system where multiple insurers compete. This problem arises when an insurance company offers substantial benefits with no deductible and

coinsurance in order to attract low-risk individuals. In doing so, the company unknowingly also signs-up a significant number of high-risk individuals. Coyte argues that high-risk individuals should be responsible for "supplemental" insurance policies to cover their above-average demand on the health system. This encourages the high-risk patient to be more cognizant of health factors and provides an *incentive* to make changes in personal life styles and habits that would lower their health risk (Coyte 107).

### METHODS FOR CONTROLLING HEALTH CARE COST

It has been suggested that there are three methods by which health care spending might be controlled: limits on per capita premium payments; limits on prices paid for services, with quantity feedback; or direct ceilings on budgets of key providers (Aaron 209).

The use of premium caps has been used by only one of the five health plans that have been reviewed. To date only the Rochester health care system requires community rating of health premiums, a form of premium caps. Premium capping remains the principle method of cost savings advocated by the California Insurance Commissioner John Garamendi. There are two approaches to premium limits called "hard" and "soft". The hard

approach restricts the premium for health insurance to a basic health care package with no supplemental insurance allowed. This causes the patient to be responsible for all non-covered services and any coinsurance and/or deductibles. Garamendi advocates a soft approach where the patient can access supplemental insurance, and would have limits on out-of-pocket expenses (Aaron 209).

Global budgets or direct ceilings on budgets has been used by the Canadian government in financing hospital services, but it has not resulted in the expected cost savings (Coyte 111). The "supposedly" chief strength of this method of controlling costs results for the restriction of resources which precipitates into the efficient use of available resources (Aaron 211). Coyte makes a strong argument that the use of deficit-insurance to cover cost overruns eliminates the hospital's incentive to evaluate outpatient and other types of services as a means to save over inpatient services. He suggests that in order for global budgets to work in Canada, the deficit-insurance insurers will need to institute a substantially higher deductible to give hospitals the

incentive to evaluate cost-saving alternatives to inpatient care (Coyte 110,112).

The lack of incentive by Canadian hospitals to seek cheaper alternatives has created problems in the availability of services. Since each hospital operates on a fixed budget for the entire fiscal year, the incentive is to admit, and retain as long as possible, low-cost, long-term patients. The patients that "fit" this mode require fewer nurses, drugs, operating rooms, high-technology equipment and other resources per day for patient care. In fact, approximately 33 percent of Canada's hospital beds are occupied by elderly, long-term patients that in the United States would be in a nursing home (Barnhill 40-41).

The Canadian hospitals can respond to the restrictions of direct ceilings on budgets by closing beds during the year, cut staff, and limit the number of procedures performed. As a consequence to this "rationing" by the hospitals, long waiting lists for surgeries and diagnostic procedures are becoming the symbol of the Canadian health care system. In some provinces "urgent" Pap smears take two months; bone scans take one-and-a-half months; CT scans two months; and orthopedic referrals take two months (Barnhill 40).

The German hospitals have limits on the per diem paid for inpatient care by the insurer. Consequently, the patients are left in the hospital an average of nine days longer than in the United States. Since the German hospital experiences the highest expenses in the first days of admission, the prevailing incentive results in keeping the patients for a longer time than necessary in order to recoup some of the earlier cost not covered in the per diem rate (Stevens 152).

The physicians in Germany, Canada and Japan have all their fees subject to some type of price controls through some type of universal fee schedule. It is argued that this type of price limit weakens any incentive to reduce utilization of physician services. Aaron argues that budget constraints can only be achieved with adjustment factors that provide for diminishing reimbursement as utilization increases (Aaron 211). The Germans experienced disastrous results with this method because, as reimbursement goes down so does the amount of time the physician spends with the patient (Stevens 148). In Germany this method is called a "stripped-down" reimbursement scheme which pays physicians as little as \$4.80 for a simple office visit. The consequences to this manner of "budgeting"

are physicians inflating their office volume or even padding their books. Other consequences are physicians paring down their care even to the point of "dumping" patients with complex problems onto the hospital rather than treating the patient at home. Dumping complex patients also allows the physician to avoid professional embarrassment because his fellow professionals may not concur with his possible "over" treatment of the patient. If over treatment is identified, the physician faces possible fines (Chase A5A).

The Germans restrict the hospital admission privileges of the private physician as means of cost control. In return, hospital based physicians cannot provide ambulatory care. Stevens argues that this restriction results in inefficiencies, especially when a patient referred from one of these entities to the other needs duplication of tests and procedures because of the lack of communication (Stevens 152).

