Health Care Administrative Costs

February 1995

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota

Program Evaluation Division

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JAMES R. NOBLES, LEGISLATIVE AUDITOR

February 22, 1995

Members
Legislative Audit Commission

Policy makers have become increasingly concerned with the nation's increasing health care costs. Among the suggested solutions are health care reforms that reduce the growing administrative costs in the health care industry.

In June 1993, the Legislative Audit Commission directed us to study health care administrative costs in Minnesota and the impact that various state-level reform options might have on both administrative costs and overall health spending in the state. This report shows that the projected differences in overall health spending across seven reform scenarios are rather modest in percentage terms. We also have found that reforms with the lowest administrative costs are not necessarily the least costly, since higher administrative costs sometimes help to control overall spending. Our report does not attempt to compare how different health reform options would affect other important issues in the debate about health care reform such as quality of care, health care outcomes, access to state-of-the art medical treatments, or consumer choice.

This report was written by John Yunker (project manager), with the assistance of Tom Walstrom and Don Feige. The spending estimates in our report were prepared for us by Lewin-VHI, a health care consulting firm with considerable experience in estimating administrative and total spending changes under health care reform. We also benefited from the assistance of the staff of the Department of Health and the Minnesota Health Care Commission.

Sincerely yours,

James Nobles
Legislative Auditor

Roger Brooks
Deputy Legislative Auditor

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Health Care Administrative Costs

EXECUTIVE SUMMARY

In recent years, policy makers have become increasingly concerned with escalating health care spending in the United States and the lack of insurance coverage for about one-seventh of the nation's population. As a result, there has been a growing interest in health care reform. One part of the reform debate has involved health care administrative costs. Some reports have suggested that administrative costs in the United States are large relative to those in other nations and have grown even faster than overall health spending. Consequently, policy makers have become interested in reducing administrative costs as a means to fund insurance coverage for the currently uninsured or to control growth in health spending.

This report examines the impact of a variety of health reform options on health care administrative costs and overall health care spending in Minnesota. Among the reform proposals examined are several "single-payer" plans and a number of options which incorporate the MinnesotaCare reforms contained in current state law but not yet fully implemented. The report addresses the following key issues:

- **What are the current levels of health care administrative expenditures and overall health spending in Minnesota?**
- **How much are health care administrative costs in Minnesota estimated to change under various reform options?**
- **How much is overall health care spending in Minnesota expected to change under various reform options?**
- **How do these results for Minnesota compare with national studies of health reform options? What are the limitations of such studies?**

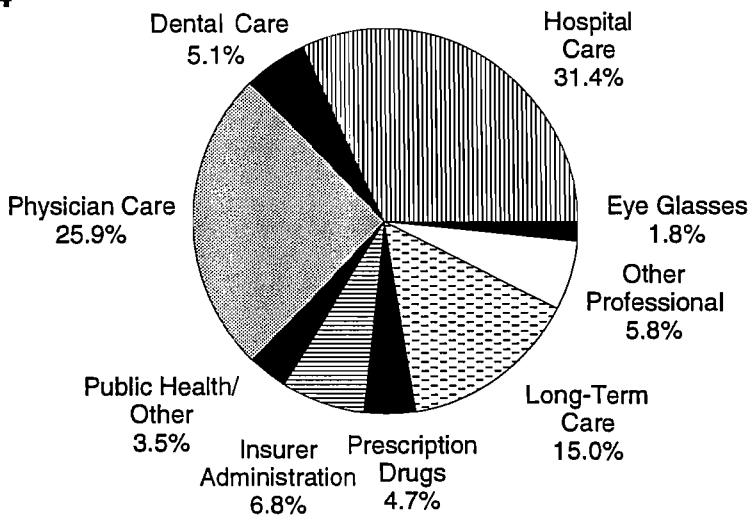
To assist us on this study, we hired Lewin-VHI, a national health care consulting firm. Our consultant was responsible for estimating the levels of administrative expenditures and overall health spending in Minnesota and projecting how much spending would change under alternative reform options. For those interested in the detailed methods used to make these estimates, Lewin-VHI's report is available from our office.

CURRENT SPENDING

In 1994, health spending in Minnesota was an estimated $15.8 billion, or roughly 13 percent of the gross state product. About three-quarters of the health spending was in three categories: hospital care (31 percent), physician care (26 percent), and long-term care (15 percent). The remaining 28 percent of expenditures was split among the following categories: insurer administration, other professional services, dental care, prescription drugs, public health and other costs, and vision care.

Health spending accounts for about 13 percent of the gross state product.

Health Spending in Minnesota by Type of Service, 1994



Total Health Expenditures: $15,771.0 Million

Note: Health expenditures do not include spending for research, construction, and federal hospitals.
Source: Lewin-VHI.

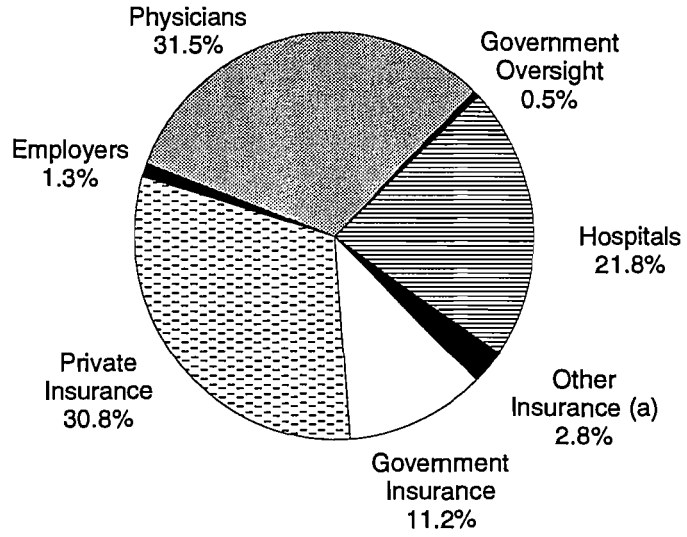
Health care administrative costs generally represent the transaction costs incurred in exchanging the information and resources necessary to provide health care services. Administrative costs are incurred by private and public insurers, physicians, hospitals, employers, and government regulatory agencies. Administrative costs were an estimated $2.4 billion, or 15 percent of overall health spending, in Minnesota during 1994.

SPENDING CHANGES UNDER REFORM OPTIONS

This report examines the cost implications of seven alternative reform scenarios, which attempt to achieve universal insurance coverage for Minnesotans. Three of these are single-payer plans, which include a fee-for-service delivery

Health care administrative costs in Minnesota exceed $2.4 billion.

Health Care Administrative Costs, 1994



Total Administrative Costs: $2,403.2 Million

(a) Includes workers compensation, automobile insurance, and other.
Source: Lewin-VHI.

system for physician care and government-set hospital budgets. These tax-financed plans eliminate the payment of insurance premiums for basic health benefits and rely instead on additional state tax revenues. As a result, health insurance would no longer be provided by employers through a multitude of insurers but rather through one single government agency funded by tax revenues. The first of these reform scenarios is a Canadian-style system, in which patient cost sharing is eliminated.[1] The second scenario is a single-payer plan with cost sharing. Both of these scenarios assume Medicare patients are included in the plan. Because obtaining Congressional permission to include Medicare patients is not likely, the third scenario examined was a single-payer plan (with cost sharing) that does not include Medicare enrollees.

In addition, we examine the impact of three reform scenarios that retain insurance premium financing, exclude Medicare, and incorporate the insurance market and health delivery system reforms envisioned under MinnesotaCare. These reforms are currently in state law but are not expected to be fully implemented until 1997. Two of the scenarios assume that Minnesota implements universal coverage by requiring individuals to obtain insurance coverage, as called for in existing law.[2] One of these individual mandate scenarios assumes that Minnesota receives a Congressional waiver from the provisions of the Employees Retirement Income Security Act (ERISA) so that the reforms can be

1 Patient cost sharing refers to the payment of deductibles and copayments for services received, subject to an annual maximum. Six of the seven scenarios include patient cost sharing, although none of the options include cost sharing for persons with incomes below the poverty level.

2 Current law makes a commitment in principle to universal coverage by mid-1997. However, that commitment is contingent upon the availability of affordable coverage. Further legislation is necessary to implement this commitment and other aspects of the MinnesotaCare reforms.

applied to self-insured employers. The other scenario assumes that an ERISA waiver is not granted. Both provide premium subsidies on a sliding scale to persons with incomes below 275 percent of the poverty level to help them afford insurance coverage. A third scenario implements universal coverage by requiring employers to provide insurance. The employer mandate approach includes subsidies to certain employers, as well as premium subsidies for individuals and families. Implementation of an employer mandate would require an ERISA waiver. These scenarios are an attempt to estimate the impact of MinnesotaCare reforms on health care spending, assuming that the state proceeds with plans to eventually provide universal coverage. They are an approximation at best, however, since many details, including the uniform benefits package, have not been determined.

The final scenario modeled was a tax-financed plan, in which a government agency would contract with health plans and provide Minnesotans with a choice of competing plans. The government agency would pay health plans based on the number of people choosing the plans. This hybrid model attempts to benefit from a streamlined payment system, while retaining a health insurance industry and also benefiting from the restructured delivery system envisioned under MinnesotaCare.

A single-payer plan with patient cost sharing would reduce overall health spending by about 3 percent.

Our consultant estimated the effect of these reform scenarios, assuming implementation in 1997 when health spending in Minnesota is estimated to be $20.8 billion. In percentage terms, the impact of the reform scenarios on health spending is rather modest:

- **The effect on *overall* health spending ranges from a 3.4 percent reduction under a single-payer plan with patient cost sharing (and including Medicare) to a 1.5 percent increase under the government payer plan, which retains managed care health plans.**

In addition:

- **The Canadian-style single-payer plan would reduce administrative costs the most, but would likely increase overall health spending by 0.4 percent.**

- **The premium-financed options, which incorporate MinnesotaCare-type reforms, are roughly equivalent in overall cost to the Canadian single-payer model and would increase overall health spending by about 0.6 to 0.8 percent.**

These estimates indicate that selecting the plan with the greatest administrative cost savings will not necessarily contain health care costs the most. The Canadian single-payer plan would reduce administrative costs the most, but it would increase overall spending almost as much as the premium-financed plans, which are expected to result in administrative cost increases. This results largely because a Canadian plan would eliminate patient cost sharing and increase health utilization by more than the $1.3 billion in administrative sav-

Other reform options would slightly increase overall health spending.

ings expected in 1997. In contrast, the individual mandate scenario with MinnesotaCare reforms and an ERISA waiver would increase administrative costs by $156 million and would increase overall health spending by $120 million compared with $93 million for the Canadian single-payer plan. What the individual mandate approach lacks in administrative savings is made up by requiring patient cost sharing and by realizing managed care savings from a restructured health delivery system.[3]

The lowest-cost option is a single-payer plan with cost sharing, which reduces administrative costs significantly but not as much as the Canadian model. This option reduces administrative costs by an estimated $1.0 billion in 1997 ($0.9 billion if Medicare is excluded) and has a much lower expected increase in utilization than the Canadian model because it requires patients to pay deductibles and copayments.

These reform options differ considerably in the amount of additional state taxes required to implement them in 1997. The tax-financed options, including all the single-payer plans, would require a substantially greater increase in

Estimated Changes in Health Care Spending in Minnesota Under Alternative Reforms, 1997

	Net Change (in Millions)			Percentage Change		
	Utilization	Administration	Overall Health Spending	Utilization	Administration	Overall Health Spending[a]
Canadian-Style Single-Payer (includes Medicare)	$1,441.4	$(1,348.7)	$92.7	6.9%	(6.5)%	0.4%
Single-Payer with Cost Sharing (includes Medicare)	307.7	(1,026.0)	(718.3)	1.5	(4.9)	(3.4)
Single-Payer with Cost Sharing (excludes Medicare)	287.7	(862.3)	(574.6)	1.4	(4.1)	(2.8)
Government Payer (with MinnesotaCare Reforms)	(36.1)	341.5	305.4	(0.2)	1.6	1.5
Employer Mandate (with MinnesotaCare Reforms & ERISA Waiver)	(36.1)	167.4	131.3	(0.2)	0.8	0.6
Individual Mandate (with MinnesotaCare reforms & ERISA Waiver)	(36.1)	156.1	120.0	(0.2)	0.7	0.6
Individual Mandate (with MinnesotaCare Reforms)	37.4	139.6	177.0	0.2	0.7	0.8

Source: Lewin-VHI.

[a]Some totals do not add due to rounding.

3 These reform scenarios have more than a one-time impact on health spending. Absent any cost controls, the estimated percentage change in spending relative to a no-reform scenario is expected to remain relatively constant in future years.

taxes ($5.8 billion to $9.5 billion) compared with the premium-financed options ($0.4 billion to $1.2 billion).[4] However, this increased reliance by the single-payer plans on taxes tends to be offset by the elimination of premium payments made by employers and individuals.

COMPARISON WITH NATIONAL STUDIES

The results of this study are generally consistent with national studies of health spending under alternative health reforms, although national studies do not always agree. For example, the Congressional Budget Office (CBO) estimated that a Canadian single-payer plan would increase U.S. health spending by 5 percent. This increase was the result of a 7 percent reduction in spending due to lower administrative costs and a 12 percent increase due to growth in health care utilization. In contrast, the General Accounting Office (GAO) projected a 0.4 percent reduction in overall spending resulting from a 9.1 percent drop due to lower administrative costs and a 8.7 percent increase due to increased utilization of health services. Our study for Minnesota estimated that overall spending under a Canadian-style system would increase by 0.4 percent as a result of lower administrative costs (6.5 percent) and higher utilization costs (6.9 percent). The studies differ in part because Minnesota data were used in our study. In addition, the GAO estimated greater administrative cost savings and used a different assumption about how significantly utilization would be affected by the elimination of cost sharing.

National studies have found similar results.

Like our study, the CBO also found that a single-payer plan with cost sharing would lower overall health spending, although it would not lower administrative costs as much as the Canadian approach. CBO estimated that the single-payer plan with cost sharing would reduce U.S. health spending by about 2 percent. Our study for Minnesota estimates a spending reduction of about 3 percent.

Estimates for the three premium-financed versions of MinnesotaCare reforms are also consistent with available research. Our study forecasts that changes in administrative costs will increase overall spending by a modest amount (about 0.7 percent). This result is consistent with the Congressional Office of Technology Assessment's finding that administrative costs would not change much under various proposals to reform the private insurance market. Lewin-VHI's estimates of the savings from a restructured delivery system are consistent with the best available research on health maintenance organizations (HMOs). However, our consultant suggests that the savings may take time to achieve, particularly outside of the metropolitan Twin Cities area. The eventual savings could exceed our consultant's estimates, if Integrated Service Networks (ISNs)

4 For all options, the estimated tax increases do not include the anticipated growth in state costs of public insurance programs between 1994 and 1997. In particular, they do not include the costs of expanding the MinnesotaCare subsidy program to include adults without children up to 275 percent of the poverty level. In addition, they do not consider how the state's costs may be affected if the state receives the pending health care reform waiver from the federal government.

are able to alter medical practices even more than established HMOs or if the market share of ISNs exceeds an estimated 66 percent statewide.

LIMITATIONS

There are important limitations on studies estimating the effects of health care reform.

Our study, like similar national studies, has some limitations. First, it is important to recognize that this study focuses only on health care spending. Reform options may have significantly different impacts on the quality of care, health outcomes, access to care, timeliness of care, technological development, and consumer choice. These considerations are of significant importance to policy makers interested in health care reform.

Second, spending estimates are sensitive to the data used, the assumptions made, and projections of general economic growth and health care cost trends. Health care analysts have an extremely difficult job predicting changes in health spending under reform, because most reforms would substantially alter the incentives of consumers, providers, insurers, and employers. Some variation in the conclusions reached by analysts can be expected, because it is difficult to forecast how people will respond to dramatically different incentives.

Third, studies generally do not attempt to take into account certain economic factors. These include possible migration effects, the economic impact of additional taxes (or premium subsidies) on work and savings incentives, the costs imposed on patients by paperwork, or the costs imposed on patients from lost time or productivity due to less timely care.

Finally, many studies including this one do not attempt to measure the impact of cost controls. Both single-payer plans and MinnesotaCare-type reforms would probably include certain types of expenditure and fee controls. The possible cost impact from such controls could be large. However, the relative effectiveness of controls under different reform options is unclear. Furthermore, controls could provide beneficial cost containment or could result in an inefficient use of resources.

Introduction

Health care spending has grown rapidly.

Policy makers in the United States have become increasingly interested in health care reform. One factor driving this concern is the large growth in health care spending experienced since the late 1970s. From 1980 to 1990, health care spending in the United States grew 170 percent, while the consumer price index grew only 59 percent and population rose 10 percent. A second factor was the growing recognition that, despite the increase in health care spending, some Americans did not have adequate health insurance. In 1990, about 14 percent of the U.S. population was uninsured for part or all of the year. In addition, an unknown number of citizens were considered to be underinsured.

The interest of policy makers in health care administrative costs stems from their interest in containing health care costs while extending health insurance coverage to the uninsured and improving coverage for the underinsured. If administrative costs such as paper work could be reduced without negative effects, then either health care costs could be lowered or benefits could be expanded.

In recent years, there has been considerable discussion and analysis of whether administrative costs could or should be reduced through a variety of health care reforms. Some policy makers and analysts have tended to view administrative costs as waste that should be eliminated. Others have suggested that some administrative costs have benefits that would be missed if administrative costs were reduced.

To a significant degree, the debate about administrative costs has focused on the merits of adopting a single-payer system like the ones used by Canadian provinces. A single-payer system is generally tax-financed and operated by a government agency. Health care provided to citizens is paid for by a single-payer—the government agency—with tax revenues. In contrast, health care in the United States is a complex, multi-payer system, which is characterized by many different types of insurance each with its own payment rules. Health care providers (such as physicians and hospitals) in the United States receive payment for services from a variety of private and public sources. The private sources include a multitude of insurance companies, health maintenance organizations, self-insured companies, and patients. Among the various

public sources are Medicare, Medicaid, state and local workers' compensation programs, and other federal and state programs.[1]

A number of different studies have estimated how much administrative costs in the United States would decrease under a Canadian-style single-payer system. Some of these studies have also estimated how much health care costs would increase due to the extension of coverage to the currently uninsured and due to the elimination of patient cost-sharing.[2] These studies differ in their conclusions about both the amount of administrative cost savings and the direction of change in overall health care spending which would result from the adoption of a single-payer system in the United States. In addition, a number of analysts have critiqued these studies and found some methodological deficiencies.

While single-payer legislation has been introduced at the federal level and in a number of states, it has not been implemented in the United States. Over the last three years, Minnesota has begun a process of health care reform which is intended to reduce administrative expenditures and contain overall costs while expanding coverage to the uninsured and improving the quality of care. Minnesota's MinnesotaCare reforms include delivery system restructuring, insurance market reforms, a uniform benefit package, administrative simplications, improved consumer information, and spending growth limits. The reforms are scheduled for complete implementation by July 1, 1997. The MinnesotaCare reforms are not consistent with a Canadian-style single-payer system. A Canadian-style system would eliminate the private health insurance and health maintenance organization sectors, rely only on fee-for-service physician care, and use government-set hospital budgets. In contrast, MinnesotaCare would restructure the health delivery system into Integrated Service Networks (ISNs) and a regulated fee-for-service sector. An ISN would combine the insurance, physician, and hospital functions into one organization. Competition among ISNs is intended to help contain health costs and improve health care quality.

There is interest in reducing administrative costs.

Because of the continuing interest of some state policy makers in a single-payer system, the 1994 Legislature requested a study of how much a single-payer system could change health care administrative costs in Minnesota.[3] The Legislative Audit Commission subsequently directed the Legislative Auditor to conduct such a study but broadened the inquiry to address additional issues besides those contained in legislation. Our study examines the impact of seven different health reform scenarios on administrative costs and total health spending in Minnesota. The alternatives examined include several single-payer plans and a number of alternative methods of implementing the insurance market and health delivery system reforms in MinnesotaCare. To assist

1 In 1991, 56 percent of U.S. health care expenditures were financed from private sources. Private sources include insurance (33 percent), out-of-pocket payments by patients (19 percent), and other sources (4 percent). Federal government programs paid for 30 percent of the spending, while state and local government programs paid for 14 percent.

2 In Canada, citizens receive a basic package of benefits and are not responsible for paying any out-of-pocket costs either for the benefit package or individual services or products.

3 *Laws of Minnesota*, Ch. 625, art. 5, sec. 9.

us on this study, we hired Lewin-VHI, a health care consulting firm with considerable experience in estimating administrative and total spending changes under health care reform. Lewin-VHI prepared estimates of current administrative expenditures and overall health spending and analyzed how they would change under alternative health reforms.

This report addresses the following questions:

- **What are the current levels of health care administrative expenditures and overall health spending in Minnesota?**

- **How much are health care administrative costs in Minnesota estimated to change under alternative reform options?**

- **How much is overall health spending expected to change in Minnesota under various reform options? What trade-offs may exist between the goal of reducing administrative costs and the goal of controlling overall health care spending?**

- **How do these results for Minnesota compare with national studies of health reform options? What are the limitations of such studies?**

This report is organized into four chapters. Chapter 1 discusses the types of administrative expenditures incurred under the current health care system and possible ways of reducing administrative costs. Chapter 2 examines previous studies of single-payer systems and the criticisms that have been made of these studies. In addition, Chapter 2 summarizes the national literature on other types of health care reforms that attempt to reduce administrative costs. Chapter 3 describes the different reform scenarios examined by our consultant and presents the consultant's estimates of changes in health spending under alternative reforms. Also included are the consultant's estimates of how some of the options would affect employers, households, and various levels of government in Minnesota. Chapter 4 examines the general accuracy of spending estimates in the health care area. In addition, the chapter discusses the need to consider other issues besides spending in the debate about health care reform.

More detailed information on Lewin-VHI's estimates and methodology is contained in the consultant's report. This report is available from our office.