The use of fee schedules and restrictions on hospital privileges prevails in the Japanese health care system. Even though the Japanese system and the German system restrict hospital admission privileges for private physicians, the Japanese private physicians

can admit patients to clinics which they own. This option to admit patients to clinic beds minimizes some of the inefficiencies Stevens identifies in the German system.

The Japanese emphasize the importance of the nationally uniform fee schedule as the key to their cost containment. This conclusion is based on the assumption that the fee schedule establishes both the scope and standard of services that can be provided. Since government controls the rate, there is no individual manipulation by providers and payers (Ikegami 95). Kobayashi and Yano argue that this approach does not work. Each believes that an effective and efficient utilization review program will reduce cost, and, in their opinion, this does not exist in Japan (Kobayashi 242). They base their opinion on the fact that the data available on the claim form does not provide the insurance company with sufficient information to assess adequacy and reasonableness of the medical services provided the patient. Once adequate data is made available on the claim form, the need to automate the data is paramount in order to improve the efficiency of the overall system (Kobayashi 239). Even though electronic billing is not permitted

in Japan (Ikegami 97), over 64 percent of medical claims are prepared by computer (Kobayashi 239). This represents approximately 39 percent of the medical facilities (Kobayashi 239).

The Germans have established an electronic data base that identifies practice standards of physicians and it is unsurpassed by any industrialized country. This has allowed the Germans to institute a relatively effective utilization review program administered by the various specialty medical groups. The German physician seems concerned as to how his colleagues view his utilization, and therefore has the *incentive* to monitor his own professional behavior (Chase A5A). In contrast, the Canadians have no utilization review system for physicians, and the Japanese have faceless bureaucrats who review claims with no established standards (Kobayashi 242).

The Japanese have the largest utilization of drugs per capita than any other industrialized country. In order to control the cost of these drugs, the government has control over what a drug company can charge (Ikegami 96). In contrast, the Germans monitor utilization of drugs by physicians to not only lower

cost, but also to address the use of unnecessary medications (Chase A5A).

Another means of rationing care to control cost is the use of core benefit packages. A core benefit package "attempts" to identify "traditionally" covered services and eliminate the not-so-traditional services such as long term care, mental health services, and substance abuse services (Altman 197). The German system has established a core health care benefit package minus coverage for the mentally ill and institutionalized elderly (Klaus 150).

The Germans acceptance of death is also relevant in rationing care. There are no heroic measures taken on the seriously ill, since the Germans accept death as part of nature's course. This is in contrast to the Rochester, New York and Hawaii systems where death is an option. The rationing of care for the terminal elderly remains one of the major fiscal tools used in the German system (Chase A5A).

The Rochester health care system succeeds in controlling cost because of a combination of three factors. The first factor, exceptional health care planning, resulted from a collaborative effort that culminated into the Rochester Area Hospital

Corporation. The second factor, community-rated health insurance premiums, allowed all employers to have the same level of coverage at the same rates no matter what the size of the corporation. Local insurers also write 95 percent of all health insurance coverage. factor resulted from extensive cooperation and innovation among all the various entities interested in Rochester's health care. This cooperation resulted in the hospitals establishing a regional financing system affecting all hospital care. The regional financing system was comprised of a board whose members represented all of the area's acute care hospitals. This board ultimately established the Hospital Experimental Payments Program which was a singlesource, communitywide prospective hospital payment system. In this program, not only were costs controlled, but also the number of acute care beds in the area were successfully kept at a minimum. addition a reimbursement system was designed encouraging each hospital to move towards ambulatory care as an alternate to inpatient care (Hall 63).

The German system has benefited from a cooperative relationship between the third party payers and physicians. Each has sympathy for the other, and this

has resulted in policies that have contributed to controlling administrative cost for both parties (Stevens 156). The spirit of cooperation prevails in the annual negotiations between the physicians and the insurers to establish reimbursement levels. Once these rates have been negotiated, all of the insurers reimburse at the established levels. This is unique because Germany is a multiple payer system with as many insurers as the United States (Stevens 154).

The Hawaiian system plans to introduce a true community rating system to address some of the financial problems that mandated health insurance has had on business(Burke 34). Small-businesses are so burdened by the present system that 35 percent indicate that they would not locate in Hawaii at the present if they had a choice (Burke 36).

The Hawaii health care system has established policies that limit the number of insurers. Like the Rochester system, this has resulted in one major insurer having the majority of the population. Thus it has allowed the insurer to institute a modified community rating system to establish premiums. A "true" community rating system needs to present in

order to further lower the cost of health care premiums (Burke 32,34).

The Japanese system is somewhat of a modified community rating system but more on a national scale rather than a regional scale such as Rochester and Hawaii. The majority of the population is insured through government-managed health insurance (27.3%), society-managed health insurance (24.9), seamen's insurance (zero.eight percent) and mutual aid associations (nine.eight percent). The remaining 37.1 percent of the population represent the self-employed (34.0%) who are insured by the national health insurance (NHI) and the pensioners (three.one percent) who are insured by the NHI associations (Ikegami 91).

## ADMINISTRATIVE COST

Administrative cost remains a major difference between the U.S. health care system and the Japanese, Canadian and German health care systems. Both the provider and the insurer in these three countries experience administrative cost less than their counterparts in the United States.

Significant administrative cost incurred by the U.S. health care insurer result from the acquiring and maintaining of a health insurance policy. However,

evaluating what constitutes administrative cost varies from one plan to another. Administrative cost in the U.S for either a public or private insurer includes the collection of premiums, monitoring and paying for services, and bearing the risk that cost could be more than premiums. In addition, the private insurer finds himself confronted with marketing expenses resulting in a total administrative cost ranging between 11.9 and 34.4 percent (Danzon 22).

The Japanese allocate approximately two.five percent of their total health care expenditure for administrative cost. They attribute this low cost to the adoption of a single fee schedule which precludes the need for each individual payer and provider to enter into protracted negotiations over payment and services. This also simplifies the processing of medical claims (Ikegami 99).

Another significant aspect of the Japanese system is that the Japanese government only allows not-for-profit insurers to offer health insurance. The Japanese insurers have no marketing cost since patients are not offered choice of insurer. This two factors further lowers the cost of the health care premium to the consumer (Ikegami 88).

Presently 33 percent of the 1993 health care expenditure estimated to be \$939 billion will be for insurance premiums (HealthSpan 26). In this author's opinion, the United States by choosing to have only not-for-profit insurers, could the save the health care program \$8 billion the first year. This is based on a two.five percent net profit on health insurance premiums that for-profit insurers are presently making. This figure could increase another \$1.5 to \$3.0 billion if 33-66 percent of the 37 million currently uninsured become insured by for-profit insurers (HealthSpan 62).

The Canadian government claims that administrative cost for their publicly insured program is only one percent. Danzon argues that the Canadian system has hidden costs because it is a public system and, unlike a private system, can hide cost of risk bearing. It can also avoid reporting the cost associated with financing and operating the health care program. In some instances, Danzon argues that these costs could be higher than similar costs incurred by a private insurer (Danzon 40). The U.S. insurance companies outspend their Canadian counterparts in administrative cost almost six-and-one-half times at

\$106 and \$17 per capita respectively (Woolhandler 1255).

Administrative cost amount to a significant expenditure for health providers. In the United States physicians have administrative cost ranging between 25-48 percent of their expenditures compared to their Canadian counterpart spending only between 18-34 percent. The estimated hospital administrative cost is 20.2 percent in the United States and only 9 percent in Canada (Danzon 22). In real dollars this translates to a U.S. hospital spending \$162 per capita for administrative cost as compared to Canada's \$50. The U.S. physician is spending \$309 per capita for overhead and billing expenses as compared to Canadian physicians spending \$121 (Woolhandler 1255).

# REDISTRIBUTION OF INCOME AND FINANCING HEALTH CARE

Each of the health care plans have their own approach to financing their respective programs and most are beginning to have financial problems. These financial problems can create tax burdens on citizens and industry, and can have a negative impact on a country's ability to compete on an international basis.

Coyte addresses two arguments for public health insurance that appear to reflect the essence of

Canada's health care policy. The first is that universal health coverage is an attempt by the government to redistribute income from the "haves" to the "have nots". The second views publicly funded health insurance as an instrument of social policy where society has an obligation to ensure that the under-insured or uninsured are cared for by government (Coyte 107).

The national health care system burdens Canadians with higher taxes than U.S. citizens experience.

Canadian citizens and corporations pay 46.9 percent of the total national income in taxes, as compared to U.S. citizens and corporations paying only 36.9 percent (Barnhill 39).

A study by Torrey and Jacobs also supports the position that Canadians and Americans have a similar net personal consumption in health care expenditures. Their study did identify that Canadian households paid half of what American households paid for health coverage, but the Canadian's personal tax burden is twice that of Americans (Torrey 126).

The German health care system reflects a system where the "rich pay for the poor, the healthy pay for the sick and the young pay for the old" as stated by

Michael Arnold, a professor at Tubingen University in Germany. But the German health care system is beginning to have financial problems similar to the United States. German employees will be faced with an increase in contributions to their sickness funds, going from 12.2 percent in 1992 to 13.4 percent in 1993 (Winslow A5A).