Background

CHAPTER 1

In recent years, policy makers have become increasingly concerned with escalating health care spending in the United States and the lack of insurance coverage for about one-seventh of the population. As a result, there has been a growing interest in health care reform. One component of the debate over reform has been health care administrative costs. It has been suggested that administrative costs in the United States are large relative to those in other nations and are growing even faster than overall health care spending.[1] Consequently, policy makers have become interested in reducing administrative costs as a means to fund insurance coverage for the currently uninsured or to contain health care spending.

This chapter discusses the types of health care administrative costs incurred in the United States and elsewhere, international comparisons of administrative costs, and reforms which seek to reduce administrative expenditures. The chapter addresses the following questions:

- **What types of administrative expenditures are incurred under the current health care system? What organizations incur these costs?**
- **Is it possible to compare the level of administrative expenditures in Minnesota with the rest of the nation or with other countries?**
- **In what ways could health care administrative costs be reduced? Other than a single-payer system, are there any other methods of reducing administrative costs that are not already part of MinnesotaCare?**

TYPES OF ADMINISTRATIVE COSTS

To understand how health care reform may impact administrative costs, it is first necessary to consider what types of administrative costs are incurred in a health care system and what organizations or individuals incur them. Kenneth

1 For example, see Steffie Woolhandler and David U. Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *New England Journal of Medicine*, Vol. 324, No. 18 (May 2, 1991): 1253-1258.

Thorpe has provided a useful classification scheme for administrative costs.[2] He has classified health care administrative costs into four categories: 1) transaction-related costs, 2) benefits management costs, 3) selling and marketing costs, and 4) regulatory and compliance costs. Thorpe also has provided examples of the sorts of administrative costs in each of these categories which are incurred by health insurers, hospitals and nursing homes, physicians, employers, and consumers. Figure 1.1 illustrates Thorpe's typology of administrative costs.

Figure 1.1: Administrative Costs, by Function and Sector of the U.S. Health Care System

Function/ Component	Health Insurance	Hospitals	Nursing Homes	Physicians	Firms	Consumers/ Individuals
Transaction-related	Claims processing	Admitting, billing	Admitting, billing	Billing	Tracking employee hires/ terminations	Submitting claims
Benefits management	Statistical analyses, quality assurance, plan design	Management information systems	Management information systems	Management information systems	Internal analyses	Tracking expenses eligible for reimbursement
Selling and marketing	Underwriting, risk/premiums, advertising	Strategic planning, advertising	Strategic planning	Advertising	Flexible benefit programs	Search costs
Regulatory/ compliance	Premium taxes, reserve requirements	Waste management	Discharge planning	Licensing requirements	Filing summary plan descriptions, COBRA obligations[a]	Mandated benefit laws

Source: Thorpe, Kenneth E., "Inside the Black Box of Administrative Costs," *Health Affairs*, Vol. 11, No. 2 (Summer 1992): 43.

[a]COBRA is the Consolidated Omnibus Budget Reconciliation Act of 1985, which includes provisions for continuation of coverage when an employee leaves a firm.

Thorpe's classification of costs, however, does not include some additional costs which must be considered when estimating how health care administrative costs may change under certain health care reforms. First, Thorpe's categories do not include the administrative costs incurred by various government or regulatory bodies. Thorpe includes the costs of regulation and compliance incurred by health care insurers and providers but not the regulatory or oversight costs of the public or quasi-public agencies involved with health care. Including oversight costs is important since regulation and oversight may vary significantly from one type of health care system to another. For example, when comparing U.S. and Canadian health care administrative costs, it is important to recognize that some of the functions carried out by private firms in

2 Kenneth E. Thorpe, "Inside the Black Box of Administrative Costs," *Health Affairs*, Vol. 11, No. 2 (Summer 1992): 43.

the United States have public counterparts in Canada.[3] While private firms set most health care prices and determine their spending in the United States, Canadian provinces are responsible for setting hospital budgets, determining capital expenditures, and negotiating price increases with physicians.

Second, for purposes of evaluating health care reforms, it may be appropriate to classify the difference between operating revenues and expenditures as an administrative expense. For example, the net profits of health insurers in the United States might be considered an expense that would not be necessary in a system in which all health insurance is provided by the government.

Finally, many analysts would consider a number of other expenditures as general administrative costs. These would include such areas as physical plant costs, other fiscal services, personnel management, purchasing, printing, communications, general legal costs, and public relations not already included in selling and promotion. One reason why Thorpe may not have highlighted these general administrative costs is because they seem less likely to change under alternative reform plans than the costs in his typology. For example, physician clinics are likely to reduce their billing expenses under reforms which simplify the payment process, but are not likely to change their physical plant expenditures. However, it is important to recognize these general administrative costs since some of them may be affected by certain types of reform.

Thorpe's classification of administrative costs, with the above mentioned additional categories, is useful in thinking about the types of administrative costs incurred under the current U.S. health care system and how they might change under various reforms. Unfortunately, the accounting data maintained by health care providers and insurers does not utilize categories similar to those used by Thorpe. Consequently, it is difficult to estimate and compare administrative costs using Thorpe's categories.

COMPARISONS OF ADMINISTRATIVE COSTS

International comparisons are limited due to data problems.

Although it is not difficult to conceptualize what administrative costs are, there is considerable difficulty in comparing administrative costs across political boundaries. One of those difficulties is a lack of adequate data to make comparisons among states or across countries. The only national data on administrative costs in the United States is collected by the Health Care Financing Administration (HCFA). These data are very limited in scope. They include only the administrative costs of private and public health insurers in the U.S. The HCFA data omit the administrative costs borne by hospitals, physicians, employers, and individual consumers, as well as the governmental administra-

3 Office of Technology Assessment, United States Congress, *International Comparisons of Administrative Costs in Health Care* (November 1994), 9.

tion or tax collection involving health care.[4] Furthermore, state-by-state estimates of these administrative costs have not been prepared by HCFA.

A similar definition of health care administrative costs is used by the Organization for Economic Cooperation and Development (OECD). The OECD annually publishes health care spending data for its member nations, which include the United States, Canada, Australia, New Zealand, and numerous European countries. The reported data indicate that between one and seven percent of health care spending in OECD countries is for insurance administration.[5] Nations like the United States, Germany, and the Netherlands are on the higher end of the spectrum, because they have multiple sources of health insurance. Countries with single government sources of health insurance and uniform insurance features such as Canada and Great Britain tend to have lower reported administrative costs of health insurance.

Unfortunately, these OECD data are not very useful even for comparing insurer administrative costs. The data are not prepared using comparable definitions.[6] For example, the data for some countries with large government health programs like Canada exclude certain overhead costs such as fringe benefit costs and depreciation on buildings and equipment. In contrast, the data for the United States includes these costs, as well as insurer tax payments and reserve accumulations not included by other countries.

The limited nature of the available data, as well as definitional problems, make it difficult to provide any thorough comparisons across countries. However, there have been a considerable number of studies which have attempted to compare health care administrative costs in the United States and Canada. These studies include the administrative costs incurred by health care providers as well as health insurers, but do not include the administrative costs borne by employers and consumers, since little is known about the latter. Chapter 2 analyzes the results of these U.S.-Canada comparisons in detail.

PROPOSALS FOR REDUCING ADMINISTRATIVE COSTS

Methods of Reducing Administrative Costs

According to the General Accounting Office, almost all health care reform proposals use one or more of seven methods to try to reduce administrative costs in the U.S. health care system. These methods and their intended objectives are:

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4 Office of Technology Assessment, 3.

5 Jean-Pierre Poullier, "Administrative Costs in Selected Industrialized Countries," *Health Care Financing Review*, Vol. 13, No. 4 (Summer 1992), 167-172.

6 Office of Technology Assessment, 19-23.

Some reforms have potential for reducing administrative costs.

1. combining large numbers of employers into large insurance-buying cooperatives to achieve economies of scale in the insurance market;
2. defining a single or limited number of basic insurance plans to reduce insurance marketing costs and providers' billing costs;
3. developing standardized claims forms and billing procedures to reduce health care providers' billing costs;
4. eliminating underwriting activities to reduce administrative costs in the insurance industry;
5. eliminating deductibles and copayments to reduce providers' billing costs;
6. using more inclusive methods for reimbursing providers such as global budgets to reduce providers' and insurers' administrative costs; and
7. using a single-payer system with universal coverage and uniform payment rules and procedures to reduce the administrative costs of both health insurance and health care providers.[7]

Other reforms which have been suggested as ways to reduce administrative costs include: 1) electronic health care information systems, 2) universal coverage, and 3) development of standard utilization review procedures. Electronic health care information systems seek to reduce administrative costs by standardizing the health care and billing information collected and reducing duplication of efforts among providers, insurers, government agencies, and others. Universal coverage reduces the need of providers to determine the insurance status and collect bills from the uninsured. Utilization review refers to the process used by managed care organizations to determine whether certain medical services are necessary. Uniform review procedures may reduce the administrative costs of insurers and providers by reducing the time they spend discussing the need for services.

Several points need to be made about these potential methods of reducing administrative costs. First, health care reform proposals vary in the number of these methods used, although many reform proposals have several of these methods in common. Standardized billing, electronic health care information systems, increased standardization of basic insurance plans, and elimination of many underwriting activities are typical of many health care reform proposals, including those which take a more modest approach to reform and may be termed "insurance reform" proposals. Managed care reform proposals tend to utilize most or all of those methods plus some additional methods such as increased use of purchasing pools. Single-payer proposals generally eliminate the private insurance business except for insurance which supplements the basic package offered through the government and financed by taxes. The single-payer approach essentially combines all of these methods of reducing administrative costs. Under a single-payer plan, there is typically a single,

7 General Accounting Office, *Health Care Reform*, GAO/OCG-93-8TR (December 1992).

basic insurance plan; uniform billing procedures; a single government purchaser of services; no underwriting activity; and universal coverage. A single-payer approach may also eliminate copayments and reimburse hospitals using prospective budgets like the health care plans in Canadian provinces.

Reforms may also create new administrative costs.

Second, while reducing certain administrative costs, a reform proposal may increase other administrative costs. As a result, it may not be immediately clear whether the proposal's net effect is to reduce or increase overall administrative costs. For example, many proposals eliminate insurance underwriting by prohibiting the use of pre-existing conditions as grounds for denial of coverage, guaranteeing renewability of insurance coverage, and instituting community rating for the setting of insurance rates. To make community rating work, reform proposals generally require risk adjustment of the premiums received by insurers.[8] The risk adjustment process, however, will add some administrative costs. Whether those additional costs are less than the underwriting costs eliminated is not certain. This uncertainty is compounded by the fact that there are unresolved questions about how risk adjustment would work.[9]

Another example of administrative costs increasing under reform is the additional costs of monitoring health care quality and outcomes and providing useful data to consumers. Managed care proposals tend to rely on increased competition to help contain health spending. Many such proposals call for the development of a database which would enable the government or purchasing pools to provide information to consumers. That information on costs and quality would presumably assist consumers in making intelligent choices about alternative health care plans and force health insurers to compete on the basis of both cost and quality. Health care analysts have difficulty evaluating reform proposals because the proposals do not generally specify the proposed costs of gathering and disseminating such information.

The General Accounting Office points out that, in general, there is considerable uncertainty about how much any particular reform proposal will change administrative costs. This uncertainty exists because it is difficult to estimate the effect of policies which have never been tried before. In addition, as noted above, estimating costs is difficult when implementation details of reform proposals have not been determined. As a result, when recently asked to examine the administrative cost implications of alternative national reform proposals,

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8 The purpose of risk adjustment is to reduce an insurer's incentive to compete only by attracting a relatively healthy clientele. Without risk adjustment, those attracting a relatively less healthy clientele may not be able to compete for long.

9 In a recent report, the General Accounting Office concluded that, although "the major reform proposals call for risk adjustment, the specifics of how best to implement risk adjustment have not been thoroughly researched. Consequently, current health care reform proposals do not prescribe a specific methodology to implement the risk adjustment process." See General Accounting Office, *Considerations for Risk Adjustment Under Community Rating*, GAO/HEHS-94-173 (September 1994): 1.

the General Accounting Office assessed the general effects of proposals on health care administrative costs but did not attempt to quantify the effects.[10]

Some administrative costs may help to control overall health spending.

Finally, many health care analysts would suggest that reducing administrative costs is only one goal of health care reform and that goal may sometimes be in conflict with other more important goals such as containing overall spending or reducing unnecessary care. According to the General Accounting Office:

> The most efficient administrative system is not necessarily the least costly, because higher administrative expenses may be needed to control spending for medical services. Rather, the appropriate level of spending on health care administration can be viewed as the smallest amount necessary to achieve the overall goals of the system: expanding access, controlling costs, and maintaining high quality of care.[11]

A 1992 workshop for policy makers, researchers, and key stakeholders was held by the Robert Wood Johnson Foundation on health care administrative costs. The conclusions reached by most workshop participants were similar:

> Administrative costs are not simply "waste, fraud, and abuse," ... but rather, they are a function of how we as a society have chosen to finance and deliver health care. Certainly, there is some waste. It is generally agreed, for example, that transactions costs are clearly out of line, and steps to reduce them should be taken, such as standardizing claims formats and taking full advantage of electronic processing capabilities. Yet most administrative functions have some value, some of which is more easily quantified than others. Some of this value is directed toward trying to control system expenditures.[12]

The relevant point is that reducing administrative costs should not be, and usually is not, the only goal of health care reform. One has to be careful to consider the beneficial impacts of administrative expenditures before routinely reducing or eliminating administrative costs.

MinnesotaCare

MinnesotaCare could be considered a type of managed care reform. Under current law, MinnnesotaCare will utilize some of the potential methods of reducing administrative costs listed above. By July 1, 1997, MinnesotaCare is currently designed to implement a number of insurance market reforms including the elimination of insurance underwriting, a prohibition on preexisting condition exclusions, a requirement of guaranteed issuance of insurance without

10 General Accounting Office, *Proposals Have Potential to Reduce Administrative Costs*, GAO/HEHS-94-158 (May 1994). This report examines four health care reform proposals: 1) President Clinton's Health Security Act (H.R. 3600), 2) Senator Chafee's Health Equity and Access Reform Today Act of 1993 (S. 1770), 3) Representative Cooper's Managed Competition Act of 1993 (H.R. 3222), and 4) Representative McDermott's American Health Security Act of 1993 (H.R. 1200). The first three proposals are managed competition proposals, while the fourth proposal is a federally-mandated, state-administered single-payer proposal.

11 GAO/HEHS-94-158, 2.

12 Anne K. Gauthier, Deborah L. Rogal, Nancy L. Barrand, and Alan B. Cohen, "Administrative Costs in the U.S. Health Care System: The Problem or the Solution?" *Inquiry*, No. 29 (Fall 1992): 319.

regard to health status, and mandated portability of coverage. MinnesotaCare will also provide opportunities for all Minnesotans to purchase health coverage as part of large state-administered or private purchasing pools. MinnesotaCare also includes the establishment of a uniform benefit package with up to five cost-sharing options—ranging from a low-premium plan with high deductibles and copayments to a high-premium plan with small deductibles and copayments. In addition, MinnesotaCare requires the development of standardized patient identification cards, uniform billing forms, uniform electronic billing procedures, and other uniform claims procedures. Standardized utilization review procedures are also part of the planned health industry changes under MinnesotaCare.[13]

MinnesotaCare seeks to promote competition and streamline administrative costs.

MinnesotaCare also intends to stimulate competition among health plans and health care providers through a variety of means. MinnesotaCare restructures the health care industry into two groups: Integrated Service Networks (and Community Integrated Service Networks) and the Regulated All-Payer Option (RAPO). Integrated Service Networks (ISNs) are a new type of health care plan which integrates all health care services, including hospital care. Competition among ISNs will be encouraged, and ISNs will have incentives to prevent future illness, improve quality, and control spending. RAPO will cover all health care not provided through the ISN system, or essentially the remaining fee-for-service providers. Included in RAPO is the establishment of a uniform fee schedule by the state, a standardized payment system, and a standardized utilization review system. In addition, to help contain overall health care costs, the Commissioner of Health has been given the responsibility to enforce annual limits on the rate of increase in total health care spending in Minnesota. Finally, Minnesota has established a Health Information Clearinghouse to provide more and better information on health care costs and quality to consumers, employers, providers, health insurers, and others. It is anticipated that the following types of information will be provided: report cards and other information on ISNs and other health plans, quality and outcomes data, hospital quality data, information on purchasing pools and health care reform programs, technology assessments, and practice parameters.[14]

Single-payer plans reduce administrative costs by eliminating most of the private health insurance industry and simplifying the billing process.

Overall, MinnesotaCare's package of reforms affecting administrative costs is roughly similar to those included in a number of managed care reform plans discussed at the national level. This is not to suggest that MinnesotaCare is identical to such plans, but rather to suggest the features affecting administrative costs are somewhat similar to those contained in national managed care proposals. MinnesotaCare and other managed care plans are dissimilar from single-payer proposals in that they do not eliminate the private insurance industry or the multi-payer characteristic of the current health system.

13 Minnesota Health Care Commission, *Minnesota Health Reform Master Plan* (June 1994).

14 Minnesota Health Reform Master Plan, 18.

SUMMARY

It is relatively easy to identify the types of administrative costs incurred in the United States under the current health care system. However, due to the lack of adequate data, it is not possible to make interstate or international comparisons of the magnitude of health care administrative costs. Furthermore, establishing the magnitude of administrative costs in the United States is difficult because accounting information does not always record information in the categories needed by analysts to measure and compare administrative costs. While comprehensive international comparisons are not possible, a number of studies have looked in some depth at how U.S. administrative costs compare to those in Canada, where each province has a single-payer system of health care. Chapter 2 will examine these U.S.-Canadian comparisons.

It appears that MinnesotaCare is using most of the known methods for reducing administrative costs short of implementing a single-payer system. In Chapter 3, we will review our consultant's estimates of administrative costs and overall health spending under several reform options that incorporate the reforms in MinnesotaCare. These estimates will be compared with the results for several single-payer options.

Results of National Studies

CHAPTER 2

During the last decade there has been a lively debate over health care administrative costs. A group of physicians, principally led by David Himmelstein and Steffie Woolhandler, have argued that administrative costs in the United States health care system are large and growing. These advocates for a Canadian-style single-payer system recently estimated that administrative costs for 1993 were $232 billion, or almost 25 percent of national health care spending—up from 22 percent in 1983.[1] Himmelstein and Woolhandler have estimated in a series of articles that between 8.2 and 16.6 percent of national health expenditures would be saved if the United States adopted the Canadian approach to health care. As a result, these two physicians and others through a group called the Physicians for a National Health Program (PNHP) have advocated the adoption of a single-payer plan in the United States. Physicians for a National Health Program has called the U.S. health care payment system "an elaborate and increasingly wasteful paper chase."[2] In addition, PNHP has claimed that managed care reforms such as those proposed by President Clinton and others would "likely ... increase administrative waste."[3]

Their work and the interest of policy makers have spawned a number of additional studies of the effect of adopting a single-payer system. Studies have been conducted by the General Accounting Office, the Congressional Budget Office, the Office of Management and Budget, and Lewin/ICF, a national health care consulting firm.[4] In contrast to the Himmelstein/Woolhandler and PNHP studies, the range of potential administrative cost savings found by these studies is lower, varying from 4.2 to 9.1 percent of national health expenditures.

These latter studies have also estimated the additional costs which may occur as a result of adopting a Canadian-style single-payer system. The additional costs include both the costs of extending insurance coverage to those who currently are uninsured and the costs of increased health care utilization by all citizens as a result of the elimination of patient cost-sharing under a

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1 Ida Hellander, David U. Himmelstein, Steffie Woolhandler, and Sidney Wolfe, "Health Care Paper Chase, 1993: The Cost to the Nation, the States, and the District of Columbia," paper by the Physicians for a National Health Program (August 1993): 1.

2 Hellander et. al., 1.

3 Hellander et. al., 8.

4 Lewin/ICF is now known as Lewin-VHI.

Canadian-style approach. Generally, the studies have found that the additional costs are roughly equal to or greater than the estimated administrative cost savings. These studies have produced estimates of the percentage change in overall health care spending ranging from a 0.4 percent decrease to an 11.3 percent increase in total spending.

In this chapter, we examine all of these studies of single-payer systems in detail and also discuss the criticisms which have been made of the studies. In addition, we consider the results of studies that have estimated the effect of other types of reforms on health care administrative costs. This chapter addresses the following issues:

- **What have previous studies found about the effect of a single-payer system on administrative costs and overall health care spending?**
- **What have previous studies found about the impact of other health care reforms on administrative costs? What are the limitations of these studies?**
- **What criticisms have been made of single-payer studies?**

SINGLE-PAYER STUDIES

Himmelstein-Woolhandler and PNHP Studies

The recent debate over the effect of Canadian-style single-payer reform on administrative costs in the U.S. started with a 1986 article by David Himmelstein and Steffie Woolhandler.[5] In this article, the two physicians estimated that $29 billion in administrative costs (in 1983 dollars) would be eliminated if the U.S. adopted a Canadian-style single-payer system.[6] These estimated savings were approximately 8.2 percent of U.S. health care expenditures in 1983. A little more than half of the savings were expected to come from hospital administration, with most of the remaining savings split between reductions in insurance overhead and physician overhead.

In 1991, the two physicians released a second estimate, which was much larger than the first.[7] They now estimated that between $69 and $83 billion (in 1987 dollars) could be eliminated, or between 13.8 and 16.6 percent of national

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5 David U. Himmelstein and Steffie Woolhandler, "Cost Without Benefit: Administrative Waste in U.S. Health Care," *New England Journal of Medicine*, Vol. 314, No. 7 (Feb. 13, 1986): 441-445.

6 The authors also estimated that $38 billion in administrative costs would be eliminated by adopting a national health service system similar to that in Great Britain.

7 Steffie Woolhandler and David U. Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," *New England Journal of Medicine*, Vol. 324, No. 18 (May 2, 1991): 1253-1258.

health care expenditures in 1987.[8] The estimated percentage savings from insurance overhead more than doubled from the first estimate. The estimated savings from physician overhead was calculated using two alternative methods; as a result, the authors provided a range of estimated savings. The range of estimated savings from physician overhead was two to three times the savings estimated in the earlier study.