The German health care system acquires financing primarily from employers with government contributing low levels of subsidies. The government contribution rate is directly related to the general level of economic activity. This approach creates instability in the system since health care expenditures could increase at the same time general revenues are decreasing (Rublee 46).

Some argue that the financing of the German health care system through employer and employee contributions based on wages may be economically harmful. German companies that compete in an international market claim that they are handicapped when competing against companies with predominantly tax-based financing of social security and lower social levies on their industries (Rublee 46).

Germany's industry believes that any increase in payroll contributions for health care will raise labor cost and will have a negative impact on employment. Because of the contributions being deducted from paychecks, employees request higher salaries to compensate for the difference. These higher wages discourage employers to add employees. The increase in contributions directly results from a decrease in the ratio of active contributors to the number of beneficiaries (Rublee 46).

The German system does not accumulate any reserves which could cause future problems if the system experiences unexpected health care expenditures. As with America, Germany is experiencing an increase in life expectancy and a decline in fertility which means that future demand will increase for health care.

Consequently, contributions to the sickness funds and retirement funds will have to increase substantially. Unfortunately the potential for future generations to be willing or financially capable of financing this major increase in contributions remains an unknown (Rublee 47).

Those Germans that choose private insurance have some advantages over other types of coverage. Since

private insurance company premiums are determined actuarially, private insurers are attractive to low-risk clients. Consequently, the high-risk insured have to turn to the sickness funds, which have fixed contribution rates. This causes a disproportionate distribution of the cost of health care for the high-risk citizens (Rublee 47).

The cost of care is not well distributed among the high- and low-income groups or the high- and low-risk groups. Consequently, the amounts of contributions can be inequitable when comparing income groups, and when comparing cost of low-risk patients in sickness funds versus patients with private insurance (Rublee 47).

Funds also differ in respect to the average number of dependents each covers. Among each separate fund, each employee contributes the same amount as all other employees within that fund, regardless of the number of dependents. Consequently, those sickness funds with more dependents per employee than other funds find its members contributing more, because more dependents means more risk. German companies with low-risk profiles choose to self-fund their own sickness funds. Those companies that do, find it cheaper than being members of the prevailing local funds (Rublee 47).

The Japanese also have designed their system to address the financial differences among its population with cross-subsidization. The government regulates cross-subsidization to assure equity and universality (Ikegami 88). Insurance premiums are divided equally between the employee and the employer. These premiums are based on a progressive income basis and are deducted from the employee's paycheck as part of the Social Security deduction. In addition to these premiums, the central government subsidizes the health care spending of small enterprises and the selfemployed from general revenue. Contributions from the health insurance societies go towards financing health care for the elderly. In all, approximately two-thirds of the population receive some form of government subsidy to pay for their health care (Ikegami 100). Japan looks to its corporations to pay for the health care of the disadvantaged through higher corporate taxes (Ikegami 107).

#### COMPETITION IN HEALTH CARE

The concept of competition in health care has mixed reviews. The majority of the health care systems reviewed in this paper minimize the effects of competition between insurers.

The executives at Kodak in Rochester, New York convinced the area employers that a dominant insurer was a key factor in keeping health care cost down. The lack of competition between insurers in order to keep Canadian health care cost down has also been argued by Coyte (Coyte 114). Consequently, Rochester Blue Cross became the dominant insured with 80 percent of the population. In essence it is a "single payer" system. One concern providers had was that a dominant insurer could lower reimbursement unreasonably. To date there is no evidence that Rochester Blue Cross has had a negative impact on provider income (Easterbrook 23).

Keijser and Kirkman-Liff challenge the argument that competition among insurers results in inflation. It is their contention that establishing premium cost by using four patient categories will give the insurers the *incentive* to have low and accurate bids. Each of the patient categories are based on progressive risk. All four categories would be used to establish a composite cost that would result in a nominal premium based on the percentage of the population in each category (Keijser 39).

The Canadians designed their health care system as a single payer system. In reality, however, it is a

number of payers since each province administers its own health care program. The relationship between each province and the central government is one of cost sharing with the central government establishing some basic rules and regulations that all provinces must follow. The central government goal in this arrangement is to give each province the *incentives* to contain cost and increase efficiency in their health care systems. Central government instituted one successful method when matching funds were replaced with a global budget. This resulted in provincial governments being encouraged to institute more efficiency in their respective health care systems (Coyte 121-122).

# FEE-FOR-SERVICE

The primary method of reimbursing physicians in four of the five health care systems is fee-for-service. The Canadian, German and Japanese systems have found problems with fee-for-service. The Rochester, New York health care system uses fee-for-service reimbursement sparingly. At the present, there are no large multispecialty groups in the Rochester area charging fee-for-service (Hall 66). The Hawaii system primarily reimburses on a fee-for-service basis

but does have a substantial portion of physician services paid on a capitation basis (Burke 32). Both the Japanese and the German systems reimburse exclusively on a fee-for-service basis.