Himmelstein and Woolhander have also participated with other physicians in preparing two other estimates. These estimates were issued in 1991 and 1993 by the Physicians for a National Health Program (PNHP). Both of these studies produced estimates somewhat different from the previous Himmelstein and Woolhandler studies. The 1991 PNHP report estimated that $67 billion (in 1991 dollars), or 9.5 percent of national health spending, could be eliminated under a Canadian-style single-payer plan.[9] This estimate was roughly similar to the first Himmelstein and Woolhandler estimate (1986), except that savings from insurance overhead were twice as large as those in the first estimate. Unlike all the other studies in which Himmelstein and Woolhandler participated, the 1991 PNHP report also included an estimate of the costs of insuring the previously uninsured. Based on work by Lewin/ICF, the PNHP physicians estimated that fully insuring the uninsured would cost $12 billion. Like the other Himmelstein/Woolhandler studies, the authors did not estimate how much utilization of health care would increase due to the elimination of patient cost-sharing under a Canadian system; however, they did include an allowance of up to $37 billion for additional utilization in the budget they set for a single-payer system. By including these additional costs, the authors were saying, in effect, that the net effect of a single-payer system would be to decrease costs by between 2.6 and 7.8 percent of national health spending, depending on whether one includes the allowance for additional utilization.

Advocates have estimated that administrative cost savings under a single-payer plan could be as high as 17 percent of health spending.

A group of PNHP physicians, including Himmelstein and Woolhandler, issued the latest estimate in August 1993. The 1993 PNHP report estimated that implementing a Canadian system in the United States would save about $118 billion (in 1993 dollars), or about 12.5 percent of U.S. health care spending.[10] The results of this study were roughly similar to the 1991 Woolhandler and Himmelstein report except that the 1993 study's estimates of physician overhead savings were lower, though not as low as in the other two studies.

Table 2.1 displays the results of these four studies. As we have described above, the results vary considerably. Estimated administrative cost savings range from 8.2 to 16.6 percent of national health expenditures. Some difference among studies would be expected due to the slight growth of administra-

8 When comparing estimates discussed in this chapter, it is best to compare each study's estimates in percentage, rather than dollar, terms. This controls for inflation when estimates from different years are being compared and also controls for the fact that some estimates made for identical years use different estimates of national health care spending.

9 Kevin Grumbach, Thomas Bodenheimer, David U. Himmelstein, and Steffie Woolhandler, "Liberal Benefits, Conservative Spending: The Physicians for a National Health Program Proposal," *Journal of the American Medical Association*, Vol. 265, No. 19 (May 15, 1991): 2549-2554.

10 Hellander et. al.

Table 2.1: Estimates by Woolhandler and Himmelstein of the Effect of a Canadian-Style Single-Payer Model on Health Care Administrative Costs

	1986 Article[a]	1991 Article[b]	1991 PNHP Proposal[c]	1993 PNHP Paper[d]
REDUCTION IN BILLIONS OF DOLLARS				
Insurance Overhead	$ 6.7	$21.7	$27	$43.2
Hospital Administration	15.2	27.3	31	49.1
Physician Overhead	6.2	15.9 to 30.0	9	23.8
Nursing Home Administration	1.1	4.1	NA	1.6
Total Administrative Savings	$29.2	$69.0 to $83.2	$67	$117.7
Estimated National Health Expenditures (and year)	$356.0 (1983)	$500.3 (1987)	$705 (1991)	$939.9 (1993)
PERCENTAGE REDUCTION IN NATIONAL HEALTH EXPENDITURES				
Insurance Overhead	1.9%	4.3%	3.8%	4.6%
Hospital Administration	4.3	5.5	4.4	5.2
Physician Overhead	1.7	3.2 to 6.0	1.3	2.5
Nursing Home Administration	0.3	0.8	NA	0.2
Total Administrative Savings	8.2%	13.8 to 16.6%	9.5%	12.5%

[a]David U. Himmelstein and Steffie Woolhandler, "Cost Without Benefit: Administrative Waste in U.S. Health Care," *New England Journal of Medicine*, Vol. 314, No. 7 (Feb. 13, 1986): 441-445.

[b]Steffie Woolhandler and David U. Himmelstein, "The Deteriorating Administrative Efficiency of the U.S.Health Care System," *New England Journal of Medicine*, Vol. 324, No. 18 (May 2, 1991): 1253-1258.

[c]Kevin Grumbach, Thomas Bodenheimer, David U. Himmelstein, and Steffie Woolhandler, "Liberal Benefits, Conservative Spending: The Physicians for a National Health Program Proposal," *Journal of the American Medical Association*, Vol. 265, No. 19 (May 15, 1991): 2549-2554.

[d]Ida Hellander, David U. Himmelstein, Steffie Woolhandler, and Sidney Wolfe, "Health Care Paper Chase, 1993: The Cost to the Nation, the States, and the District of Columbia," paper by Physicians for a National Health Program (August 1993).

tive expenditures as a share of all health spending. However, this factor does not explain the large differences in results.

One of the key differences among studies is that the 1991 Woolhandler and Himmelstein uses a different assumption than the other studies. Most of the studies assume that U.S. administrative costs would be reduced to the same proportions of spending that are experienced in Canada. For example, the latest PNHP study assumes that physician overhead in the U.S. would be reduced from 48.1 percent of physician revenues in the U.S. to the 34.5 percent level experienced in Canada, a 13.6 percent difference. The 1991 study instead assumes that physician overhead would be reduced to the same per capita expenditure amounts occurring in Canada. Since Canada spends less on overall health care spending per capita than the U.S., the 1991 study assumes larger reductions in administrative costs than the other studies.

The results of the 1991 Woolhandler and Himmelstein study, which produced the largest estimates of administrative savings, do not seem reasonable. It may be possible, under a Canadian-style system, to reduce U.S. administrative costs to the same proportion of expenditures that is experienced in Canada. However, it does not seem plausible to assume that overall U.S. spending per capita could be reduced to Canadian levels. This would require at least a 25 percent reduction in total health care spending.

Another difference among the studies is in the estimation of insurance overhead savings. The first study (1986) had significantly lower insurer savings than the other three. According to Woolhandler and Himmelstein, this difference resulted because insurer overhead costs rose from 4.4 to 5.1 percent of U.S. health care spending between 1983 and 1987, while insurance overhead in Canada declined from 2.5 to 1.2 percent.[11] Consequently, the 1986 results for insurer overhead savings are no longer accurate. In addition, as we will see in the next section, the insurer overhead savings estimated by Himmelstein and Woolhandler in 1986 are low compared with estimates by others who have studied the impact of a Canadian-style system.

Studies by Government Agencies and Consulting Firms

More recent studies suggest administrative cost savings would range from 6 to 9 percent.

The Himmelstein-Woolhandler studies generated interest among policy makers and analysts in the savings which could be produced by a single-payer system. As a result, a number of additional studies of the Canadian system have been completed. The General Accounting Office published the first of these studies in June 1991. Subsequent studies include those by the Office of Management and Budget, Lewin/ICF, and the Congressional Budget Office. Each of these studies estimated not only the administrative cost savings from implementing a Canadian system but also the additional costs arising from insuring the currently uninsured and eliminating patient cost-sharing. Table 2.2 shows the results of these four studies. Also shown in Table 2.2 are the results from the 1991 PNHP study, since that was the only Himmelstein-Woolhandler estimate which was in 1991 dollars like each of these four studies.

In its study, the General Accounting Office (GAO) estimated that a Canadian-style system would save $67 billion in administrative costs, or 9.1 percent of health care spending in 1991.[12] However, the GAO also estimated that health care spending would increase by $64 billion, leaving a net savings of about $3 billion, or 0.4 percent of health care spending. The increased spending consisted of about $13 billion to bring the health care consumption of the uninsured up to the level consumed by the insured and $51 billion for the

11 Woolhandler and Himmelstein, 1255-56.

12 General Accounting Office, *Canadian Health Insurance: Lessons for the United States*, GAO/HRD-91-90 (June 1991). The methodology for estimating administrative cost savings and additional health care costs for a Canadian-style system is detailed in General Accounting Office, *Canadian Health Insurance: Estimating Costs and Savings for the United States*, GAO/HRD-92-83 (April 1992).

Table 2.2: Estimated Savings and Costs from a Canadian-Style Single-Payer System, 1991

	Congressional Budget Office (April 1993)	Lewin ICF[a] (January 1992)	Office of Management and Budget (October 1991)	General Accounting Office (June 1991)	Physicians for a National Health Program (May 1991)
CHANGES IN BILLIONS OF 1991 DOLLARS					
Insurance Overhead	$(27)	$(23)	$(17) to (30)	$(34)	$(27)
Hospital Administration	(17)	(13)	(11) to (14)	(18)	(31)
Physician Overhead	(8)	(11)	(3) to (5)	(15)	(9)
Net Reduction in Administrative Costs	$(52)	$(47)	$(31) to (49)	$(67)	$(67)
Increased Spending[b]	90	78[c]	56 to 114	64	12[d]
Net Change in Spending	$38	$31	$ 7 to 83	$(3)	$(55)
PERCENTAGE CHANGE IN NATIONAL HEALTH EXPENDITURES					
Insurance Overhead	(3.6)%	(3.0)%	(2.3) to (4.1)%	(4.6)%	(3.8)%
Hospital Administration	(2.3)	(1.8)	(1.5) to (1.9)	(2.5)	(4.4)
Physician Overhead	(1.1)	(1.5)	(0.4) to (0.7)	(2.0)	(1.3)
Net Reduction in Administrative Costs	(7.0)%	(6.3)%	(4.2) to (6.6)%	(9.1)%	(9.5)%
Increased Spending[c]	12.0	10.6	7.6 to 15.5	8.7	1.7
Net Change in Spending	5.0%	4.3%	0.9 to 11.3%	(0.4)%	(7.8)%

[a]This firm is now known as Lewin-VHI.

[b]Includes increased health care utilization due to the elimination of patient cost-sharing and increased spending due to universal coverage.

[c]Also includes $10.2 billion in increased spending on nursing home and home health care due to the elimination of patient cost-sharing and $6.4 billion in increased spending due to elimination of utilization management programs.

[d]Includes only an estimated $12 billion in added costs to cover the currently uninsured population. The PNHP proposal does not estimate the increase in costs due to the elimination of patient cost-sharing, but includes an allowance of $37 billion for these and other costs.

additional health care utilization estimated to result from the elimination of patient copayments and deductibles.

In 1991, the Office of Management and Budget (OMB) also produced estimates of the effect of a Canadian-style system.[13] The OMB provided a range of estimates. For example, OMB estimated that administrative savings would be between $31 to $49 billion dollars, or 4.2 to 6.6 percent of U.S. health care spending. OMB estimated the additional health care costs to be between $56 and $114 billion dollars. As a result, OMB's overall estimates ranged from a

13 Testimony by Richard Darman, director of the Office of Management and Budget, hearings before the House of Representatives, Committee on Ways and Means on H.R. 3205 (October 10, 1991): 700-727.

net increase of $7 billion to an increase of $83 billion. These estimates were equivalent to a 0.9 to 11.3 percent increase in health care spending.

In early 1992, three consultants working for the consulting firm of Lewin/ICF issued estimates of the effect of a Canadian system on U.S. health care costs.[14] The Lewin consultants estimatted that a Canadian system would result in administrative cost savings of $47 billion, or 6.3 percent of health care spending, but would increase health care spending by $78 billion, or 10.6 percent. According to the Lewin estimate, the net effect would be to increase overall spending by $31 billion, or 4.3 percent of health care spending.

Finally, in April 1993, the Congressional Budget Office (CBO) issued a report containing estimates somewhat similar in magnitude to those prepared by Lewin.[15] CBO estimated that a Canadian-style system would reduce administrative costs by $52 billion but increase health care spending by $90 billion. The net effect, according to the CBO, would be to increase spending by $38 billion, or 5.0 percent of health care spending in 1991.

Under a Canadian-style system, administrative savings may be offset by increased health care utilization costs.

The CBO study also examined the effect of implementing a single-payer system with patient cost-sharing. Due to the additional bills and paperwork generated by patient copayments and deductibles, CBO estimated lower administrative cost savings for a single-payer system with cost-sharing ($34 billion) than for a Canadian-style system ($52 billion). However, unlike the results for the Canadian-style system, CBO estimated that cost-sharing would result in lower overall costs than the current system. CBO estimated that a single-payer system with cost-sharing would reduce health care spending by $14 billion, or 1.9 percent, compared with a 5.0 percent increase for a Canadian system with no cost-sharing. Despite lower administrative savings, the system with cost-sharing would reduce overall health care spending because it would avoid the significant increases in health care utilization expected to occur under a Canadian system.

Table 2.3 shows the results of the CBO study. Also included in the table are the results for two "all-payer" systems. For these systems, CBO assumed that the federal government would set all payment rates for insurers. All payers would be required to reimburse providers at Medicare's rates. With universal coverage, CBO estimated that administrative costs would increase 3.4 percent, but overall health spending would increase less than under a Canadian-style single-payer system (3.1 percent versus 5.0 percent). According to CBO, an all-payer system without universal coverage would reduce overall spending by 1.3 percent, or not quite as much as a single-payer system with cost sharing and universal coverage.

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14 John F. Sheils, Gary J. Young, and Robert J. Rubin, "O Canada: Do We Expect Too Much from its Health System? *Health Affairs*, Vol. 11, No. 1 (Spring 1992): 7-20.

15 Congressional Budget Office, *CBO Staff Memorandum: Single-Payer and All-Payer Health Insurance Systems Using Medicare's Payment Rates* (April 1993). This paper was an update and expansion of earlier estimates presented in a CBO study called *Universal Health Insurance Coverage Using Medicare's Payment Rates* (December 1991).

Table 2.3: Congressional Budget Office Estimates of Administrative Costs and National Health Expenditures Under Alternative Systems

	Administrative Costs[a]	Percentage Change	National Health Expenditures[a]	Percentage Change
Current System	$71.3 billion	NA	$748.2 billion	NA
Canadian-Style Single-Payer	19.3	-72.9%	785.8	5.0%
Single-Payer with Cost Sharing	37.2	-47.8	734.0	-1.9
All-Payer System with Universal Coverage	74.7	4.8	771.5	3.1
All-Payer System without Universal Coverage	69.7	-2.2	738.3	-1.3

Source: Congressional Budget Office.

[a]In billions of 1991 dollars.

A single-payer plan with cost sharing might reduce overall health spending.

The results of these four studies, plus the 1991 PNHP study, are summarized in Figures 2.1 and 2.2. Figure 2.1 shows that these four studies estimated administrative cost savings of between 4.2 percent (low OMB estimate) and 9.0 percent (GAO) of overall health care spending. These estimates were below the 1991 PNHP estimate of 9.5 percent and below all of the other Himmelstein-Woolhandler/PNHP estimates except the initial estimate in 1986.

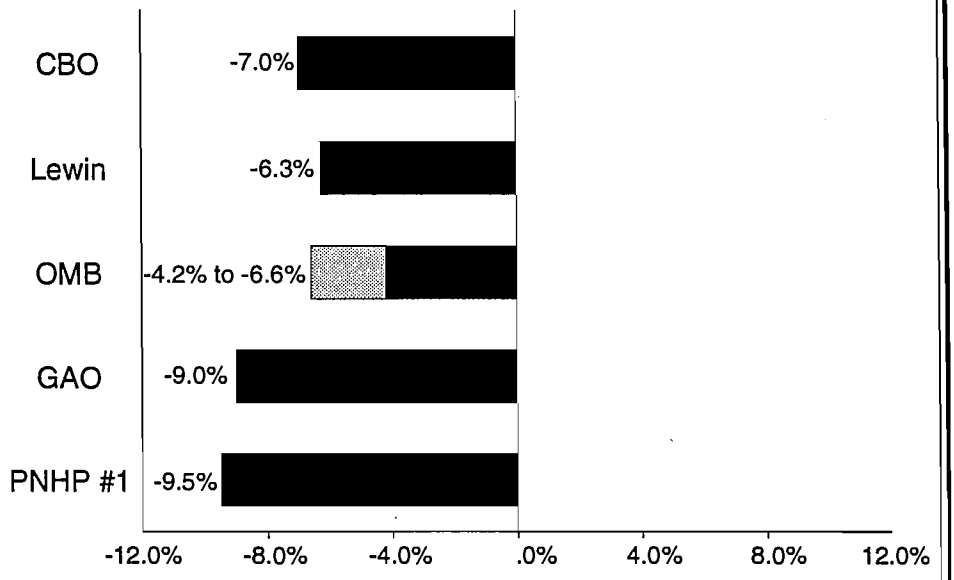
Figure 2.2 shows the overall estimates of change in health care spending produced by these four studies. The overall estimates incorporate both the administrative cost reductions and the additional costs incurred under a Canadian system. Three of the four studies projected increases in health care spending ranging from 0.9 percent (low OMB estimate) to 11.3 percent (high OMB estimate). The other study (GAO) projected a small reduction in spending of 0.4 percent. In contrast, the 1991 PNHP study appears to suggest that overall costs could be reduced by 2.6 to 7.8 percent.

Main Differences in Administrative Cost Savings

The magnitude of administrative savings estimated in the studies by CBO, GAO, OMB, and Lewin (4.2 to 9.0 percent) is considerably less than that projected in the Himmelstein-Woolhandler/PNHP (HW/PNHP) studies (8.2 to 16.6 percent). One reason for the difference is that the highest Himmelstein-Woolhandler estimate (1991), as noted earlier, assumed that U.S. administrative costs (and overall health care spending) could be reduced to the same per capita levels as experienced in Canada. However, even if this high estimate is not considered, the range of Himmelstein-Woolhandler/PNHP estimates (8.2 to 12.5 percent) is still higher than the range for the other studies. The average administrative savings for these three remaining HW/PNHP studies is about 10 percent, while the average administrative savings for the four other studies is about 7 percent.[16]

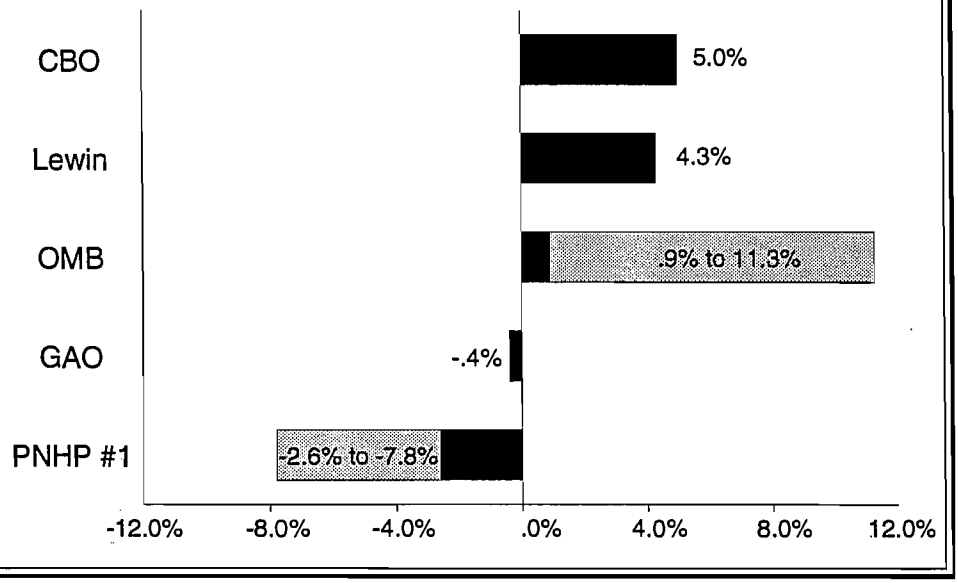
16 This average includes administrative savings for the OMB study at its mid-point level, 5.4 percent of health care spending.

Figure 2.1: Change in Administrative Costs Under a Canadian-Style Single-Payer System, As a Percentage of National Health Expenditures



A Canadian-style system would reduce administrative costs, but might increase overall health spending.

Figure 2.2: Overall Percentage Change in National Health Expenditures With Adoption of a Canadian-Style Single-Payer System



CBO and GAO estimate lower hospital administrative savings than advocates of a single-payer approach.

The remaining difference is in large part due to the lower hospital administrative cost savings estimated in the other studies. Table 2.2 shows that the four other studies estimated hospital cost savings of 1.5 to 2.5 percent of health care spending. In contrast, the remaining three HW/PNHP studies projected hospital administrative cost savings of 4.3 to 5.2 percent of health care spending. The average hospital cost savings for the HW/PNHP studies were 4.6 percent of health care spending, compared with 2.0 percent for the other four studies. Thus, the difference in estimated hospital administrative savings (2.6 percent) accounts for most of the remaining difference in overall administrative savings (3.1 percent).

The GAO and CBO estimates of hospital administrative cost savings assume that about 6 percent of overall hospital expenditures can be eliminated under a Canadian-style system. The GAO estimate was derived by comparing administrative costs of 9 percent of hospital expenditures in Canada with 15 percent in the United States for comparable costs. The 1991 PNHP estimate assumed that the 9 percent Canadian level was comparable to U.S. administrative costs of 20.2 percent, measured using data from California hospitals. Thus, the PNHP study assumed savings of 11.2 percent of hospital expenditures, compared with the 6 percent savings used by GAO.