Ikegami argues that one of the negative aspects of the Japanese system is the distorting effect fee-for-service has on the overutilization of services. Since fees are controlled by the government, there remains the tendency for physicians to maximize revenue by seeing more patients which adds to the cost of health care (Ikegami 103). The Japanese attempt to control over-utilization by focusing in on physicians that insurers identify as excessive utilizers. The Japanese do not maintain practice profiles on their physicians (Ikegami 97).

The Germans attempt to control overutilization with a "stripped-down" reimbursement scheme, but physicians responded by seeing even more patients in less time (Chase A5A). One advantage the German system has is the detailed physician practice profiles that are "light years" ahead of the U.S. (Stevens 151). The Germans attempt to control overutilization by focusing on physicians with utilization practices 50 percent or more above the average (Stevens 152).

The Candian physicians are uninhibited by the insurer and experience more clinical freedom than any of their peers in the other four systems reviewed. This is one reason why most primary care physicians in Canada on the average take home higher pay than their American colleagues. The province of Quebec is an exception to this policy and does have utilization retrictions on their physicians. Other provinces are evaluating a modified DRG system to curb overutilization (Fulton 50).

The central focal point of any universal health care system has to be on the establishment of incentives for all entities in the health care equation that will maximize access and minimize cost. If one entity is left without any incentive to maximize access and/or minimize cost, then the health care system will be compromised. It either will be too expensive or limit access for large segments of the population. An effective U.S. health care plan must address the identified problems with fee-for-service, multiple insurers, financing that causes rationing, the impact of competition, and administrative cost. The goal will be how to incorporate incentives for each of the entities that minimize the cost of these problems.

In the above review there were positive and negative aspects of each system identified as follows:

### POSITIVES

- \* dominant insurers by regions
  - \* DRG's
- \* automated standards of practice
- \* local professionals reviewing the utilization of their peers
  - \* not-for-profit insurers
  - \* sub-acute beds for physician clinics
- \* federal government not matching state government

funds for welfare

- \* community health care boards
- \* co-payments and deductibles
- \* community rating for premiums

### NEGATIVES

- \* fee-for-service
- \* global budgets
- \* price fixing drugs
- \* lack automated data base for standards of practice
  - \* lack of utilization review
  - \* lack of drug utilization review
    - \* single-payer
  - \* no co-payments and deductibles

#### CHAPTER IV

#### RESULTS

#### CANADA

Coyte concludes that the a public health care system is one mechanism to redistribute income. It was an effective method to assure that the majority of the Canadian population received health care coverage. Coyte demonstrates that the percentage of Canadians covered by health insurance progressed from 45.2 percent in 1961 to 99.8 percent in 1971 (Coyte 135).

In addressing the effects of moral hazards and adverse selection as reasons for the introduction of a public health care system, Coyte admits there was little evidence that they were the main cause of excessive increases in the cost of health care in Canada (Coyte 136). During the period from 1953 to 1970 the percentage of GNP designated for health care expenditures increased from two.nine percent to seven.one percent. Also during that period there was competition among insurers which increased coverage from 45 to 78.3 percent of the population. After 1971 over 99 percent of the population was insured under a public health care system. The GNP only increased from seven.one to eight.six percent, causing Coyte to

emphasize that competition increases the cost of health care (Coyte 135).

Coyte stressed the need for provinces to have an incentive to contain cost. This was achieved when the central government replaced cost-sharing with a global budget. The providers were affected by provincial governments decreased reimbursement. Coyte attributes this decrease in reimbursement to the introduction of hospital user charges and extra-billing by physicians. Coyte identifies hospital user charges and extra-billing by physicians as problems resulting from global budgets (105). He also argued that global budgets in Canada have not lead to cost containment (110).

Coyte addressed the effects competition has had on increasing health care expenditures. He supported the Canadian governments policies that attempted to eliminate for-profit health insurers from the health care market (114).

Fulton and Digiorgio see the U.S. health system with envy when evaluating research, innovation, and the use of technology in clinical care. Weaknesses in the U.S. health system are the barriers that exist which prevent access by a significant portion of the population. Even though the Canadian system has

universal coverage for its population there are excesses in utilization by primary care physicians and over-utilization of medications. In addition Canadians are slower in accepting technology. The authors also stress the fact that in practice, the Canadian system is ten systems, not one system (Fulton 49-50).

### **GERMANY**

Stevens sees the Canadian health care system as yesterday's solution, and the German system as a better model for the United States. She points to the Canadian system and questions whether Americans would accept waiting lines and limits on high-tech treatments. In contrast to the Canadian system, the German system spends less of its GNP on health care, has better benefits, better control of health care cost, and less rationing of care. Stevens concludes a major key to Germany's cost control is providers and insurers negotiating reimbursement rates (149,151).

Henke identifies two problems with the German system. First is the obvious absence of cost-consciousness among physicians and patients. He identifies this problem as being rooted in the fact that there is no financial relationship between physician and patient. The physician receives

quarterly payments from the insurers and the patient receives nothing that identifies the cost of their treatment. Not sending the patient an accounting of services is compounded in the fee-for-service system in which physicians can easily order excessive treatments. He concludes that a better system would have the patient pay the physician, and the insurer would then reimburse the patient. The patient would be responsible for deductibles and coinsurance. In addition he endorses the idea of patients paying surcharges on their premiums because of unhealthy living habits (165).

These "sin" premiums would help finance the second problem Henke identifies with the German system, which is the lack of a catastrophic insurance fund.

Additional financing would have to come from either employers or the combination of employees and employers (Henke 166).

Chase sees the physician as being aware of over utilization of medication and other treatments. She attributes this to the peer review present in Germany and the fact that physicians are held responsible for paying for unnecessary medications (A5A).

Rublee attributes the success of the German system to its emphasis on the use of ambulatory care over inpatient care. However he feels that there is a need to improve the utilization review for both physicians and hospitals. This is needed because the bulk of cost containment is directed towards the physicians primarily, and hospitals through fee-for-service and per diem budgets for each, respectively. The problem arises when utilization is above projections and in order to remain within the budget, fees to physicians and hospitals are lowered (Rublee 42).

Aaron and Schwartz suggest that global budgets are necessary to control cost, but considerable latitude needs to be given to the states in establishing the targets for their respective budgets. They do conclude that global budgets will present bureaucratic rigidity (Aaron 204).

#### JAPAN

Ikegami addresses what the implications are for the United States in adopting a nationalized system similar to Japan's. He emphasizes the fact that the Japanese started their health care system in 1947, and in its early stages it was designed to encourage low cost ambulatory care. He contrasts this with the

United State's introduction of health insurance being focused towards the middle-class as a hospitalization insurance (106).

Ikegami sees the successful health care system achieving maximum access and quality while containing cost. He concedes that this has not been achieved in the Japanese system and sees it as an impossible goal. He concludes that the Japanese system has been relatively successful in attaining access and cost containment by focusing on ambulatory care, whereas the U.S. has achieved high quality with the high cost of inpatient care. The transition the U.S. faces from predominantly inpatient care to ambulatory care he sees as very difficult, because it is rooted in the values and beliefs intrinsic to the U.S. Consequently the process of reform in the U.S. will require incremental adjustments with considerable political commitment as it strives for long-range goals (108).

Kobayashi argues strongly that controlling health care cost in Japan cannot be achieved by medical facilities alone or the introduction of fee schedules. Improvement in the health care system can only result if the insurers and utilization review organizations are also actively involved in the process. The

universal development of qualification checks would be capable of effectively evaluating utilization by providers using an efficacious automated data collection system. He concludes that the cost of automation would be offset by the savings of an effective utilization review program and eliminating inefficiencies (Kobayashi 243).

Tanaka stresses that the Japanese health care system is facing two substantial problems. The first relates to the lack of data collection on medical care given to the population. The second is the need for more government involvement in the utilization process, in an attempt to control health care expenses (Tanaka 178).

# ROCHESTER, NEW YORK

Hall and Griner have argued that the Rochester,
New York system has succeeded for two reasons. First
it has a long history of community based health
planning with strong corporate involvement. This
helped to limit the expansion of hospital capacity and
to control the duplication of expensive medical
technology. Second, the introduction of a dominant
insurer that insures more than 70 percent of the area

population and uses community rating to base premiums (Hall 58).

# HAWAII

Burke concludes that the pending changes in the Hawaii health care system will have a mixed effect on small business. Community rating will be mandated and there will be increases in the employee contribution (Burke 36). Presently Hawaii health care expenditures increase at the same rate as the U.S. average. Some of the rise can be attributed to the expanded and expensive benefits that have been added to the system over the years such as in-vitro fertilization (Tanouye B1).