Other Differences in Administrative Cost Savings

Most of the studies used somewhat similar methods, although sometimes different numbers, to calculate administrative cost savings for insurers, hospitals, and physicians. Generally, the studies calculated savings for each group by comparing the percentage of relevant administrative expenditures for that group to the percentage of administrative expenditures in Canada for that group. One of the studies, however, used a completely different method. The Lewin/ICF study used much more detailed breakdowns of administrative expenditures for hospitals and physicians and then used assumptions about how each category of administrative expenditure would change under a single-payer system.[17] There are several advantages to this approach. First, this approach explicitly recognizes that some "overhead costs"—such as medical malpractice insurance, quality assurance, medical supplies, nonphysician medical staff, and hospital laundry and dietary services—would not likely be affected by the implementation of a single-payer system. Second, the approach acknowledges that some U.S. administrative costs represent higher levels of capital investment than in Canada and cannot be eliminated in the short run. Finally, the Lewin approach for measuring insurer cost savings avoids the problem that Canadian cost figures do not include certain overhead costs (buildings, equipment, fringe benefits, and personnel services), which are included

17 The Lewin study calculated insurer overhead savings by subtracting expected insurer overhead under single-payer system from current levels of public insurance administration and private insurance overhead. Current levels of private insurance overhead were adjusted to reflect the fact that the relative levels vary over the insurance cycle and need to be averaged over a period of years. The expected overhead under a single-payer system was based on current levels of overhead in the Medicare program, adjusted to reflect lower hospital claims processing and associated general administration under a single-payer system and higher administrative costs due to the elimination of patient cost-sharing and the resulting increase in health care utilization.

in the U.S. data.[18] The main potential disadvantage of the Lewin approach is that it must make possibly arbitrary assumptions about how much individual categories of administrative expenses would change under a single-payer system.[19]

The remainder of this section attempts to point out the differences in methodology for the remaining studies. Table 2.4 highlights the differences and similarities for four of the eight studies outlined earlier in the chapter. Included in Table 2.4 are the CBO and GAO studies and the two PNHP studies. The Lewin/ICF was not included because its methodology is substantially different from the other studies and would be too complicated to explain in one table.[20] Also, the 1986 Himmelstein and Woolhandler study was excluded because the data used in that study has been updated in the more recent PNHP studies. The 1991 Woolhandler and Himmelstein study was excluded from the table because, as noted earlier, it makes an unrealistic assumption about the reductions in U.S. administrative and overall health care costs. Finally, the OMB study is excluded, since its methodology was not readily available.

All four of the studies in the table used somewhat similar methods to estimate administrative cost savings. However, these studies sometimes used slightly different methods and often used different numbers which caused their results to differ. For example, the studies generally computed insurer overhead savings by comparing the percentage of U.S. health spending which currently goes for private insurance overhead and public insurance program administration to a percentage which was expected to be achieved under a U.S. single-payer system. The GAO report and the second PNHP study used the same method and percentages for calculating insurer overhead savings. Both compared U.S. insurer overhead equal to 5.8 percent of national health expenditures to a 1.2 percent figure for Canada and calculated savings to be 4.6 percent of national health expenditures. The first PNHP estimate was calculated in approximately similar fashion, except that the percentages for the U.S. and Canada were different because they were based on older data. The CBO study, however, applied somewhat different methods to the same data and derived lower estimated savings as a result. The CBO study adjusted insurer overhead for the current year to reflect the cyclical nature of the private insurance business in the United States. In addition, CBO eliminated insurance premium taxes from U.S. administrative expenditures because these taxes are a transfer payment not a real cost of providing insurance. CBO also used administrative cost experience in the U.S. Medicare program as the benchmark for administrative costs under a single-payer program. CBO reasoned that a U.S. single-payer system was not likely to reduce the percentage of administrative costs below that already experienced in the Medicare program. As a result, CBO's estimate of insurer overhead savings (3.6 percent of national health

18 Sheils, Young, and Rubin, 8 and 11.

19 David U. Himmelstein and Steffie Woolhandler, "Bias In, Bias Out: A Reply to Sheils, Young, and Rubin, *Health Affairs*, Vol. 11, No. 2 (Summer 1992): 235-238.

20 Furthermore, the results of the Lewin/ICF study are similar to the CBO results, although they were derived using different methods.

Table 2.4: Comparison of Methods Used in Single-Payer Studies

	CBO		GAO		PNHP #1		PNHP #2	
Insurer Overhead	1991 U.S.:	5.4% of NHE[a]	1991 U.S.:	5.8% of NHE	1987 U.S.:	5.9% of PHE[b]	1993 U.S.:	5.8% of NHE
	Less Medicare:	1.9%	Less Canada:	1.2%	Less Canada:	1.4%	Less Canada:	1.2%
	Savings:	3.6% of NHE	Savings:	4.6% of NHE	Savings:	4.5% of PHE	Savings:	4.6% of NHE
Hospital Administration	Billing Costs:	3.0% of hospital revenues	1988 U.S.:	15.4% of hospital revenues	1987 California:	20.2% of hospital revenues	1990 U.S.:	22.5% of hospital revenues
	Plus management information system costs:	3.0%	Less Canada:	9.0%	Less Canada:	9.0%	Less Canada:	9.0%
	Savings:	6.0% of hospital revenues	Savings:	6.4% of hospital revenues	Savings:	11.2% of hospital revenues	Savings:	13.5% of hospital revenues
Physician Overhead	U.S.:	8.2% of physician revenue	U.S.:	22.3% of physician revenue	U.S.:	8.25% of physician revenue	1987 U.S.:	48.1% of physician revenues
	Less Canada:	2.0%	Less Canada:	12.0%	Less Canada:	2.0%	Less Canada:	34.5%
	Savings:	6.2% of physician revenue	Savings:	10.3% of physician revenue[c]	Savings:	6.25% of physician revenue[d]	Savings	13.6% of physician revenues

[a]Estimated savings in national health expenditures (NHE) were slightly higher than the difference between the two figures due to other factors in CBO's more complicated model.

[b]Personal health expenditures (PHE) are national health expenditures (NHE) less spending on research and construction, government public health activities, and private and public insurance overhead. In 1991, PHE was about 88% of NHE, which was $751.8 billion.

[c]The GAO estimate of physician overhead savings was based on the following estimates of U.S. overhead as a percentage of physician revenue: 16.6% for nonphysician personnel, 4.4% for physician time spent on insurance-related functions, and 1.3% for contracted billing services. Estimated overhead for Canada included 11.0% for nonphysician personnel and 1.0% for physician time.

[d]The PNHP #1 estimate of physician overhead for the U.S. included 5.5% of physician revenue for billing costs and 2.75% for physician time. The estimate for Canada included 1.0% for billing costs and 1.0% for physician time. The CBO study used about the same estimates for physician overhead.

spending) is significantly lower than the other two estimates which are based on similar data.

For hospital administration, the GAO and CBO savings estimates were similarly calculated and were significantly lower than the two PNHP estimates. All four of the estimates assumed that a U.S. single-payer system would achieve the reported level of Canadian administrative costs (9.0 percent of hospital revenues). However, the studies differed substantially on the question of what the comparable level of current administrative spending was in U.S. hospitals. The PNHP studies appear to use a definition of administrative costs used in Medicare cost reports filed by U.S. hospitals which showed administrative costs to be more than 20 percent of hospital revenues. In contrast, the GAO and CBO studies used a definition of U.S. hospital administrative costs which the GAO said was comparable to the Canadian definition.[21] GAO calculated comparable U.S. administrative costs to be only 15.4 percent and estimated administrative savings of 6.4 percent of hospital expenditures.

Physician overhead savings were calculated in three different ways in these four studies. The CBO study used the same methods used in the first PNHP study, but the GAO and second PNHP study used significantly different methods. As a result, the CBO and PNHP #1 studies arrived at similar estimates of savings (about 6.2 percent of physician revenue). The estimated administrative savings for the other two studies were significantly higher: 10.3 percent (GAO) and 13.6 percent (PNHP #2) of physician revenues. However, it now appears that GAO may be more inclined to accept the CBO estimate. In a recent report, GAO cited the CBO's estimated savings of 6 percent in the text of the report, while noting its previous estimate in a footnote.[22]

The first PNHP study estimated that 5.5 percent of U.S. physician revenue was spent on billing costs and that physicians spent approximately 2.75 percent of their time on billing-related activities. The PNHP study compared these figures with physician billing costs of one percent and physician time expenditures of no more than one percent in Canada. As a result, the initial PNHP study concluded that at least 6.25 percent of U.S. physician revenues would be eliminated by implementing a Canadian-style single-payer system in the United States.

The GAO study instead calculated savings in three categories: 1) physician time, 2) contracted billing services, and 3) nonphysician personnel. According to GAO's data, U.S. insurance-related costs totaled 22.3 percent of physician revenues, based on the following cost assumptions: 4.4 percent of physician revenues for physician time, 1.3 percent for contracted billing services, and 16.6 percent for nonphysician personnel. The GAO study assumed that Canadian physicians experienced comparable costs totalling 12.0 percent and con-

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21 GAO included general accounting, patient accounts and admitting, medical records, purchasing and stores, and data processing in U.S. hospital administrative costs and constructed a comparable figure from unpublished data collected by the Canadian government. See GAO/HRD-92-83, 12.

22 General Accounting Office, *Health Care Reform: Proposals Have Potential to Reduce Administrative Costs*, GAO/HEHS-94-158 (May 1994): 9.

sisting of 1.0 percent for physician time, 11.0 percent for nonphysician personnel, and no costs for contracted billing services.[23] As a result, GAO estimated that 10.3 percent of physician revenues would be saved under a Canadian-style system.

The second PNHP study had the highest estimated savings for physician overhead —13.6 percent of physician expenditures. This figure was obtained by comparing the level of non-patient care expenditures of U.S. physicians to the level experienced by Canadian physicians. According to the authors of this report, U.S. physicians spend 48.1 percent of expenditures on overhead items not directly involved in patient care, while Canadian physicians spend only 34.5 percent on such items. The second PNHP study attributed all of the difference in overhead expenditures to the single-payer system and estimated savings of 13.6 percent of physician expenditures.

The key difference in physician overhead savings among the studies is in how much of the difference in overall overhead each study assumed would be eliminated by a single-payer system. The second PNHP study assumed all of the difference would be eliminated. The GAO study was more selective but assumed that all of the difference in costs for nonphysician personnel would be eliminated. Finally, the first PNHP study and the CBO report assumed that only certain billing-related and insurance-related costs would be eliminated.

A Canadian-style system would increase spending by eliminating patient cost sharing.

Differences in Estimates of Additional Costs

Only three of the studies provided estimates of both the cost of covering the currently uninsured and the cost of additional utilization.[24] The GAO study estimated the cost of covering the uninsured to be $12.9 billion and the cost of additional utilization due to the elimination of patient cost-sharing to be $51.0 billion (in 1991 dollars).[25] These estimates were approximately 1.8 percent and 6.9 percent of national health expenditures respectively in GAO's study. The Lewin/ICF study projected the cost of expanding services to the uninsured to be $11.9 billion, or 1.6 percent of health care spending, and the cost of additional utilization to be $49.7 billion, or 6.7 percent of spending.[26] The Lewin study also estimated that the elimination of patient cost-sharing would increase home health service and nursing home utilization by $10.2 billion, or 1.4 percent of national health expenditures. Furthermore, the study projected that the

23 We calculated these percentages based on the data provided in the GAO report. See GAO/HRD-92-83, 12.

24 The OMB study estimated additional costs ranging from 7.6 to 15.5 percent of national health expenditures. However, the study did not break down these costs or explain the OMB's methodology. The 1991 PNHP study estimated that insuring the uninsured would raise costs by about 1.7 percent of national health expenditures. The PNHP study did not estimate the cost of increased utilization.

25 The GAO report (GAO/HRD-92-83) reported a different breakdown—namely $18.2 billion for expanding services to the uninsured and $45.7 billion for increased utilization. However, the $18.2 billion included about a $5.3 billion increase due to the elimination of cost-sharing.

26 The $11.1 billion figure in the Sheils, Young, and Rubin article is a misprint and should be $11.9 billion. See John F. Sheils and Gary J. Young, "National Health Spending Under a Single-Payer System: The Canadian Approach," Lewin/ICF staff working paper (January 8, 1992): 6.3.

elimination of utilization management techniques would increase health care utilization by $6.4 billion, or 0.9 percent of national spending. Finally, the CBO estimated additional health care costs of $89.6 billion.[27] CBO's estimate for extending coverage to the uninsured was about $25.4 billion, or 3.4 percent of health care spending. Its estimate for additional utilization and other miscellaneous factors was about $64.2 billion, or 8.6 percent of spending.[28]

The Lewin and GAO studies derived similar estimates of the cost of covering the uninsured. However, the CBO estimate was about twice as high. This occurred because CBO's 1993 study was able to use more recent data on the utilization of health care services by the uninsured. Lewin has since doubled its estimate based on this updated data. The CBO and updated Lewin estimates appear consistent with some other estimates which have been made in the national literature, although there is some disagreement in the literature regarding the increased costs of covering the uninsured.[29]

The three estimates of the costs of additional utilization do not differ as much as expected. The range of the estimates is between $50 and $64 billion, when one excludes from the Lewin estimates the items not in the other estimates. This range is smaller than expected because the Lewin and CBO estimates are based on the results of the RAND Health Insurance Experiment and the GAO study is only partially based on the RAND results. The RAND study used a controlled experiment setting and showed that patients with free care consumed 31 percent more physician services and 10 percent more hospital care than those with a plan requiring a 25 percent copayment.[30] While the Lewin and CBO estimates are based on the RAND results, the GAO used only a 17 percent increase for physician services. GAO did not accept the RAND evidence completely because Canada's experience before and after implementation of a single-payer system has suggested to some that utilization of physician services would not increase much.[31] The 17 percent increase used by the GAO is the average of the 31 percent increase predicted by the RAND results and the 3 percent increase experienced in Canada. Although none of these studies estimated an increase in utilization beyond the RAND results,

27 It is not entirely clear how the $89.6 billion is split between the two factors in the CBO study. We calculated that $25.4 billion was for insuring the uninsured by adding the amounts which CBO projected as increased costs for the uninsured for hospital services ($9.0 billion), physician services ($12.9 billion), and other covered services ($3.5 billion) under a single-payer model which included cost-sharing. Under a Canadian-style model, CBO estimated that the costs of serving the uninsured would increase by $43.4 billion. We assumed that the difference in the two figures was due to the elimination of patient cost-sharing.

28 Dollar amounts in this section are all in 1991 dollars. However, each study assumed a slightly different level of national health expenditures, so percentages of spending are always calculated relative to the level assumed in each study.

29 For a lengthy discussion and analysis of the literature on the costs of insuring the uninsured, see Office of Technology Assessment, Congress of the United States, *Understanding Estimates of National Health Expenditures Under Health Reform* (May 1994): 97-130.

30 W.G. Manning, J.P. Newhouse, N. Duan, E.B. Keeler, A. Leibowitz, and M.S. Marquis, "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, Vol. 77, No. 3 (June 1987): 251-277.

31 P. Enterline, V. Salter, A. McDonald, and J. McDonald, "The Distribution of Medical Services Before and After 'Free' Medical Care: The Quebec Experience," *New England Journal of Medicine*, Vol. 289, No. 22 (November 29, 1973).

some economists have argued elsewhere that the financial effect of implementing universal coverage would exceed the cost increase suggested by the RAND results because the prevailing standard of care would be raised.[32]

The GAO study also did not include increased utilization in insured services other than hospital and physician care, which were included in the CBO and Lewin/ICF studies. As a result, it is rather surprising that GAO's estimate of increased utilization costs ($51 billion) was actually higher than the Lewin/ICF estimate ($50 billion). This anomaly occurred because GAO applied the percentage increases in both physician and hospital utilization to all physician and hospital spending. In contrast, Lewin more appropriately applied the percentage increases only to spending by those currently in plans with copayment requirements.[33]

CBO's estimate of $64 billion is considerably higher than Lewin's estimate of $50 billion, even though both studies relied on the RAND results. The difference resulted because CBO assumed that physicians experiencing a reduction in revenues would respond with an offsetting increase in the volume of services provided.[34]

Summary of Single-Payer Studies

Past studies have unanimously concluded that implementing a Canadian-style, single-payer system in the United States would reduce health care administrative costs. However, the studies have not agreed on the magnitude of administrative cost savings. Estimates have ranged from 4.2 percent to 16.6 percent of national health care spending. Based on 1991 health care expenditures of $752 billion, the estimated range of savings would vary from $32 billion to $125 billion.

The range of estimates can be narrowed somewhat. The highest estimate (the 1991 Woolhandler and Himmelstein study) could be excluded because it assumed that U.S. administrative costs could be reduced to the same per capita amounts experienced in Canada. Even if the United States and Canada both had administrative costs equal to 10 percent of total health care costs, the methodology used in that study would suggest that a single-payer system would reduce U.S. administrative costs by about 32 percent. All of the other studies would have concluded that no change would have occurred. Furthermore, the savings from hospital administration seem inflated in all the Himmelstein-Woolhandler and PNHP studies. The GAO derived significantly lower hospital savings by making sure that the U.S. and Canadian administrative cost categories were comparable.

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32 Martin Feldstein, "Health Plan's Financing Gap," *Social Science and Modern Society*, Vol. 32, No. 1 (November/December 1994): 64-66.

33 CBO Staff Memorandum (April 1993): 44-46.

34 CBO's estimate of increased utilization costs would be even higher when compared with the Lewin estimate, except for CBO's assumption of lower physician payment rates. Under a single-payer system, new physician rates were assumed to be 13 percent lower than the current average physician rates for patients with private insurance.

The method for calculating physician overhead savings in the two Himmelstein-Woolhandler studies and the second PNHP estimate also seems inappropriate. The method assumed that all differences in physician overhead between the United States and Canada would be eliminated by a single-payer system. Even the method used by GAO may overstate physician overhead savings, since it assumed that all of the difference in nonphysician personnel costs was due to billing requirements. Some of the difference reflects the greater U.S. use of nonphysician personnel to staff laboratory and radiology equipment, which Canadian physicians are less likely to have in their offices. The method used in the first PNHP report and the CBO study, on the other hand, may understate physician overhead savings, since it only includes billing costs for Medicare and Blue Shield patients and uses a generous estimate of Canadian billing costs.[35]

We also feel that the lowest estimate (OMB) should be excluded since its derivation is not known. As a result, it is reasonable to conclude that implementing a Canadian-style single-payer system in the United States would probably reduce administrative costs by an amount equal to 6 to 9 percent of health care spending.

Several studies estimate that a Canadian-style system would increase U.S. health spending by 4 to 5 percent.

Of the studies examined, the recent CBO report has the most up-to-date estimate of additional spending due to utilization increases. The CBO increase of 12 percent includes a 3.4 percent increase to expand services to the uninsured and an 8.6 percent increase to cover the additional utilization which CBO expects would occur as a result of eliminating patient cost-sharing. As we have indicated above, the increase in utilization is not agreed to by all. Some believe that utilization would only increase a little due to the elimination of cost sharing and others believe that utilization would increase even more than predicted from the RAND results used by CBO and Lewin/ICF. Himmelstein and Woolhandler also have suggested that increased utilization would be less if measured at marginal, rather than average, costs. Fixed hospital costs could be allocated to greater numbers of patients and, thus, per diem costs would fall with increased utilization.[36]

If one accepts the RAND results, then the CBO and Lewin studies suggest that implementing a Canadian-style system in the United States would increase total health care spending by 4 to 5 percent. The decrease in administrative costs would be more than offset by the additional costs of increased utilization by the currently insured and expansion of services to the uninsured. It is also interesting to note, however, the CBO conclusion that a single-payer system *with patient cost-sharing* would reduce health care spending by 2 percent. The reduction in administrative costs would not be as much as under a Canadian-style system (4.6 percent versus 7.0 percent of national health expenditures), but overall costs would go down because cost-sharing would avoid much of the increase in health care utilization.

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35 CBO Staff Memorandum (April 1993): 42.

36 Himmelstein and Woolhandler, "Bias In, Bias Out," 237.

STUDIES OF OTHER REFORMS

Policy makers have also been interested in the effect of other reforms which, unlike single-payer proposals, retain the private insurance market. As discussed in Chapter 1, these proposals include limits to insurance underwriting, pooling small firms and individuals into large purchasing groups, standardization of basic benefits packages, and uniform billing and electronic claims processing. Policy makers have been interested in how much these types of reforms could reduce health care administrative costs.

Unfortunately, the literature on other reforms intended to reduce administrative costs is not as well developed as the literature on single-payer systems. There is significant difficulty in estimating the effect of such reforms because they have never been tried on a large scale before and many important implementation details of such reforms have not been specified in proposed legislation.[37] The general consensus is that:

- **While insurance market reforms have potential to reduce some administrative costs, they may cause other administrative costs to increase. Studies examining insurance market and other reforms intended to simplify administration have either declined to quantify the effect on administrative costs or have estimated the net change in administrative costs to be relatively small compared with overall health care spending.**

Insurance Market and Other Reforms

The U.S. Congress's Office of Technology Assessment (OTA) reviewed a number of studies of insurance market reform. Specifically, OTA examined studies of President Clinton's proposed Health Security Act (H.R. 3600) by Lewin-VHI, the Congressional Budget Office (CBO), and the Clinton administration, and CBO analyses of several other reform proposals. According to OTA, the Lewin-VHI analysis projected a small net increase in administrative costs, equal to 0.5 percent of total health care spending, while the CBO study was not clear regarding the Health Security Act's effect on total administrative costs. The Clinton administration's estimates did not appear to estimate the change in administrative costs. CBO studies of other insurance reform proposals have also not provided a clear conclusion regarding the net effect of insurance market reforms on administrative costs.[38]

The Lewin-VHI study assumed that the insurance market reforms in the Health Security Act would reduce insurance administrative costs paid by employers by 30 percent. Furthermore, it projected small savings due to standardized insurance benefit plans and reduced physician claims processing

37 General Accounting Office, GAO/HEHS-94-158, 2.

38 Office of Technology Assessment, United States Congress, *Understanding Estimates of National Health Expenditures Under Health Reform* (May 1994): 142-144.

expenses due to reduced adjudication costs. However, the study estimated that these cost reductions would be offset by the costs of alliances and new federal administrative costs.[39]

Other reforms are not likely to produce significant administrative savings.

Overall, the Office of Technology Assessment has concluded that the potential impact of specific insurance market reforms is unclear. OTA has suggested that health care purchasing cooperatives may reduce insurers' marketing costs, but could increase other administrative costs as employer transactions with insurers are replaced with a greater number of individual transactions. OTA has also indicated uncertainty about whether such reforms will decrease or increase the frequency with which individuals change insurers or the profits of insurers. According to OTA, administrative savings from the elimination of insurance underwriting may be offset by the costs of making risk adjustments to health plans. Citing the lack of evidence on the impact of pooling and limited underwriting and the difficulty of estimating potential new costs resulting from reform proposals, OTA found that the making of precise estimates of administrative costs under reform was uncertain. Overall, OTA concluded that reform proposals which maintain a private insurance market "appear unlikely to generate large administrative savings."[40]

Automation of Administrative Functions

Short of even insurance market reform, some have advocated the simplication of administrative tasks through automation. Automation of claims submission and processing, claims denial and adjudication, coordination of benefits, patient accounting, health plan enrollment, and eligibility determination are areas in which administrative savings for physicians, hospitals, or insurers have been cited. A 1993 study by Lewin-VHI attempted to estimate the administrative cost savings from such an approach. More specifically, the Lewin-VHI study estimated the administrative cost savings from the Healthcare Administrative Simplication and Uniformity Act of 1993 for the Healthcare Financial Management Association (HFMA), the proponents of the legislation. Lewin-VHI estimated that the proposal would result in net annual savings of $2.6 to $5.2 billion (in 1993 dollars), or about a 2 to 4 percent reduction in overall health care administrative costs in the United States.[41] These savings would have been about 0.4 to 0.6 percent of total health care spending in 1993.

The range of these estimates by Lewin-VHI was generally less than some previous estimates. For example, the Health Care Financing Administration estimated savings of $9.4 billion from automation of a wide range of administrative functions. In 1993, the Workgroup for Electronic Data Interchange (WEDI) estimated gross annual administrative savings of $13 to $26

39 Office of Technology Assessment, 142-143. Under the Clinton plan, most employers and individuals would be required to join a regional health alliance. Alliances would be responsible for contracting with at least three types of health plans and providing information to those in the alliance.

40 Office of Technology Assessment, 151.

41 Allen Dobson and Matthew Bergheiser, "Reducing Administrative Costs in a Pluralistic Delivery System Through Automation," Lewin-VHI paper prepared for the Healthcare Financial Management Association (April 30, 1993).

billion.[42] Net of implementation costs, WEDI estimated net savings of about $42 billion over the next six years.

Other than perhaps the high end of the WEDI estimates, these savings appear to be relatively small compared with overall health care spending. Nevertheless, they are worth pursuing and may produce benefits beyond just the potential administrative savings. According to Lewin-VHI, automation on the scale of the HFMA proposal could provide health care managers with the data needed to make reliable comparisons of health care charges and episodes of care. The data could be used to reduce the incidence of diagnostic tests, reduce the length of hospital stays, and improve the quality of care.[43]

CRITICISMS OF SINGLE-PAYER STUDIES

Criticisms of single-payer studies can be separated into two categories. In the first category are criticisms which were largely directed at the early Himmelstein-Woolhandler studies and may not apply to all of the later studies, particularly those done by CBO or Lewin-ICF. The second category of criticisms apply to all of the studies we reviewed earlier in the chapter. A principal source of the criticisms directed at single-payer studies is Patricia Danzon, a health care economist at the University of Pennsylvania. In early 1992, Danzon published an article on the hidden overhead costs in a Canadian-style system and criticized the 1991 Woolhandler and Himmelstein study.[44] Some of the later studies corrected for some of the concerns raised by Danzon. However, many of Danzon's criticisms apply to all of the studies reviewed in this chapter.[45]

Some of the single-payer studies overstated the administrative savings for insurers and providers.

The first category of criticisms generally deal with how insurer overhead or provider overhead was measured. For example, a number of sources have indicated that premium taxes paid by U.S. insurers should not be included in current administrative costs, since they are not a true administrative cost. The taxes cannot be eliminated unless you eliminate the activity which government is funding with the premium taxes. As a result, most of the single-payer studies (except the CBO and Lewin-ICF studies) overstated insurer savings because premium taxes were included in insurers' administrative costs under the current U.S. system and assumed to be eliminated under a single-payer system. Another criticism of early single-payer studies is that they failed to adjust for insurance market cycles. All the studies except for the CBO and Lewin-ICF studies used only one year of data on insurance overhead. Because insurance

42 WEDI is a workgroup established by the federal goverment. The 1992 WEDI report, which was examined in the Lewin-VHI study, projected only $4 to $10 billion in gross annual savings.

43 Dobson and Bergheiser, 12.

44 Patricia M. Danzon, "Hidden Overhead Costs: Is Canada's System Really Less Expensive?" *Health Affairs*, Vol. 11, No. 1 (Spring 1992): 21-43.

45 Other sources of criticisms include the Office of Technology Assessment, which recently reviewed the early single-payer studies by Himmelstein and Woolhandler, as well as the later studies by others.

overhead (the difference between premium revenues and claims) varies considerably from year to year, it is appropriate to average the overhead percentage over a number of years. Finally, many of the early studies attributed the entire difference in physician overhead (physician revenues less patient care expenses) between the United States and Canada due to the difference in insurance systems and assumed the entire amount could be eliminated. Later studies—including those by CBO, Lewin-ICF, and the first PNHP estimate—were more careful to isolate those particular overhead costs which were likely to decrease from those which were not likely to change.[46]

Included in the second category of concerns are those contained in OTA's review, as well as additional criticisms raised by Danzon. OTA's concerns primarily relate to the difficulty of providing precise estimates of administrative cost savings and include the following points:

- The assumptions that insurer overhead rates would fall to Canadian levels or to Medicare levels may be incorrect.

- There is no empirical evidence documenting how U.S. providers would behave under a single-payer system, and comparisons with Canada are problematic because Canadian overhead estimates may not be comparable with U.S. overhead estimates.[47]

Most single-payer studies have assumed that U.S. insurer overhead could be reduced to Canadian levels (1.2 percent of health care spending). Two studies (CBO and Lewin-ICF) assumed instead that insurer overhead would be reduced to Medicare levels (about 1.9 percent of national health spending). OTA has suggested a number of reasons why a single-payer system may not fall to Canadian or Medicare levels. First, OTA stated that the United States might not administer a national single-payer system as efficiently as Canada or Medicare. Second, administrative functions beyond those employed in Canada or under Medicare, such as greater utilization review or more extensive data collection, might be performed. Finally, average claim size may differ from that in Canada or under Medicare. Lower average claim size in a U.S. single-payer system would lead to higher administrative costs as a percentage of claims and thus lower administrative savings.[48]

OTA has concluded that estimating administrative savings for physicians and hospitals is even more problematic. According to OTA, there is little empirical evidence demonstrating how U.S. providers would behave under a single-payer system. As a result, most studies have relied on comparisons with

46 The GAO study did not assume the entire difference in overhead could be eliminated, but did assume that the entire difference in nonphysician personnel would be eliminated under a single-payer system. It is not likely that the entire difference in nonphysician personnel could be eliminated. U.S. physicians perform more procedures and diagnostic tests in their offices than Canadian physicians. Some of the additional cost of nonphysician personnel in the U.S. is a result of these differences in patient care activities and not the result of differences in insurance-related or billing-related administrative functions.

47 Office of Technology Assessment, 146-148.

48 Office of Technology Assessment, 148.

Canada, which OTA views as problematic. OTA expressed concern that Canadian estimates of provider overhead may not be comparable to U.S. estimates. In addition, it is difficult to review the Canadian estimates, since they are based on unpublished data. Finally, OTA stated that U.S. provider overhead may not fall to Canadian levels, because certain functions (such as utilization review) may continue to be conducted in the United States even under a single-payer system. OTA acknowledged that the Lewin-ICF methodology avoids the problem of comparisons with Canada by making assumptions about how much various administrative functions of the current system would be reduced. However, that alternative methodology cannot completely avoid any problems because it must make assumptions which are not based on data and may be arbitrary.

One of Danzon's criticisms falls in this second category of concerns and relates to how studies have measured insurance overhead under a single-payer system.[49] Danzon concluded that insurer savings were overstated because they included the cost of capital under the current U.S. system but not under a single-payer system. The cost of capital under the current private system of insurance is the risk and profit component of private insurance overhead, which provides a "buffer" against unanticipated claims experience. Under a public system, unanticipated shocks would simply be shifted to taxpayers through reductions in other government programs or tax increases, to patients through service cuts, or to providers through decreases in reimbursement. According to Danzon, these shocks have a cost of capital, albeit perhaps a lower one than for private insurance.

Single-payer studies have not recognized the "hidden costs" of the Canadian system.

Danzon also made some more substantial criticisms of single-payer studies. She argued that:

- Single-payer studies have not recognized certain "hidden overhead costs" of the Canadian system.
- Single-payer studies have recognized just the costs, and not the benefits, of certain administrative functions.

Among the hidden costs cited by Danzon were: 1) the excessive time costs incurred by patients who are required to visit physicians more frequently; 2) the costs of lost productivity, pain and suffering, and other resources required to support patients waiting for services due to the rationing of hospital care; and 3) the productivity, savings, and consumption inefficiencies resulting from financing a much greater share of health care spending with taxes. Danzon cited data showing that Canadians made more physician visits per capita and that real resources used per physician visit were 34 to 46 percent lower in Canada than in the United States. Although others have interpreted these data to mean that Canadians receive more physician services and those services are provided more efficiently, Danzon interpreted these data differently. She suggested that less physician time and other medical inputs are used per visit in

49 Danzon also made a number of other criticisms which we have already discussed. They include the points about insurer premium taxes and physician overhead comparisons.

Canada because of the Canadian system of fee reimbursement. Canadian physicians have an incentive to produce more services to increase their revenues, even if it comes at the expense of patients who must spend more time in and traveling to physicians' offices. According to Danzon, these alternative interpretations of the data cannot be settled because comparisons of the average length of physician-patient encounters have not been measured and the real health benefits per physician visit cannot be measured.[50]

Canadian hospitals negotiate annual operating budgets with provincial governments and receive their operating funds from the provinces. Capital expenditures must be approved by a government agency, which provides the major share of funding for capital expenditures. As a result of this funding system, total hospital costs per capita are lower in Canada, although the number of admissions per capita are slightly higher and the average length of stay is about 50 percent higher in Canada than in the United States. According to Danzon, access to acute care services is more limited in Canada, while more Canadian hospital beds are occupied by elderly patients with average length-of-stays exceeding 60 days. Danzon concluded that this is a natural response to the incentives facing hospital administrators, who must show that the hospital beds are full but must stay within limited budgets. The hidden costs of this system are the lost productivity and other costs experienced by those who must wait longer in Canada to receive needed acute care services.[51]

According to Danzon, another substantial source of hidden costs is Canada's tax-based financing system. In the United States, about 30 percent of health care spending is financed by federal taxes and about 14 percent is supported by state and local taxes. In Canada, however, the vast majority of health care expenditures is financed by taxes at the federal and provincial levels.[52] Implementing a Canadian-style single-payer system in the United States would require a significant increase in taxes; the increase could be even more significant in percentage terms for a state implementing a single-payer system, since state taxes are lower on average than federal taxes.

Danzon cited evidence from other economic studies showing that raising taxes by one dollar costs 17 to 56 cents in hidden costs. These costs are the "production and consumption losses that occur because people change their work, saving, and consumption patterns to avoid taxed activities." Danzon pointed out that even the lowest estimate (17 percent of additional tax revenues) was greater than premium collection costs under the current system of private insurance.[53] The study cited by Danzon also found that the tax burden, or hidden costs, varies depending on the type of tax. Tax burdens varied from 16 to 31 percent for income taxes, from 12 to 23 percent for payroll taxes, and from 4 to 12 percent for sales taxes on commodities other than alcohol, tobacco, and

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50 Danzon, 31.

51 Danzon, 34.

52 Some exceptions to the public financing of Canadian health care are private supplemental insurance and the portion of hospital capital expenditures which is privately financed.

53 Danzon, 37.

gasoline. Tax burden was very high for sales taxes on these latter commodities.[54]

Danzon also criticized the early single-payer studies for failing to acknowledge the benefits of administrative costs under the current U.S. system. She attributed most of the increase in insurance overhead during the 1980s to the growth in strategies to control moral hazard—the incentive of the insured individuals to overuse medical care.[55] Without such strategies, the insured would be willing to use services that are not worth as much as they cost, and providers would likely provide those services because doing so would increase their revenues. While implementing strategies such as utilization review results in additional administrative costs, Danzon argued that single-payer studies should acknowledge the benefits of those costs.

According to Danzon, another distortion in comparisons of Canada and the United States was the failure to attribute benefits to the additional research and development spending which occurs in the United States. Canada and other countries benefit from U.S. research and development spending without paying for the full costs of the research.[56]

But, there also are "hidden costs" in the U.S. health care system.

Other analysts, however, have not agreed with some or all of Danzon's criticisms. The major points raised by others include: 1) the current U.S. system results in some patient and employer costs which are not experienced in Canada; 2) there is no comprehensive data for comparing waiting times for surgery; 3) the U.S. system has considerable tax distortions because of the deductibility of health care and other fringe benefits for income and payroll taxes; and 4) a single-payer system would result in a more equitable system for financing health care. Danzon's analysis may have understated the costs of the U.S. system of health care by omitting any patient waiting costs experienced in the United States due to utilization management techniques. In addition, Danzon omitted patient time costs for selecting insurance, filling out insurance forms, and making copayments. Similarly, Danzon omitted time spent by U.S. employers in making insurance benefit decisions and managing the benefit process at their firms. Finally, Danzon's analysis did not consider the time spent by U.S. firms to screen out health risks among job applicants and the possible inefficiencies in the U.S. labor market because people select jobs or remain in jobs because of concerns over health insurance coverage.[57]

The issue of comparative waiting times for surgery has been receiving attention in the medical literature in recent years. Some analysts dispute Danzon's

54 Charles L. Ballard, John B. Shoven, and John Whalley, "General Equilibrium Computations of the Marginal Welfare Costs of Taxes in the United States," American Economic Review, Vol. 75, No. 1 (March 1985): 128-138.

55 According to Danzon (p. 26), these strategies included structured copayments, utilization review, case management, selective contracting with preferred providers, and provider-targeted financial incentives such as capitation or prospective reimbursement.

56 Danzon, 38.

57 Testimony by Robert D.Reischauer, director of the Congressional Budget Office, hearings before the House of Representatives, Committee on Ways and Means (October 9, 1991): 423-434.

claim that waiting times for surgery are longer in Canada than in the United States or that the additional waiting time involve large hidden costs. However, there is no comprehensive source of data on comparative waiting times which could help settle the debate.

Finally, in response to Danzon's point about the negative economic effects of raising taxes, some have suggested that the U.S. system already introduces some tax distortions which need to be recognized in any comparison.[58] Compensation received in the form of health care insurance provided by employers is not subject to income or payroll taxes. As a result, employers and employees have an incentive to pay more for medical care than would be the case if fringe benefits were taxed. Also, despite whatever additional tax burden might be imposed by a Canadian-style system, it could be argued that a single-payer system would result in more equitable financing of health care. Under the current U.S. system, low-income families spend a higher percentage of their income on health care than high-income families. Families in the lowest quintile of income spend slightly more than 13 percent of their income (plus nonwage compensation) on health care compared to just under 9 percent for families in the highest quintile of income. According to a recent study, this pattern would be reversed under a single-payer system. A Canadian-style system would reduce health care expenditures for the low-income group to less than 5 percent of income and increase health care spending to about 10 percent of income for families in the highest income group.[59]

SUMMARY

Our review of single-payer studies suggests that implementing a Canadian-style system in the United States would eliminate administrative costs equaling about 6 to 9 percent of national health care spending. However, increases in health care utilization due to the elimination of patient cost sharing and expansion of services to the uninsured would probably more than offset the administrative savings. A single-payer system with cost sharing would not reduce administrative costs as much but would likely result in a modest decrease in overall health care spending.

Single-payer studies have not taken into account what some have termed the "hidden costs" of the Canadian health care system. These costs include lost productivity due to rationing of hospital care, extra patient time commitments due to the provision of physician services, and adverse economic impacts of the additional tax burden on productivity, savings, and consumption. It has

58 The Danzon argument concerning the hidden costs of taxes would also apply to taxes and premium payments required of employers and individuals in the individual mandate and employer mandate reform options examined in Chapter 3. Mandatory premium payments should be considered similar to a tax when they are compulsory. However, when compared with taxes on income or payroll, compulsory premiums may have less detrimental economic effects, since they do not affect a worker's marginal return from working additional hours.

59 Sheila Zedlewski, John Holahan, Linda Blumberg, and Colin Winterbottom, "The Distributional Effects of Alternative Health Care Financing Options," in *Building Blocks for Change: How Health Care Reform Affects Our Future*, Jack A. Meyer and Sharon Silow-Carroll, eds. (1993): 87-144.

been suggested that the administrative cost savings from a Canadian system are small compared with the extra hidden costs of the Canadian system. However, these studies have also not accounted for some of the hidden costs of the U.S. system; and there is no comprehensive source which compares surgery waiting times and outcomes in Canada with the United States. As a result, it is difficult to resolve this controversy over hidden costs.

It is unclear whether other reforms like insurance market reform would reduce health care administrative costs by a significant amount. Insurance market reform is likely to reduce some current administrative costs while creating new types of administrative expenditures. Some analysts suggest that these reforms have potential to reduce administrative costs overall, but others are skeptical that a net reduction would occur. There is considerable uncertainty about the net effect on administrative costs because many of these reforms have never been tried on a large-scale basis and many of the implementation details of the reforms have not been specified in legislation.

Results for Minnesota

CHAPTER 3

In this chapter, we present the results of our consultant's analyses for Minnesota. We contracted with Lewin-VHI to estimate the effect of various reforms on health care administrative costs and overall health care spending in Minnesota. Prior to estimating the effect of reforms, Lewin-VHI prepared health care expenditure estimates for Minnesota using a variety of data sources including Minnesota-specific data collected by the Minnesota Department of Health. These estimates detail spending by type of expenditure and by source of financing. From these estimates and other data sources, the consultant then prepared estimates of health care administrative costs in Minnesota for insurers, hospitals, physicians, and government agencies.

Finally, Lewin-VHI estimated the effect of a variety of reforms on overall health care spending, as well as various components of spending such as administrative costs. The consultant examined five different reform models, each of which attempts to achieve universal coverage for all Minnesotans. Two of the models are tax-financed single-payer models, which eliminate the private health insurance industry in Minnesota and rely on privately delivered fee-for-service medical care. Two other models are largely premium-financed and include, as much as possible, the MinnesotaCare reforms contained in current Minnesota law. These models retain a private health insurance industry and delivery system, both of which are restructured as envisioned under MinnesotaCare. The final option is a quasi-single-payer model, which has a restructured health insurance market and delivery system but is tax-financed. In this model, a government agency is in charge of receiving bids from health plans and paying health plans based on the number of consumers who choose to enroll in the plans.

This chapter summarizes the consultant's work. More detailed information on Lewin-VHI's methodology is contained in the consultant's report, which is available from our office. This chapter covers the following topics:

- **What were the estimated administrative costs and total health care spending for Minnesota in 1994?**

- **How much is overall health care spending estimated to change in Minnesota under various reform proposals? How much are certain components of spending, such as administrative costs, expected to change? What trade-offs may exist between the goal of**

reducing administrative costs and the goal of controlling overall health care spending?

- **What additional state tax revenues would be needed to implement the reform proposals?**

- **How do the proposals financially affect employers, families, and various levels of government? How are employers in different industries and of varying sizes affected? How are families at different income levels affected?**

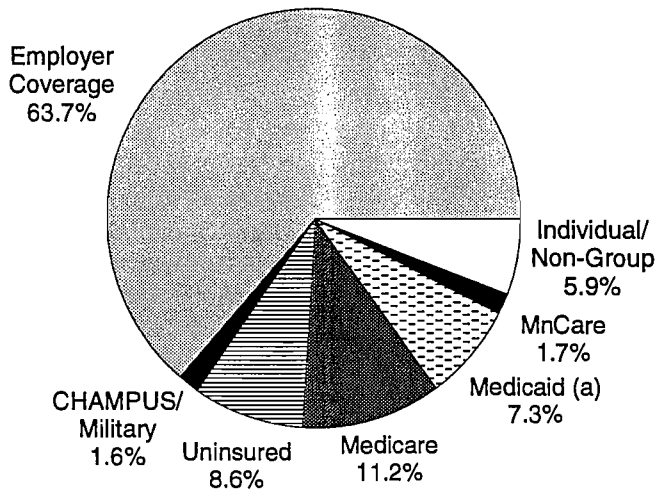
ESTIMATES OF HEALTH CARE SPENDING

The first step in Lewin-VHI's analysis was to develop a comprehensive database on health care expenditures in Minnesota. Our consultant used a variety of data sources to estimate expenditures for 1994 and then projected future expenditures through the year 2000. As much as possible, Lewin-VHI used Minnesota data, particularly a series of surveys of Minnesota providers and insurers conducted by the Health Economics Program of the Minnesota Department of Health in 1993. Despite some problems, these survey data provided useful information on overall expenditures and revenues and components of administrative expenditures for Minnesota physicians, hospitals, commercial insurers, health maintenance organizations (HMOs), and third-party administrators (TPAs) of self-insured plans.[1] These survey data were supplemented with other data from numerous state and national sources. Finally, the data were integrated into a single database using Lewin-VHI's Health Benefits Simulation Model (HBSM). The model enables Lewin-VHI to estimate both the aggregate impact of major health reform proposals and the impact on various groups of households and employers.

In conducting its analysis, our consultant first made estimates regarding the insurance status of Minnesotans. Figure 3.1 shows Lewin-VHI's estimates of the primary insurance status of Minnesotans for 1994. An estimated 70 percent of Minnesotans were privately insured—most through their employer or their spouse's employer. Almost 22 percent were insured through public programs—with half of that group receiving its principal source of coverage from

1 The 1993 Minnesota survey data have several problems. First, health care providers do not routinely keep records of administrative costs in the categories requested by the Department of Health. As a result, providers had some difficulty reporting administrative costs in these categories. About one-third of physician clinics and one-eighth of the hospitals did not attempt to allocate their administrative expenditures to all of the categories and put most of their administrative expenditures into one or two general administrative cost categories. Second, the surveys did not cover all of the providers and insurers operating in Minnesota. Physicians in solo practices and in group model HMOs were not surveyed. There was substantial under-reporting by third party administrators, because their participation could not be mandated. In addition, there was some non-reporting by commercial insurers. Lewin-VHI adjusted the data to address these concerns. The quality of the survey data may improve over time, since 1993 was the first year in which these data were collected.