In conclusion each health care system has
experienced success in controlling cost with emphasis
on different methods. The Japanese emphasize a
universal fee system, the Germans emphasize rate
negotiations, the Canadians emphasize a single payer
system, the Hawaiians emphasize dominant payers and
Rochester, New York emphasizes community based
planning. Each identified problems with fee-forservice reimbursement and over utilization of medical
services. None have had notable success with global
budgets. One common factor in all five systems is that

cost is the driving factor and quality remains a result rather than the central goal.

#### CHAPTER V

### DISCUSSION

## SUMMARY

The U.S. consumer will accept any health care system that offers 100 percent access, choice of physician and is both quality and cost conscious. The primary goal of any universal health care system should be to implement effective *incentives* to achieve quality and cost consciousness. A system without these two characteristics will fail to offer 100 percent access and choice.

Each of the five health care systems reviewed do offer effective incentives that the U.S. health care system could adopt to achieve quality and cost consciousness. In this author's opinion the most impressive health care system is the Rochester, New York health care system. It is first a U.S. health system that offers universal access, choice of physician and controls cost. It lacks, as do all health care systems, a true means to measure quality. Rochester, N.Y. has succeeded in making its community cost conscious while the remaining U.S health care system was moving in the opposite direction.

The freedom to choose one's physician is prevalent in all three foreign national plans. The presence of dominant insurers contributes to this benefit being available to the patient. The exception to this is Germany that has 1,150 fee-for-service insurers, but the trend is down in the number of insurers. None of the three international health care systems has health maintenance organizations (HMO) which may limit choice of physician.

The Canadians achieve a dominant insurer by using a "one payer" system which in reality is a ten payer system. This is the result of each province being responsible for administering and financing their own health care system. The Japanese have minimized the number of insurers by basing the industry to which one belongs. The Japanese also insist that all insurers be not-for- profit. The advantages of a dominant insurer experienced by Japan and Canada is the lack of marketing cost, and the spreading out the cost of high risk patients over a larger number of insured.

Evidence supports that administrative costs can be substantially lowered with dominant insurers.

Both the Hawaii and Rochester health care system support the argument that dominant insurers can save

cost. Each of these U.S. health care systems has been able to institute community rating, which keeps premium cost low, especially in Rochester. Hawaii as previously mentioned does not have a true community rating system, but has recognized the benefit and is presently converting.

In this author's opinion the combination of dominant insurer and community rating will have an effect on lowering administrative cost for both provider and insurer, and will allow the cost of health premiums to be reasonable for all businesses and individuals. Administrative cost experienced by the insurer in the U.S. averages 10.5 percent. This expense substantially exceeds the 2.5 percent in Japan and one percent in Canada, while Rochester keeps administrative cost under seven percent.

As previously mentioned the Canadian and Rochester systems have identified the fact that competition between insurers inflates the cost of health care. The inflation in cost results from competitors increasing their benefits to attract new subscribers from other plans. This results in each insurer offering new services to their policies which in time increases cost.

The establishment of a universal benefit package should be controlled by either the federal government, state government or local community. Each state and community should retain the freedom to establish health care benefits based on what they are willing to pay. The Rochester, N.Y. community involvement model reflects a successful health care system where a community dictates its own destiny in health care cost. In this author's opinion this freedom should be encouraged by any universal health care system established in the United States.

This author does believe that there should be a minimum of two dominant players for each type of health care delivery in a community or region. For example, the Rochester plan would have two fee-for-service insurers and two managed care providers. It is also this author's belief that each category of insurer has to offer exactly the same benefits. Under this requirement each insurer would be competing on quality, cost and administrative performance. It would be these criteria by which the consumer would judge each insurer.

The use of fee-for-service reimbursement for physician services was universally used by the three

foreign national health care systems. Each system has identified over-utilization problems with this type of reimbursement. The Canadians do not use any method to monitor utilization of physician services. The Japanese and the Germans use physicians to review utilization of services by their peers. The use of physicians to review utilization puts peer pressure on the physician. Both Germany and Japan have identified that peer pressure does give physicians the *incentive* to monitor their utilization. The Germans are the most effective because of the extensive data base that reflects standards of practice for each specialty. The Japanese are not as effective because there are no standards, consequently they find themselves superficially reviewing every claim.

The United States, in this author's opinion, should invest in establishing an extensive data base as the centerpiece of any universal health care system. From this information sophisticated standards of practice could be developed. Without standards of practice the United States will not be able to have an efficient and effective utilization review program and will not be able to measure quality. Both of these

factors are essential in establishing effective cost control.

The Japanese attribute their universal fee schedule as the major contributor to controlling physician cost. The universal fee schedule gives the physician the incentive to tailor his practice within the limitations of a standard fee schedule. A similar method prevails in the United States for Medicare reimbursement with regional variances which are not present in the Japanese system. In each instance both the Japanese and United States governments establish the rates. In contrast the German and Canadian physicians are involved through their professional associations in the fee setting process. The Germans believe that this cooperative effort to establish a fair fee schedule is their major mechanism to control cost. The is merit following Canada's and Germany's lead in allowing each physician specialty to be involved in fee-for-service negotiations. Universal fee-for-service schedules should be adopted by both inpatient and outpatient providers and followed by all insurers. Efficiencies will surface as providers attempt to increase profits. This may result in some

fees possibly dropping, staying the same or increasing at a slower rate.

The Canadian health care system has identified that the consumer lacks the incentive to control cost because they have no direct financial sacrifice. One method implemented by the Japanese to give the consumer the incentive to control cost is coinsurance and deductibles. The Germans use this method sparingly and the Canadians have been advised to implement an effective coinsurance and deductible policy into their health care system. The Japanese have made coinsurance and deductible rates for inpatient services higher than outpatient services to give patients the incentive to use outpatient services. The Japanese conclude that this incentive has been effective. These are strong arguments for any universal health care system in the United States to include coinsurance and deductibles that encourage the use of cheaper outpatient services. Deductibles and coinsurance can be effectively used to encourage patients to use a managed care provider in lieu of a fee-for-service provider.

One method used by the Canadian and German health care systems to give providers the *incentive* to lower cost, but has not demonstrated success, with global

budgets. The critics of the Canadian system have concluded that global budgets cause rationing of care and delays care in some instances. The Germans have evidence that global budgets can negatively affect the quality of care. This is especially evident when a physician's reimbursement decreases as volume increases. Consequently the amount of time spent with the patient also decreases, which in turn can effect the quality of outcome. The Japanese have a similar problem by keeping physician reimbursement low, causing the physician to minimize his time with the patient. Other nations have made an argument that the United States health care system should avoid global budgets since evidence demonstrates they restrict access and negatively affect quality.

The Japanese have identified a serious problem with the amount of medications that are prescribed to each patient. Their attempt to control the cost of medication is to fix prices for all drugs. This method to control cost has not decreased the over utilization of medications. One contributing factor to the over utilization of medications are physicians dispensing drugs with no effective utilization review.

The Medicare program has instituted an effective utilization review program to monitor excessive use of medications in long term care. This success would warrant the United States to consider, with the use of automated technology, the creation of a data base that would universally monitor medication usage.

The Japanese have also established a health care system that gives physicians the incentive to enter primary care. Primary care physicians in Japan experience higher incomes than specialists. The reason for this is that the majority of physicians have solo practices and are allowed to charge for all ancillary services. In addition each physician runs a clinic that also has patient beds to which their patients are admitted. Consequently the physician has the incentive to treat the patient on an outpatient basis and if hospitalization is necessary, admit the patient to his/her clinic. The Japanese have identified over utilization problems, but critics attribute this to an ineffective utilization review system. This author believes that U.S. physicians would be attracted to primary care if allowed to charge for a broader range of services. An effective utilization review program

based on standards of practice would control over utilization to a major degree.

At the present time all five health care systems are concerned with the increases in health care cost. This remains true whether the percentage of GNP equals six percent or 14 percent. The continuous rise in GNP or GDP has caused each health care system to find major problems with escalating cost of health care. are inefficiencies and waste in health care causing rises in cost in addition to other factors. continuous development of new technology and medications adds to cost. Furthermore the demands on health care are symptomatic of the problems in society. The continuing increases in crime, substance abuse, unhealthy life styles, war etc. will continue to put further burdens on the health care system and increase the percentage of GNP being required for health care. An efficacious health care system needs to emphasize quality and cost consciousness and avoid financial restrictions that will discourage research, development and rationing of care. An effective health care system will need to concentrate on incentives that counter inefficiencies that relate to administrative costs,

over utilization, insufficient incentives to use lower cost services, etc.,.

In this author's opinion the war against the deterioration of society has replaced the cold war. The inefficiencies of the cold war are well documented. There is also evidence that the U.S. Congress had the will to finance any destructive weapon at any cost during the cold war. As the cold war scales down we are witness to the destruction of some industries and the economies of some communities. Military expenditures have been a major factor in the financial success that this country has experienced over the past 50 years. This country will have to come to terms with the realization that the new war is our own physical and mental well being and it will continue to represent a major portion of the U.S. GNP. Health care will also continue to replace the military complex as a major employer of American citizens as we attempt to win this war inflicted on ourselves.

The U.S. health care system will need to be centered in the accumulation of accurate data in order to efficiently respond to the demands of society. The effective use of data will allow health care to establish effective incentives that will create a

balance between quality, access and cost of health care.

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