Figure 3.1: Distribution of Minnesotans by Primary Source of Insurance Coverage, 1994



(a) Persons with Medicare/Medicaid dual coverage are considered covered by Medicare, since Medicare is their primary source of coverage.
Source: Lewin-VHI.

Medicare. Slightly less than 9 percent of Minnesotans were uninsured in 1994.[2]

An estimated $15.8 billion was spent on health care in 1994.

Our consultant then estimated health care spending in Minnesota for 1994. Table 3.1 provides Lewin-VHI's estimates by type of expenditure and source of payment. Overall, an estimated $15.8 billion was spent on health care in Minnesota in 1994, or about 13.0 percent of gross state product.[3] The estimate excludes spending for federal hospitals, research, and construction. In addition, hospital spending of $84 million and physician spending of $40 million were excluded, since they represent the estimated use of Minnesota facilities by non-Minnesotans on Medicare.[4]

Figure 3.2 shows that employer-provided insurance and individual health insurance policies paid for about 41 percent of health care spending in Minnesota in 1994. Public programs accounted for 34 percent of spending, while out-of-pocket spending by individuals financed 18 percent. About 7 percent

2 These estimates represent the average monthly status of coverage throughout 1994. The estimate for the uninsured (8.6 percent) is based on the Minnesota Health Care Commission's estimate of 8.9 percent for mid-1993, adjusted for increases in MinnesotaCare's enrollment between 1993 and 1994.

3 Gross state product is the state counterpart of gross domestic product at the national level and represents the market value of all the goods and services produced by labor and property located in a state. Minnesota's gross state product for 1994 was estimated by applying the rate of growth in personal income between 1991 and 1994 to the published estimate of gross state product for 1991.

4 Data from the Health Care Financing Administration (HCFA) were used to make these estimates of Medicare use by non-Minnesotans. No adjustment was made for non-Medicare usage since such data are not yet available from HCFA.

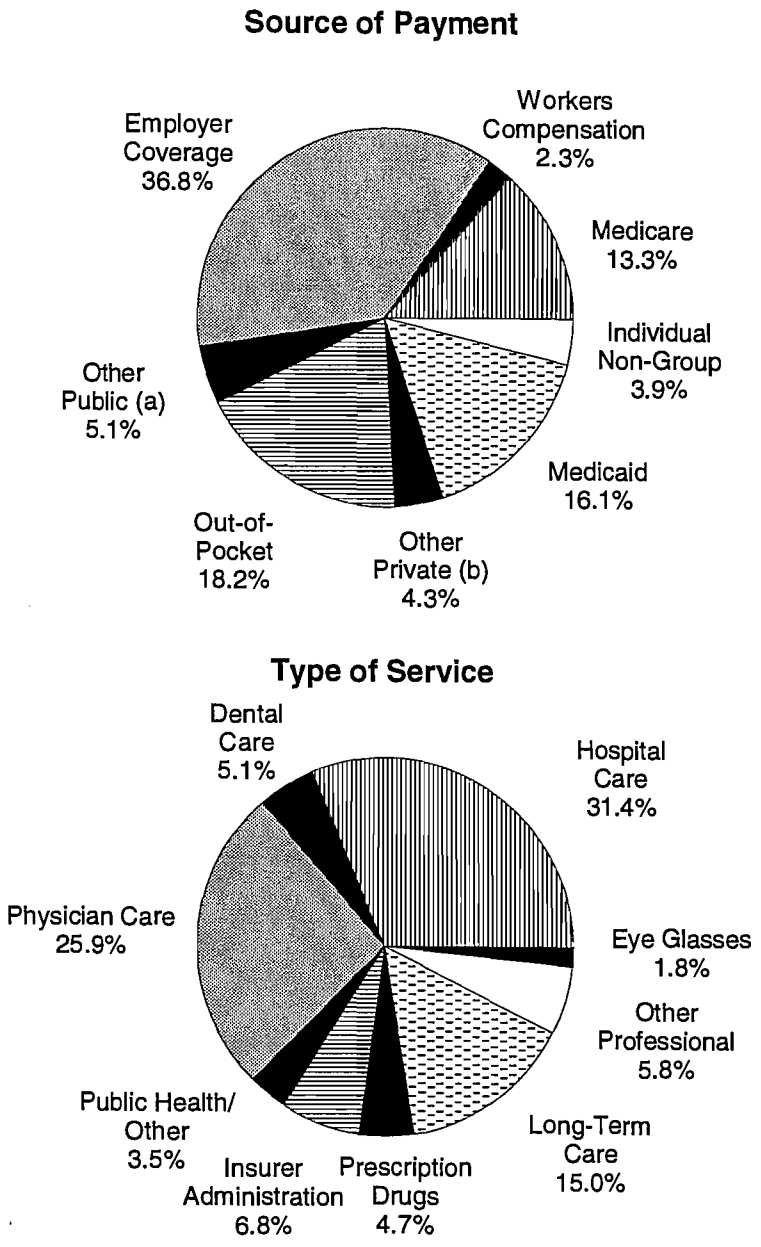
Table 3.1: Health Spending by Type of Service and Source of Payment, 1994 (in millions)

	Hospital Inpatient	Physician	Dental	Other Professionals	Drugs and Medicine	Vision	Nursing Home	Home Health	Public Health and Other	Hospital Emergency Room/ Outpatient	Insurer Administration	Total
Out-of-Pocket	$118.8	$727.7	$357.3	$229.4	$369.9	$162.4	$721.7	$111.7	$--	$74.6	$--	$2,873.5
Employer Workers	983.2	2,034.2	379.5	450.3	134.5	22.5	--	--	--	592.6	583.4	5,180.2
Employer Non-Workers	190.7	228.6	14.4	22.9	54.5	4.0	--	--	--	69.0	50.9	635.0
Non-Group	176.2	215.5	9.9	22.0	16.6	2.8	--	--	--	66.8	105.3	615.1
Medicare	1,170.4	433.8	--	55.7	--	38.5	75.6	41.0	--	171.7	104.2	2,090.9
Medicaid	325.3	166.0	32.3	83.8	151.0	37.2	1,115.3	293.0	56.8	87.5	145.3	2,493.5
CHAMPUS/Military	31.3	13.3	--	--	1.5	--	--	--	0.3	31.1	4.1	81.6
Other Public	79.6	7.7	0.4	7.2	7.3	1.5	--	12.8	192.6	59.0	11.6	379.7
Workers Compensation	98.1	155.2	--	25.5	5.2	5.2	--	--	--	33.8	35.5	358.5
Other Private	37.7	92.4	6.7	14.6	1.3	1.6	--	--	9.9	23.6	32.0	219.8
Minnesota Care	17.2	7.7	2.9	6.3	3.6	1.3	--	--	0.2	3.5	5.0	47.7
Non-Patient Revenues	330.1	--	--	--	--	--	--	--	--	122.1	--	452.2
Community Mental Health	--	--	--	--	--	--	--	--	291.5	--	--	291.5
Disproportionate Share Hospital Payments	51.8	--	--	--	--	--	--	--	--	--	--	51.8
Total	$3,610.4	$4,082.1	$803.4	$917.7	$745.4	$277.0	$1,912.6	$458.5	$551.3	$1,335.3	$1,077.3	$15,771.0

Source: Lewin-VHI.

Note: Spending estimates exclude federal hospital expenditures, research, and construction.

Figure 3.2: Health Spending in Minnesota by Source of Payment and Type of Service, 1994



Total Health Expenditures = $15,771.0 Million

Note: Health expenditures do not include spending for research, construction, and federal hospitals.
(a) Includes general assistance medical benefits, CHAMPUS/Military, acute care services provided in public hospitals, MinnesotaCare covered services and community mental health programs.
(b) Includes hospital non-patient revenues and health benefits covered through auto and other types of insurance.
Source: Lewin-VHI.

of health spending was paid from other sources such as automobile insurance and workers compensation.

Figure 3.2 also shows that an estimated 31 percent of 1994 spending went for hospital care, while 26 percent went for physician care and 15 percent was spent on long-term care. The remaining 28 percent was split among the following categories: insurer administration (7 percent), other professional services (6 percent), dental care (5 percent), prescription drugs (5 percent), public health and other costs (3 percent), and vision care (2 percent).[5]

Lewin-VHI projected future health care spending through the year 2000. Table 3.2 provides these detailed estimates by type of service and source of payment. Lewin-VHI's overall estimate is that expenditures will grow to $27.6 billion by the year 2000—an annual growth of about 9.8 percent. These future projections were obtained by projecting growth in population, adjusting for changes in population mix by age and sex, incorporating estimated changes in household earnings and other income, and adjusting health expenditures to reflect Congressional Budget Office projections in per capita health spending by type of service.

ADMINISTRATIVE COST ESTIMATES

Lewin-VHI also developed a summary of health care administrative costs in Minnesota. This summary sorts administrative costs by function for insurers, hospitals, physicians, and government. The estimates for insurers and providers were largely based on recent surveys conducted by the Minnesota Department of Health and supplemented with data from other sources where necessary. Survey data were adjusted for non-respondents.[6]

Insurers

Our consultant defined insurer administrative costs as the difference between insurer revenues and benefit payments. Administrative costs come from two sources: 1) private health insurance (including the administration of self-insured plans) and 2) government-financed health programs. For public programs, Lewin-VHI included the following types of costs as administrative expenditures: eligibility determination, claims processing, research, and utilization review. In addition to those costs, private insurance overhead included marketing, profits, taxes, and the accumulation of reserves less interest earned on reserve balances.

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5 Lewin-VHI's estimate of Minnesota health spending is likely to differ somewhat from estimates being developed independently by the Minnesota Department of Health. The Lewin-VHI estimate was developed to facilitate an analysis of the health reform options and includes some administrative expenditures not included in the Department of Health's overall estimate of spending on personal health care services. In addition, different methodologies may have been used to estimate certain components of health spending.

6 Details on the methodology used by Lewin-VHI to estimate administrative costs are contained in the consultant's report, which is available from our office.

Table 3.2: Total Health Spending by Type of Service and Source of Payment, 1994-2000 (in millions)[a]

	1994	1996	1998	2000
TYPE OF SERVICE				
Hospital Inpatient Care	$3,610.4	$4,307.6	$5,132.5	$6,103.9
Hospital Outpatient Care	1,335.3	1,587.9	1,893.0	2,256.4
Physicians Care	4,082.1	4,939.9	5,990.1	7,272.3
Dental Care	803.4	932.4	1,078.3	1,245.5
Other Professional Services	917.7	1,188.5	1,539.0	1,926.2
Prescription Drugs	745.4	915.5	1,110.9	1,355.6
Vision Care	277.0	336.6	406.3	490.4
Nursing Home	1,912.6	2,298.0	2,760.1	3,317.3
Home Health	458.5	587.7	753.2	965.4
Public Health and Other	551.3	604.5	661.4	722.3
Administration	1,077.3	1,301.6	1,565.2	1,885.6
TOTAL	$15,771.0	$19,000.2	$22,889.9	$27,540.9
SOURCE OF PAYMENT				
Out-of-Pocket	$2,873.5	$3,500.7	$4,376.7	$5,458.7
Employer Workers	5,180.2	6,254.4	7,551.1	9,141.3
Employer Non-Workers	635.0	760.1	912.7	1,096.8
Non-Group	615.1	682.5	814.8	978.6
Medicare	2,090.9	2,495.8	2,973.9	3,542.4
Medicaid	2,493.5	2,977.6	3,498.2	4,121.1
CHAMPUS/Military	81.6	99.2	121.1	148.6
Other Public	379.7	411.3	470.5	528.3
Workers Compensation	358.5	431.8	545.6	611.7
Other Private	219.8	262.6	300.6	348.7
Minnesota Care	47.7	213.2	276.2	355.8
Non-Patient Revenues	452.2	538.5	641.4	763.7
Community Mental Health	291.5	318.3	347.6	379.6
Medicaid Disproportionate Share Hospital Payments	51.8	54.2	59.6	65.6
TOTAL	$15,771.0	$19,000.2	$22,889.9	$27,540.9

Source: Lewin-VHI.

[a]Excludes spending for research, construction, and federal hospitals.

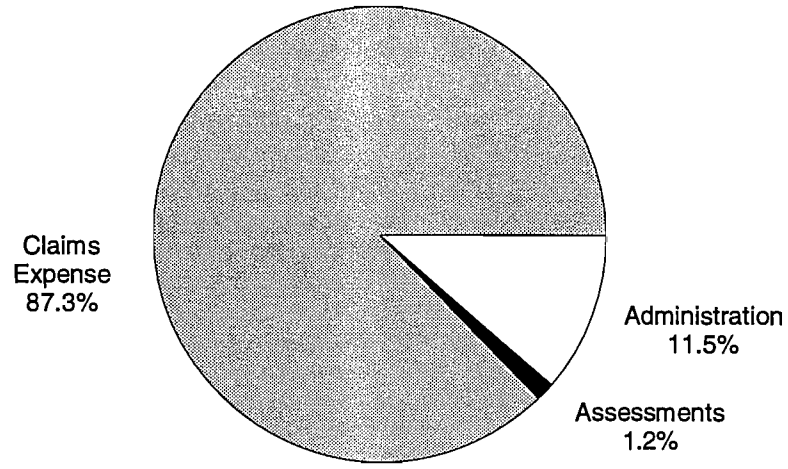
Figure 3.3 shows the estimated private insurer revenues in Minnesota for 1994. Of the $6.4 billion in revenues, 87 percent paid for claims, 12 percent paid for administrative costs, and 1 percent went for assessments. Figure 3.3 also breaks down the estimated administrative costs of $740 million into various categories. Most private insurer administrative costs are accounted for by billing (37 percent), marketing (25 percent), and general administration (17 percent). The remaining 21 percent pays for quality assurance (8 percent), taxes (5 percent), product management and design (4 percent), regulatory reporting (2 percent), government relations (1 percent), and research (1 percent).[7]

Table 3.3 summarizes both the private and public administrative costs estimated by Lewin-VHI. Total insurance administrative costs for 1994 were

7 Quality assurance includes the activities of evaluating the quality of care and managing utilization.

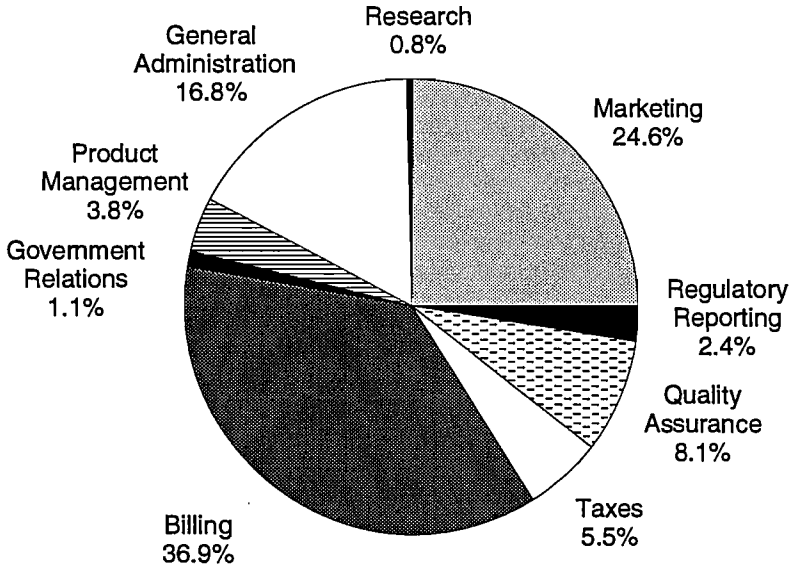
Figure 3.3: Estimated Insurer Administrative Costs, 1994

Insurer Expenditures



Total Private Insurance Expenditures: $6,430.2 Million

Insurer Administration



Total Insurer Administration: $739.6 Million

Note: Insurer expenditures include commercial insurer and HMO payments for benefits and administration. They also include third party administrators' administrative costs and provider payments administered by TPAs.
Source: Lewin-VHI.

Insurer administrative costs were about $1.1 billion in 1994.

Table 3.3: Administrative Expenses as a Percentage of Paid Claims by Source of Payment in 1994[a]

Source of Payment	Projected Payments to Providers	Insurer Administrative Costs	Insurer Administrative Costs as a Percent of Program Expenses
Out-of-Pocket	$2,873.5	—	—
Employer Workers[b]	4,596.8	644.2	14.0%
Employer Non-Workers[b]	584.1	56.2	9.6
Non-Group[b]	509.8	116.2	22.8
Medicare[c]	1,986.8	104.2	5.2
Medicaid[c]	2,348.2	145.3	6.2
CHAMPUS/Military	77.5	4.1	5.3
Other Public[c]	368.1	11.6	3.2
Workers Compensation	323.0	35.5	11.0
Other Private	187.8	32.0	17.0
Minnesota Care	42.7	5.0	11.7
Total (including assessments)	$13,898.3	$1,154.3	8.3%
Less Assessments (paid by private insurers)	—	77.0	—
Total	$13,898.3	$1,077.3	7.8%

Source: Lewin-VHI.

[a]Excludes spending for federal hospitals, research, construction, community mental health, hospital non-patient revenues, and disproportionate share hospital payments.

[b]Includes assessments paid by private insurers.

[c]Includes the administrative costs of health maintenance organizations for individuals covered under at-risk contracts.

about $1,077.3 million. This figure includes $740 million for private health insurance administrative costs, $270 million for public insurance administration, and $67 million for workers compensation, automobile insurance, and other forms of insurance.[8] Among the government insurer costs included in Table 3.3 are the administrative costs for Medicaid ($145 million), Medicare ($104 million), General Assistance Medical Care ($12 million), MinnesotaCare ($5 million), and CHAMPUS/military ($4 million). The figures for Medicaid, Medicare, and General Assistance include not only the administrative expenditures of government agencies, but also the administrative costs incurred by health maintenance organizations serving clients of those programs.

Table 3.3 also shows that administrative costs as a percentage of claims paid are considerably higher for the private health insurance sector than for the pub-

8 Administrative costs for private health insurers include premium taxes, but not assessments, paid by these insurers. Table 3.3 shows administrative costs of $816.6 million for employer-provided and individual insurance coverage. Subtracting $77 million in estimated medical assessments and surcharges results in private insurance administrative costs of $739.6 million. The assessments include items such as the amounts paid to the Minnesota Comprehensive Health Association. Assessments should be subtracted from administrative costs to avoid double-counting, since they pay for health care spending accounted for elsewhere in Lewin-VHI's overall spending estimate.

lic sector. Private sector administrative costs for employer-provided and individual coverage averaged about 14.3 percent of provider payments. Public sector administrative costs were about 5.6 percent of claims paid. The level of administrative costs also varies considerably across different types of private insurance. Lewin-VHI estimated that administrative costs (including taxes and assessments) as a percentages of claims paid were 22.6 percent for commercial insurers, 16.5 percent for health maintenance organizations, and 7.2 percent for third party administrators overseeing self-insured plans.

Hospitals

Lewin-VHI estimated that Minnesota hospitals had revenues of $4.9 billion in 1994.[9] As Figure 3.4 shows, 91 percent of these revenues (or $4.5 billion) were received for patient care. Patient care revenues came from the following sources: private insurance (46 percent), Medicare (31 percent), Medicaid (11 percent), patients (4 percent), and other sources (8 percent).

Hospital administrative costs were about $0.5 billion in 1994.

Figure 3.5 shows how these revenues were used. About 80 percent of the total revenues paid for patient care. Other uses of the revenues include: administration (11 percent), net income (7 percent), and other costs (2 percent). Figure 3.5 also illustrates how hospital administrative costs of $525 million were spent. Most of the administrative costs were reported in two categories: general administration (59 percent) and billing (22 percent). The remaining 19 percent of administrative costs were incurred in the following categories: admitting (7 percent), marketing (5 percent), quality assurance (4 percent), regulatory compliance and fees (3 percent), and government relations (0.3 percent). Based on data from California, Lewin-VHI allocated the expenses reported as general administration into two categories.[10] About 58 percent of the general administrative costs were attributed to salaries, benefits, and overhead costs for hospital administrative staff. About 42 percent of this category was estimated to have been spent on other hospital functions such as general accounting, communications, personnel, and purchasing.

Physicians

Lewin-VHI estimated that Minnesota physician revenues for 1994 were $4.1 billion. Figure 3.6 shows how these revenues were spent. About 48 percent was spent on health professional wages and salaries and another 9 percent went for health professional fringe benefits. Other practice expenses accounted for 30 percent and purchased services accounted for 13 percent.

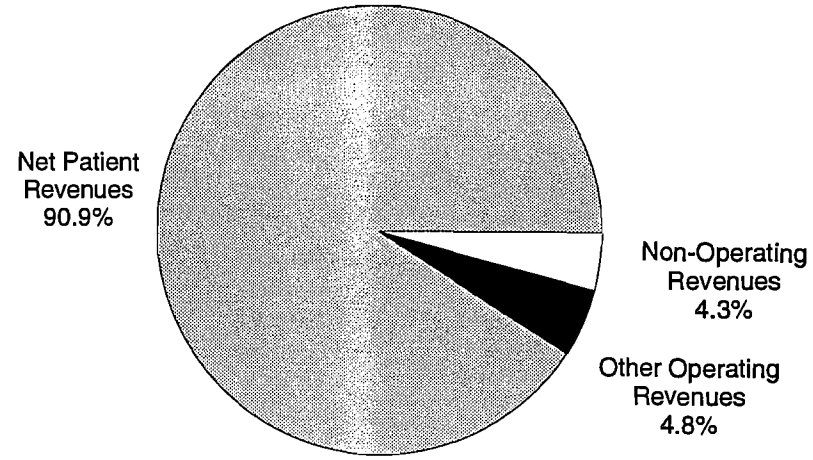
Figure 3.7 reports on the type of expenditures made in physicians' practices. About 64 percent of expenditures were made for patient care activities. Financial administrative functions accounted for 19 percent of expenditures, while

9 This figure does not include federal hospitals located in Minnesota and long-term hospitals for psychiatric care or for the mentally retarded.

10 Data on the distribution of costs within the general administration category were not available for Minnesota hospitals.

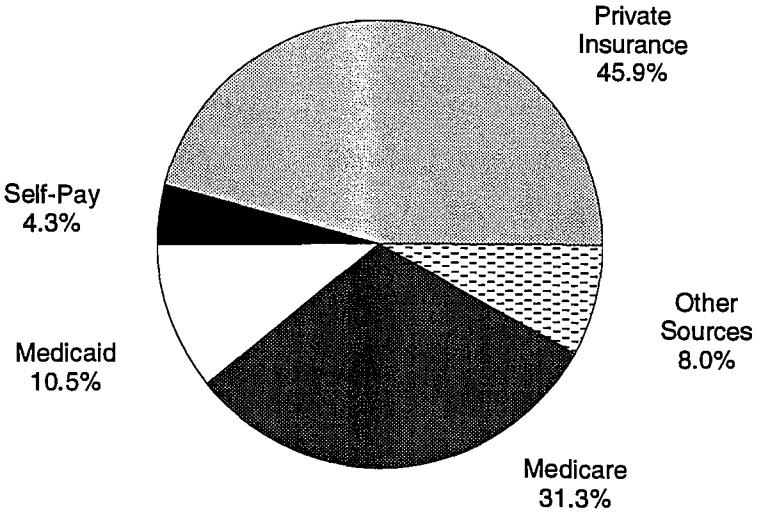
Figure 3.4: Sources of Hospital Revenues, 1994

Hospital Revenues



Total Hospital Revenues: $4,945.7 Million

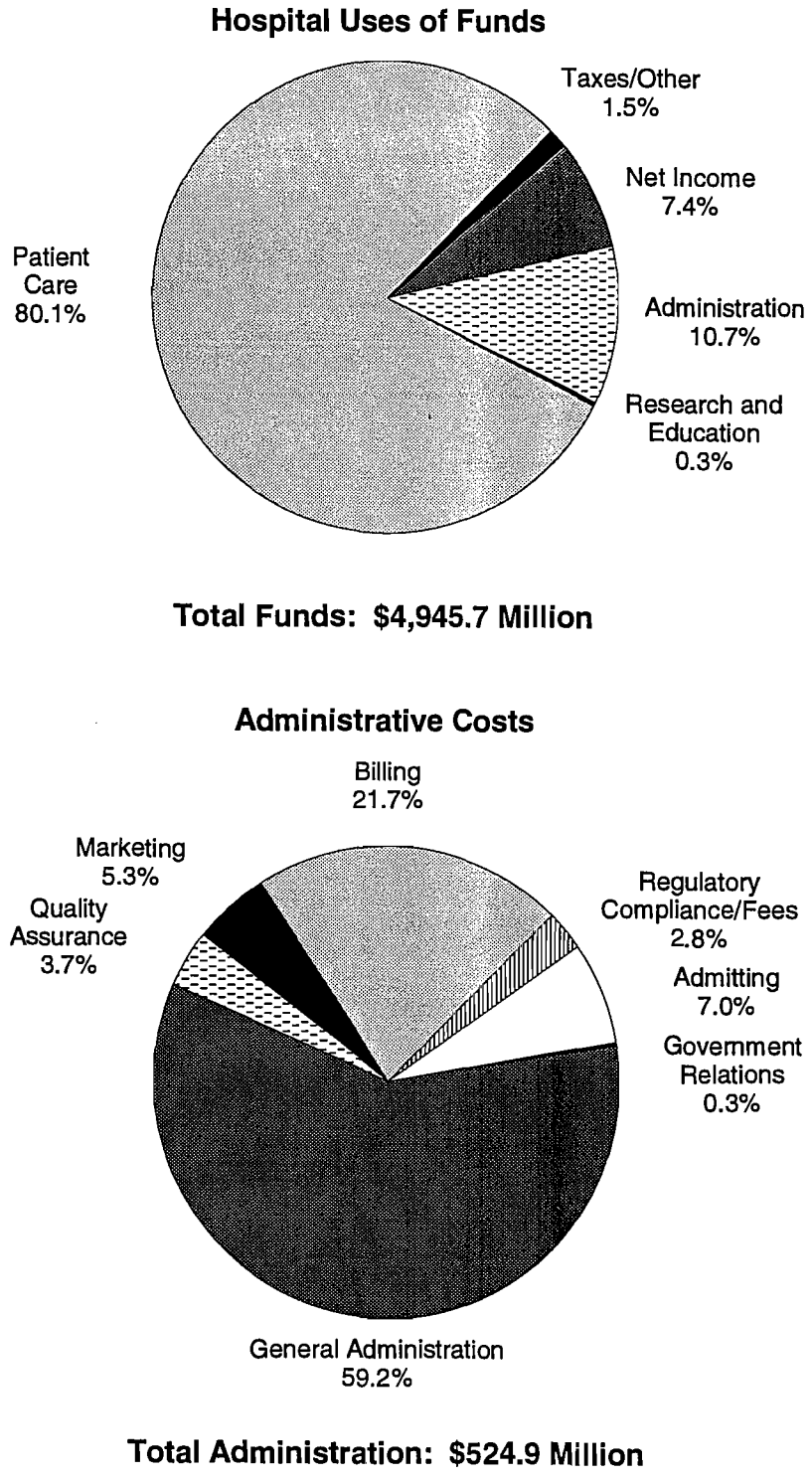
Net Patient Revenues by Source



Net Patient Revenues: $4,493.5 Million

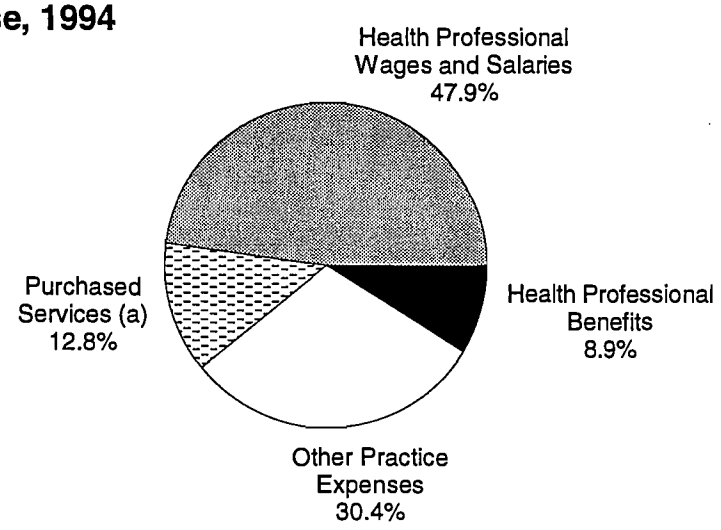
Note: The analysis of hospital revenues is based on data from the Minnesota health care cost information system for hospitals in 1993. The analysis of net patient revenues is based on Lewin-VHI projections of Minnesota health spending by type of service and source of payment.
Source: Lewin-VHI.

Figure 3.5: Uses of Hospital Revenues by Type of Expense, 1994



Source: Lewin-VHI.

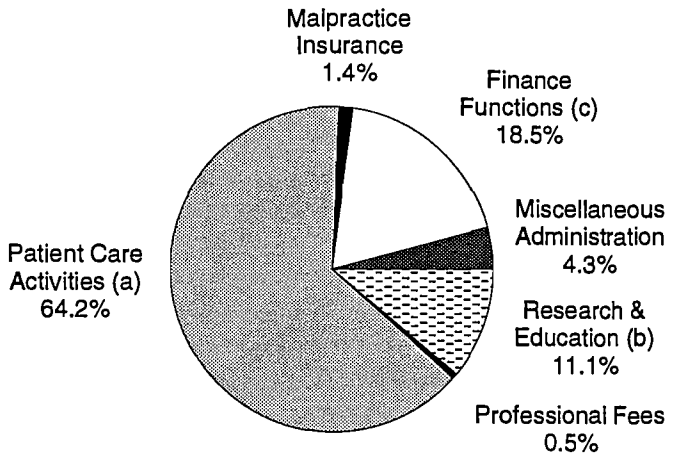
Figure 3.6: Physician Expenditures by Type of Expense, 1994



Total Physician Expenditures: $4,082.1 Million

(a) Includes medical testing costs and the depreciation of medical equipment used in patient care.
Source: Lewin-VHI.

Figure 3.7: Physician Expenditures by Class of Activity, 1994



Total Physician Expenditures: $4,082.1 Million

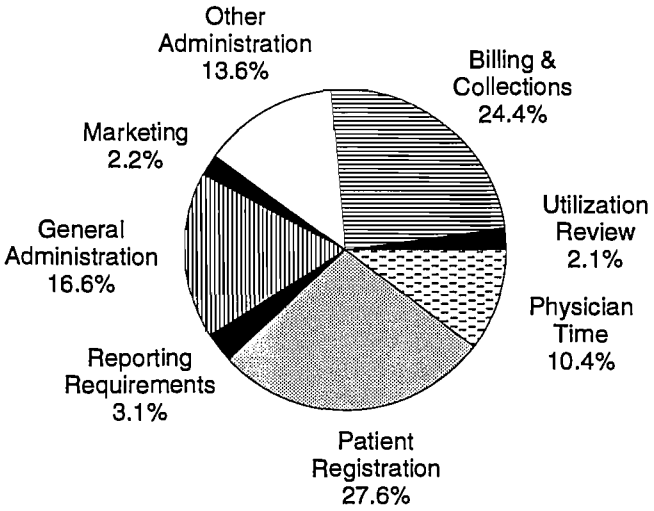
(a) Includes the value of physician time and purchased services directly related to patient care.
(b) Includes the value of physician time and overhead costs for research and education activities.
(c) Includes the value of physician time and overhead attributed to insurance related activities.
Source: Lewin-VHI.

miscellaneous administrative functions accounted for 4 percent of expenditures.[11] Research and education expenses were 11 percent of all spending, and malpractice insurance and professional fees accounted for the remaining 2 percent.[12]

Figure 3.8 shows how the estimated $757 million in finance-related administrative costs were spent. The largest types of these costs were patient registration (28 percent), billing and collections (24 percent), general administration (17 percent), and other administration (14 percent). The remaining 17 percent of finance-related administrative expenditures went for health professional time devoted to finance-related administration (10 percent), reporting requirements (3 percent), marketing (2 percent), and utilization review (2 percent).

Physician administrative costs were about $0.8 billion in 1994.

Figure 3.8: Physician Finance Related Expenses by Function, 1994



Total Finance Related Expenses: $757.3 Million

Source: Lewin-VHI.

11 Costs reported as general administrative costs or other administrative costs were proportionately allocated to the finance-related administrative cost and miscellaneous administrative cost categories. General administrative costs included general organizational expenses such as public relations and development, general accounting, budgeting, payroll accounting, accounts payable, plant and equipment, and inventory accounting. Other administrative costs included such items as printing and duplicating, receiving and storing, and personnel management.

12 Based on regional physician surveys and other information, Lewin-VHI estimated that Minnesota physicians spend 90.7 percent of their time on patient care activities, 5.9 percent on research and education, and 3.4 percent on insurance-related and billing-related activities. These percentages were applied to all health professional wages and benefits in deriving the total spending on patient care, research and education, and finance-related administrative costs.

Government Regulation and Oversight

Employers and government regulators also incur administrative costs.

Most of the administrative costs incurred by government agencies were already included in the insurance administrative costs listed in Table 3.3. Those costs are incurred by government agencies administering public insurance programs such as Medicare, Medicaid, General Assistance Medical Care and MinnesotaCare. In addition to those costs, Lewin-VHI identified $11.4 million in state government administrative costs during 1994. These latter costs include $9.5 million in Department of Health for health policy and planning and $1.9 million in the Department of Commerce for health insurance regulation and oversight. Of the $9.6 million spent by the Department of Health, about $4.8 million was on functions related to health care reform.

Employers

Employer administrative costs include the cost of employer staff and overhead costs devoted to employee health benefits programs. Employers often have employee benefits staff who select health plans for the company, enroll employees in the plans, arrange for employee payroll deductions, and administer the flow of funds from the employer to the health plans.

For the most part, data on employer administrative costs are unavailable. However, based on information from several large Minnesota employer groups, Lewin-VHI estimated that $32.3 million was spent by private and public employers in 1994. These administrative costs are in addition to employer spending for health insurance premiums and insurer administration.

Summary of Administrative Cost Estimates

As Table 3.4 shows, there was an estimated $2.4 billion spent on health care administrative costs in Minnesota during 1994. Over half of the administrative expenditures were incurred by health care providers, including physicians (32 percent) and hospitals (22 percent). Insurer administration accounted for most of the remaining administrative costs. About 31 percent of total administrative costs were incurred by private health insurers. Public insurance programs, workers compensation, and automobile insurance accounted for about 14 percent of the total. Employer benefits administration and government regulation were responsible for slightly less than 2 percent of all administrative costs.

Overall, administrative costs represented 15 percent of all health care spending in Minnesota. This estimate is lower than some estimates for the United States, which have been as high as 25 percent. The estimate for Minnesota could have been as high as 23 percent had Lewin-VHI included certain types of provider expenses in its definition of administrative expenditures. Among the items excluded from the definition of administrative expenditures were physician malpractice insurance, research and education, professional fees,

An estimated $2.4 billion was spent on health care administrative costs in 1994.

Table 3.4: Total Health Care Administrative Expenditures, 1994

Type	Amount (in Millions)	Percentage of Administrative Costs	Percentage of Overall Health Spending
Private Insurer	$739.6	30.8%	4.7%
Government Insurer	270.2	11.2	1.7
Other Insurer[a]	67.5	2.8	0.4
Subtotal: All Insurers	$1,077.3	44.8%	6.8%
Physicians	$757.3	31.5	4.8
Hospitals	524.9	21.8	3.3
Subtotal: All Providers	$1,282.2	53.4%	8.1%
Employers	32.3	1.3	0.2
Government Regulation and Oversight	11.4	0.5	0.1
Total	$2,403.2	100.0%	15.2%

Source: Lewin-VHI.

[a]Includes workers compensation, automobile insurance, and other.

and other administration not attributable to finance-related functions. Lewin-VHI also excluded hospital research and education, taxes, non-operating expenses, and net income. The general rationale for excluding these expenses from the definition of administrative expenditures is that they are not the type of costs that are likely to change under health care reform. The reforms examined in this report are likely to affect transactions and billing costs of providers but not these costs.

HEALTH REFORM MODELS

Lewin-VHI examined five alternative health reform proposals, as well as several variants of these models. Figure 3.9 lists the five models and the key assumptions used in each model. The five models include:

1. a Canadian-style single-payer model (no patient cost sharing),
2. a single-payer model with cost sharing,
3. a quasi single-payer model with MinnesotaCare-like reforms,
4. a MinnesotaCare model with an employer mandate for insurance coverage, and
5. a MinnesotaCare model with an individual mandate for insurance coverage.

Figure 3.9: Health Reform Models and Their Assumptions

	Tax-Financed Systems			Premium-Financed Systems	
	Single Payer: Canadian Model	Single Payer: With Cost Sharing	Government Payer: With MinnesotaCare	With MinnesotaCare[a]	
				Employer Mandate	Individual Mandate
Insurer	One Government Health Plan for All State Residents		Choice of Competing Health Plans	Choice of Competing Health Plans	
Delivery System	Fee-For-Service		Capitated Payments to Plans	Capitated Payments to Plans	
Benefits	President Clinton's Benefits Package: Hospital care, physician services, drugs, mental health up to limits.				
Patient Cost Sharing	None	Annual Patient Deductible of $200 ($400 family); 20 Percent Copayment on the Remainder; Annual $1,500 Out-of-Pocket Maximum ($3,000 family).			
Employer Financing	Payroll Tax Sufficient to Fund Coverage for Workers and Dependents			Premium Payments to Health Plans	
Employer/Employee Shares	Employer Pays 80 Percent/ Employee Pays 20 Percent of Payroll Tax			Employer Pays 80 Percent / Employee Pays 20 Percent of Premium	Not Specified by Law
Non-Workers	Family Pays No Premium			Family Pays Full Premium Subject to Premium Subsidies	
Family Premium Subsidies	None Required			No Premium Payment for Persons Below Poverty; Sliding Scale Through 275 Percent of Poverty	
Employer Premium Subsidies	None Required			Yes[b]	None
Cost Sharing Subsidies	None Required	No Cost Sharing For Persons Below Poverty			
Tax on Family Income	Tax on Personal Taxable Income Sufficient to Fully Fund the Program				

Source: Lewin-VHI.

[a]A fee-for-service sector would remain under MinnesotaCare. Fees would be regulated through the Regulated All-Payer Option (RAPO).

[b]Under the employer mandate scenarios, individual employers would not have to spend more than 7.9 percent of payroll.

The five different approaches to health care reform are similar in that they all attempt to achieve universal health insurance coverage. In addition, the same benefit package and patient cost sharing approach, where applicable, was used in all the models. However, the models vary considerably in the degree to which taxes are used to finance health care benefits. Also, there are differences among the models in the way health care services are delivered.

We examined the financial impact of two types of single-payer plans.

The first two of these models both would have one government health plan for all state residents and would rely on a fee-for-service delivery system. The government health plan in these two models is financed by taxes. For illustrative purposes, our consultant assumed that payroll taxes would be imposed on employers and employees in an amount sufficient in the aggregate to finance coverage for workers and their dependents. Additional personal income taxes were assumed to pay for the remaining costs of the first two models. The only difference between these two models is the use of patient cost sharing in the second model.[13]

The third model, like the first two models, is financed through payroll and personal income taxes. However, unlike the single-payer models, this third approach would rely on the health delivery system envisioned under current Minnesota law, incorporate other MinnesotaCare reforms currently in law, and provide residents with a choice of competing health plans. In this model, a government agency would contract with health plans (integrated service networks under MinnesotaCare) in a manner similar to how the Minnesota Department of Employee Relations contracts with health plans to provide health coverage for state employees. Health plans could compete on price and quality, but government payments for health coverage would be capitated and limited to the costs of the lowest acceptable plan in an area. The government agency would be responsible for establishing and operating the contracting process, providing information to consumers, tracking enrollment in various health plans, and reimbursing health plans based on their enrollment. Thus, this model attempts to retain much of Minnesota's health care industry, as it is expected to be restructured under MinnesotaCare; but, unlike MinnesotaCare, the model tries to take advantage of possible economies of scale by having one public entity responsible for paying health plans.

The fourth and fifth models attempt to model the impact of the MinnesotaCare reforms expected, under current law, to be in effect by mid-1997. These reforms include the restructuring of the health delivery system, insurance market reforms, a uniform benefit package, administrative simplifications, and health expenditure growth limits. Our consultant used two different assumptions about how universal coverage would be achieved. In the fourth model (employer mandate), the consultant assumed that employers would be required to provide insurance coverage to employees. Alternatively, in the fifth model

13 The benefit package in President Clinton's Health Security Act was used in all the models, since Minnesota has not yet adopted a uniform benefit package. Patient cost sharing, in the form of an annual deductible of $200 ($400 for a family) and a 20 percent copayment on additional costs (subject to a total annual out-of-pocket maximum of $1,500 for an individual or $3,000 for a family), is required in all of the models except the Canadian single-payer model. However, none of the models require cost sharing by persons below the poverty level.

(individual mandate), the consultant assumed that individuals would be required to obtain insurance coverage if they do not otherwise have coverage through their employer or another source. The individual mandate model is consistent with current state law.[14] In both of these models, government subsidies are available to low-income people without insurance to help them pay for their coverage.[15]

We also examined the impact of several models incorporating MinnesotaCare-like reforms.

Unlike the first three models, these two models are largely premium-financed. Premium payments from employers, employees, and individuals pay for the majority of health care services.[16] Current public funding for Medicaid and other public insurance programs is supplemented only by a tax on personal income sufficient to fund the two alternatives.

These two premium-financed "MinnesotaCare" models are an attempt to determine what the effects of MinnesotaCare would be on health care administrative costs and overall health care spending under alternative assumptions about the means of achieving universal coverage.[17] However, these models are an approximation at best. As we noted earlier, many of the details of MinnesotaCare reforms have not been decided. In particular, a uniform benefits package and cost sharing options for MinnesotaCare have not been adopted. The estimates in our consultant's report are based on particular assumptions about the benefit package, cost sharing, and other features of the models. To the extent that Minnesota adopts a program which has different features from the assumptions made here, the cost estimates in this report may not apply.

In addition, it should be noted that our consultant's estimates for the fourth and fifth models are likely to differ from the estimates being prepared by actuaries working for the Minnesota Health Care Commission (MHCC). Thus far, published MHCC estimates have focused on the additional amount of state funds needed to fund the MHCC's recommendations, while our report focuses on

14 Current state law makes a commitment to universal coverage by mid-1997 using an individual mandate approach. However, that commitment is contingent upon the availability of affordable coverage. The 1994 MinnesotaCare Act required the Minnesota Health Care Commission to study how universal coverage could be financed and how much additional state funding would be required. Further legislation would be required to implement universal coverage.

15 Lewin-VHI assumed that the state would pay the insurance premium for persons below the poverty level and would provide premium subsidies to persons between 100 percent and 275 percent of the poverty level using the existing MinnesotaCare sliding scale. Premium subsidies are assumed to be based on the costs of the lowest-cost plan available in an area. The incremental costs of a higher cost plan must be paid by individuals.

16 In the employer mandate model, employers are required to pay at least 80 percent of the costs of the lowest-cost health plan available to employees, while employees pay the remaining premium. Under the individual mandate, employers who wish to contribute to employee coverage are required to structure their contribution so that employees must pay the full incremental costs of selecting plans which cost more than the lowest-cost plan.

17 The assumed use of the personal income tax to fund program costs in these two models does not affect overall health care spending in the models. A different source of tax financing could be used without affecting conclusions about health care spending, but changing the source of tax revenues would alter Lewin-VHI's distributional analysis of how the models affect different groups of employers and employees financially.

the overall change in health care spending.[18] In addition, MHCC estimates are based on different assumptions than used by our consultant. MHCC assumed an individual mandate with a free-rider penalty on individuals whose non-compliance with the individual mandate is detected, while Lewin-VHI did not use this assumption because it is not contained in current Minnesota law. MHCC also assumed that persons receiving MinnesotaCare premium subsidies would be subject to the current restrictions on eligibility and coverage. Currently, uninsured persons must go 4 months without insurance and 18 months since their last access to employer-subsidized coverage in order to be eligible. Furthermore, subsidized coverage is limited to the first $10,000 of inpatient hospital costs. In contrast, our consultant was attempting to compare a number of models, all of which have universal coverage, and thus assumed that these barriers would not continue to exist under MinnesotaCare models with universal coverage.[19]

ESTIMATES FOR ALTERNATIVE REFORM SCENARIOS

Our consultant estimated the change in health care spending for the seven different health reform scenarios shown in Figure 3.10. These seven scenarios include each of the five health models discussed previously, as well as additional scenarios for the single-payer with cost sharing and the individual mandate models. As Figure 3.10 illustrates, the consultant first estimated results for the two single-payer models. Both the Canadian-style single-payer plan (Model #1) and the single-payer plan with patient cost sharing (Model #2a) were estimated assuming that Minnesota would receive permission to integrate the Medicare program into a broader single-payer program at the state level. This assumption permits our results to be compared with national studies of single-payer plans which include Medicare recipients.

Next, our consultant estimated the effects of the single-payer plan with cost sharing, assuming instead that Medicare is not part of the state's health care reform plan (Model #2b). This assumption is perhaps more realistic, since there is no current process for obtaining federal permission to fully include Medicare recipients in a state-level reform plan. In each of the subsequent models, it was also assumed that Medicare was not part of the health care plan.[20]

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18 Later in this chapter, however, we also report our consultant's estimate of the additional state funding necessary to implement each of the models. These funding estimates do not include the additional state funds necessary to expand eligibility of MinnesotaCare subsidies to adults without children with incomes between 125 and 275 percent of the poverty level. Those additional state funds have already been built into the baseline data that Lewin-VHI is using for 1997.

19 In addition, our estimates may vary from those prepared for MHCC because of different assumptions about the health care package, cost sharing, and other plan features.

20 Minnesota has applied to the federal government for a health reform waiver, which would attempt to integrate a variety of state and federal programs. The waiver does not ask permission to fully integrate Medicare into MinnesotaCare reforms but seeks approval to coordinate Medicare managed care, require Medicare participation in the statewide data collection and analysis effort, and alter Medicare payment rates to address geographic inequities.

Figure 3.10: Health Reform Scenarios Estimated

	Type of System	Primary Source of Financing	Patient Cost Sharing[a]	Market Structure	Medicare Program
1	Canadian-Style Single-Payer	Taxes	No	Physician Fee-for-Service and Hospital Budgets	Included
2a	Single-Payer with Cost Sharing	Taxes	Yes	Physician Fee-for-Service and Hospital Budgets	Included
2b	Single-Payer with Cost Sharing	Taxes	Yes	Physician Fee-for-Service and Hospital Budgets	Not Included
3	Government Payer	Taxes	Yes	Integrated Service Networks[b]	Not Included
4	Employer Mandate	Premiums	Yes	Integrated Service Networks	Not Included
5a	Individual Mandate	Premiums	Yes	Integrated Service Networks	Not Included
5b	Individual Mandate (without an ERISA waiver)	Premiums	Yes	Integrated Service Networks	Not Included

Source: Lewin-VHI.

[a]Persons with incomes under the federal poverty level are not required to pay copayments or deductibles in any of the models.

[b]Those models with integrated service networks also include a regulated fee-for-service sector.

The effect of ERISA on state-level reforms is difficult to predict.

These models include the government payer/contractor model with MinnesotaCare reforms (Model #3), the MinnesotaCare model with an employer mandate (Model #4), and the MinnesotaCare model with an individual mandate (Model #5a).[21]

Finally, the consultant estimated the change in health care spending for an alternative version of the individual mandate model. This version (Model #5b) assumes that Minnesota is unable to obtain a Congressional waiver from the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). Without a waiver, the state may be prevented from mandating benefit packages or regulating the health coverages provided by firms which choose to self-insure. As a result, the effect of reforms would be somewhat limited.

21 The models which exclude Medicare also assume that early retirees continue to obtain coverage from their previous employers. The single-payer models which include Medicare assume that early retirees are covered under the government health plan.

Only the individual mandate model was estimated without an ERISA waiver. Lewin-VHI did not estimate how the results would change for the employer mandate model without an ERISA waiver, because this reform option would not be permitted without an ERISA waiver. In addition, our consultant did not estimate what would happen under any of the three tax-financed models without an ERISA waiver. It is not entirely clear whether these models could be implemented without a waiver. It is possible that the single-payer models could be implemented without an ERISA waiver if the state permited employers to duplicate or supplement the tax-financed coverage provided by the state. However, it is also possible that ERISA might prevent the state from using payroll taxes to help fund a single-payer or tax-financed system.[22] ERISA could also prevent various cost control efforts contemplated either under MinnesotaCare or a single-payer model.

It is difficult to be very specific about the impact of ERISA on state-level health reforms. In general, state laws related to self-insured health plans are pre-empted by ERISA. Unfortunately, the law is unclear on which laws are considered to "relate to" self-insured plans, and courts appear divided on a number of issues. Since the legality of various health reform initiatives cannot be tested until a program is actually in place, it is difficult to state with certainty what reforms would be permissible without an ERISA waiver.

Estimated Changes in Health Care Spending

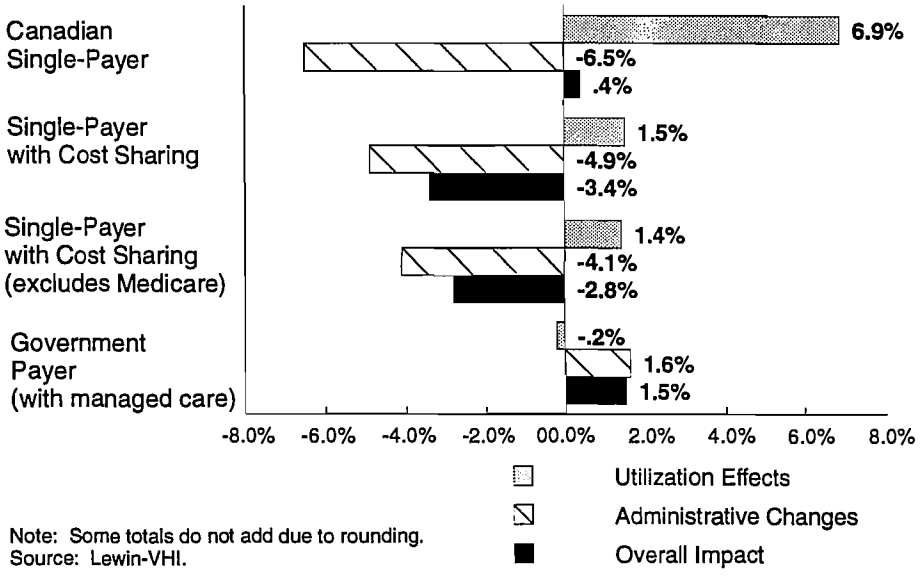
A single-payer plan with cost sharing would reduce health spending by about 3 percent.

Figures 3.11 and 3.12 summarize Lewin-VHI's estimates of the changes in overall health care spending under seven alternative health reform scenarios. Figure 3.11 summarizes the consultant's results for the four tax-financed plans (Models #1, 2a, 2b, and 3). Figure 3.12 summarizes the consultant's results for the three premium-financed scenarios (Models #4, 5a, and 5b). The figures show that:

- **The Canadian-style single-payer model would reduce administrative costs the most, but would likely increase overall health care spending in Minnesota by 0.4 percent.**
- **A single-payer model with patient cost sharing is the lowest cost alternative and would reduce health spending by about 3 percent.**
- **The highest cost alternative is the government payer with managed care and insurance market reforms and would increase health spending by 1.5 percent.**

22 Other taxes could be substituted for payroll taxes without materially affecting the most important results the consultant estimated for the single-payer models. In particular, the estimated changes in administrative costs and overall health care spending and the estimated change in overall state taxes would be unaffected. The only substantive change would be in the consultant's distributional analysis of how individuals of varying incomes and employers of various sizes are financially affected by the change to a single-payer system.

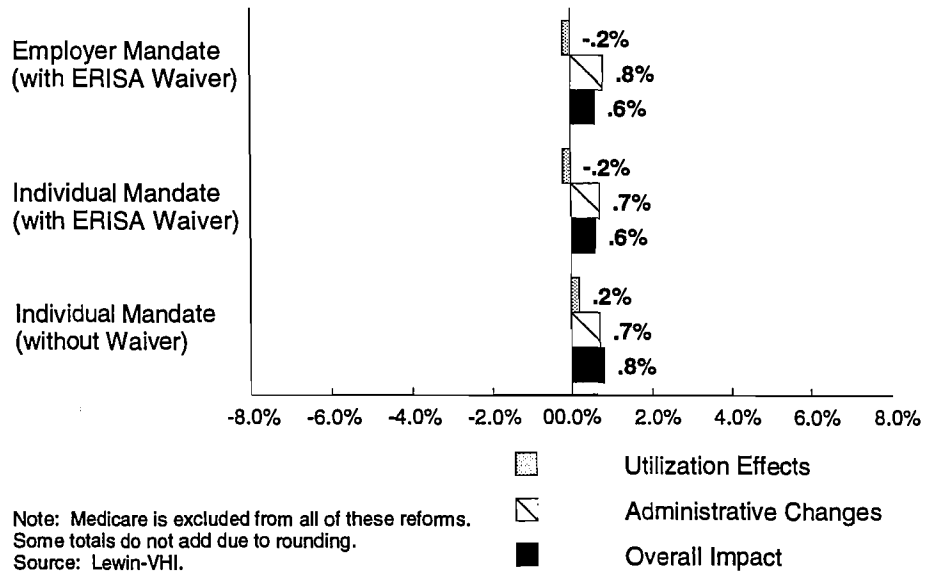
Figure 3.11: Percentage Changes in Aggregate Health Care Spending in Minnesota Under Tax-Financed Reforms, 1997



Note: Some totals do not add due to rounding.
Source: Lewin-VHI.

Other reform options would increase spending by 0.4 to 1.5 percent.

Figure 3.12: Percentage Changes in Aggregate Health Care Spending in Minnesota Under Premium-Financed Reforms, 1997



Note: Medicare is excluded from all of these reforms. Some totals do not add due to rounding.
Source: Lewin-VHI.

- **The various premium-financed alternatives are roughly equivalent in cost to the Canadian single-payer model and would increase health spending by about 0.6 to 0.8 percent.**

Changes in Health Care Utilization

Table 3.5 provides greater detail on the factors affecting health care spending under all of the health reform scenarios. The factors affecting overall health spending are of two general types. First, there are four factors that affect health care utilization. These factors include: 1) the additional utilization of health care by those previously uninsured, 2) the expansion of coverage for persons who were already insured, 3) the increase in utilization under the Canadian single-payer plan when patient cost sharing is eliminated, and 4) the reduction in utilization resulting from increased use of managed care in those options incorporating the MinnesotaCare reforms.

Health care utilization costs would increase under single-payer plans.

For each option, health care utilization by the uninsured is expected to increase about $194 million, assuming each option is implemented in 1997. This estimate is based on increases of about 160 percent in physician services, 50 percent in inpatient hospital services, and 77 percent in hospital outpatient services for the uninsured. However, this is a relatively modest increase of slightly less than one percent of overall health spending, because the percentage of population that is uninsured is lower in Minnesota than in the rest of the nation.

Each option also includes an increase in health spending for the incremental cost of providing coverage to those whose previous insurance benefits were not comparable with the new standard benefit package. The cost of the improved benefit package varies from $71 to $114 million across reform options.[23]

Unlike the other options, the Canadian single-payer option would result in an estimated $1,134 million increase in health care utilization due to the elimination of patient cost sharing. Our consultant used the results of the RAND studies mentioned in Chapter 2 to estimate the increased utilization. Lewin-VHI assumed that, without cost sharing, physician services would increase 31 percent and inpatient hospital services would increase 10 percent for those persons currently in plans that require cost sharing.

Finally, for the four scenarios that incorporate MinnesotaCare reforms, utilization is reduced because significant numbers of individuals are shifted from fee-for-service coverage to lower-cost coverage under integrated service networks (ISNs). Lewin-VHI assumed that, under MinnesotaCare, ISNs would serve the current population enrolled in health maintenance organizations (HMOs) plus half of the population not currently in an HMO. This change would mean

23 The variation is due to the differences in populations covered by the benefit package. Two reform options include the entire state population, while the others exclude the population covered by Medicare. One of the latter options also excludes self-insured firms under the assumption of no ERISA waiver.

Table 3.5: Estimated Changes in Aggregate Health Care Spending in Minnesota Under Alternative Reforms, 1997 (in Millions)

	(1) Canadian-Style Single-Payer (includes Medicare)	(2a) Single-Payer with Cost Sharing (includes Medicare)	(2b) Single-Payer with Cost Sharing (excludes Medicare)	(3) Government Payer (with MinnesotaCare Reforms)	(4) Employer Mandate (with MinnesotaCare Reforms & ERISA Waiver)	(5a) Individual Mandate (with MinnesotaCare Reforms & ERISA Waiver)	(5b) Individual Mandate (with MinnesotaCare Reforms)
Utilization increase for previously uninsured	$193.6	$193.6	$193.6	$193.6	$193.6	$193.6	$193.6
Expanded coverage for persons already insured	114.1	114.1	94.1	94.2	94.2	94.2	70.6
Utilization increase due to elimination of cost sharing	1,133.7	NA	NA	NA	NA	NA	NA
Managed care savings	NA	NA	NA	(323.9)	(323.9)	(323.9)	(226.8)
Subtotal: Net Change in Utilization	$1,441.4	$307.7	$287.7	$(36.1)	$(36.1)	$(36.1)	$37.4
Insurer administration	$(808.6)	$(784.9)	$(655.0)	$219.3	$(12.8)	$(20.3)	$(34.8)
Physician administrative costs	(326.5)	(233.4)	(199.8)	(17.6)	(17.6)	(17.6)	(13.2)
Hospital administrative costs	(213.6)	(149.8)	(123.6)	(11.6)	(11.6)	(11.6)	(8.7)
Administration of subsidies	NA	142.1	116.1	114.4	172.4	168.6	168.6
Administration of MinnesotaCare	NA	NA	NA	37.0	37.0	37.0	27.7
Subtotal: Net Change in Administration	$(1,348.7)	$(1,026.0)	$(862.3)	$341.5	$167.4	$156.1	$139.6
Net Change in Health Care Spending	$92.7	$(718.3)	$(574.6)	$305.4	$131.3	$120.0	$177.0
Percentage Change Due to Utilization	6.9%	1.5%	1.4%	(0.2)%	(0.2)%	(0.2)%	0.2%
Percentage Change Due to Administration	(6.5)	(4.9)	(4.1)	1.6	0.8	0.7	0.7
Percentage Change in Aggregate Health Spending[a]	0.4%	(3.4)%	(2.8)%	1.5%	0.6%	0.6%	0.8%

Source: Lewin-VHI.

[a]Some totals do not add due to rounding.

about 66 percent of the health care services in Minnesota would be delivered by ISNs. Overall, Lewin-VHI estimated the annual managed care savings from this shift to be about $324 million in 1997. This figure includes a $255 million net reduction due to an estimated reduction in inpatient hospital costs of $275 million and an increase in other health care costs of $20 million.[24] In addition, a savings of 1.3 percent of all services, or $69 million, is estimated due to the increase in volume of ISN enrollees seen by physicians. As physicians treat more patients from the same ISN, it is expected physicians' practice patterns are more likely to be modified.

The estimated managed care savings were significantly less for the individual mandate scenario without an ERISA waiver. Lewin-VHI estimated savings of only $227 million for that scenario. The lower estimate results because savings cannot be expected from self-insured employers without an ERISA waiver.

It should be noted that the amount of managed care savings depends on the financial incentives facing consumers. For each of the scenarios incorporating MinnesotaCare reforms, Lewin-VHI assumed that consumers would have to pay the incremental costs of higher cost plans and thus would have strong financial incentives to seek out low cost plans. Without these incentives, the potential managed care savings would be lower.

The assumed financial incentives could be mandated if the state received an ERISA waiver. Without a waiver, the state may not be able to mandate such incentives. However, faced with a choice of health plans including ISNs, employers and employees may voluntarily choose to implement such incentives. To the extent that such incentives are not implemented, the managed care savings under the individual mandate scenario without an ERISA waiver would be lower than those estimated by Lewin-VHI.

Changes in Administrative Costs

Administrative costs would decrease under single-payer options, and increase under other proposals.

The second set of factors affecting health care spending includes the various changes in administrative costs. Each reform option lowers the administrative costs of physicians and hospitals. All options except one lower the administrative costs of insurers. These administrative cost reductions for providers and insurers are relatively modest for the premium-financed options, ranging between $42 million and $57 million. The administrative savings in these areas are significantly greater for the single-payer options. For the Canadian single-payer option, Lewin-VHI estimates net savings of $1.35 billion, or about 6.5 percent of health care spending in Minnesota in 1997.[25] This level of savings is roughly equivalent to the 7 percent nationwide savings estimated by the Congressional Budget Office (CBO) for a Canadian-style system. Also, like

24 Lewin-VHI assumed that hospital inpatient costs would decrease between 14 and 16 percent and that the costs of outpatient physician and non-physician services would increase between 1 and 4 percent.

25 Without implementation of one of these reform options, health care spending in Minnesota is estimated to be $20.84 billion in 1997.

CBO's estimates, Lewin-VHI's estimates for a single-payer with cost sharing suggest that administrative savings would be significant but not as large as for the Canadian option which eliminates patient cost sharing. Administrative savings are not as large with cost sharing because providers incur costs when billing patients for copayments and deductibles. Under a single-payer plan with cost sharing, administrative savings for Minnesota insurers and providers are estimated to be about $1.17 billion. Savings for a similar option that does not include the Medicare program are estimated to be $978 million.[26]

The tax-financed government payer model that offers consumers a choice of health plans would, however, result in a net increase in administrative costs to insurers and providers of $190 million. This increase results because, unlike the single-payer options, this plan retains a restructured private insurance industry and, unlike the premium-financed options, this plan shifts a substantial number of Minnesotans out of employer group coverage into individual coverage. As a result, substantial economies of scale in the administrative costs under employer group plans are lost.

All but one of the options impose new government administrative costs. Each of the four scenarios that include MinnesotaCare reforms would result in some additional state government costs ($28 million to $37 million) for the collection and distribution of consumer information, regulation of ISNs, enforcement of health spending limits, and general research and policy direction. In addition, all of the options, except the Canadian single-payer, would require increased government costs to administer various subsidies. The tax-financed options which include cost sharing require the government to administer cost sharing subsidies to families with incomes below the poverty level. In addition to cost sharing subsidies, the premium-financed options require government resources to administer premium subsidies to families and, under the employer mandate, employer subsidies to firms whose health care costs exceed 7.9 percent of payroll. The costs of administering various subsidies varies from $114 million to $172 million.

Overall Spending Changes

For each reform option modeled, Table 3.5 computes the net change in 1997 health spending as the sum of the spending changes due to utilization factors and the spending changes due to administrative factors.[27] For the Canadian

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26 The legislation requesting our study also asked us to examine whether administrative cost savings would vary if a private sector entity, instead of a public sector agency, functioned as the single payer. The lack of prior research prevents us from providing a definitive answer to that question. Experience with Medicare suggests that private contractors might be able to do claims processing for a lower initial cost than a public agency. However, experience in a number of states suggests that the cost of a private contractor cannot be measured by its initial bid. Contractors make additional money whenever additional research or work is required but not covered in the initial contract. The cost of the additional work may offset any initial cost advantage of a private contractor over a public agency.

27 All the scenarios assume that provider cost reductions due to administrative savings or lower amounts of uncompensated care are recaptured through some mechanism such as rate regulation, cost controls, or competition. Without a recapture through lower provider fees, these cost reductions would be a windfall for providers and would not necessarily lower health spending.

single-payer option, utilization is estimated to increase $1.4 billion, while administrative costs decline by $1.3 billion. The net effect is an increase of $93 million, or about 0.4 percent of estimated health care spending in Minnesota. The single-payer plan with cost sharing would not reduce administrative costs by as much ($1.0 billion) but would result in a much smaller utilization increase ($0.3 billion). As a result, this option would reduce health care spending by $718 million, or 3.4 percent. This second option illustrates a trade-off between the goals of reducing administrative costs and containing overall health care costs. Eliminating patient cost sharing helps to maximize the administrative savings but, in the process, is expected to increase overall health spending because of its effect on the utilization of health care services.

The other reform scenarios assume that Minnesota would not be able to include the Medicare program in a broader reform plan. This assumption may be more politically realistic, since there is no current mechanism for obtaining federal permission to include Medicare and support for such a plan might not be forthcoming. Excluding Medicare, the single payer plan with cost sharing is estimated to save $575 million, or 2.8 percent of health care spending. These savings are the result of administrative savings of $862 million less the expected increase in utilization of $288 million.

The two premium-financed scenarios with MinnesotaCare reforms and an ERISA waiver are expected to increase overall health spending by between $120 million (individual mandate) and $131 million (employer mandate), or about 0.6 percent. These estimates result from a net decrease in utilization of $36 million under each of the scenarios and an increase in administrative costs of between $156 million and $167 million. The premium-financed individual mandate scenario without an ERISA waiver is expected to increase health spending by $177 million, or 0.8 percent. In this scenario, utilization costs would increase by $37 million because of lower managed care savings, and administrative costs would increase by $140 million.

The most costly reform option is a hybrid model, which combines managed care with some aspects of a single-payer plan.

The most costly reform scenario is the tax-financed government payer option with managed care. This option results in a net spending increase of $305 million, or 1.5 percent. A reduction in utilization of $36 million is more than offset by a $341 million increase in administrative costs. This scenario was an attempt to achieve some administrative savings through use of a government payer, while benefiting from the savings produced by a restructured health insurance industry. The main problem with this option, however, is that it substantially increases insurer administrative costs. This option retains a private insurance industry and, consequently, does not achieve significant administrative savings like a "true" single-payer approach. Even compared with the premium-financed scenarios, it increases insurer administrative costs because it does not retain the economies of scale present in employer group coverage.

These estimates provide a good indication of the relative impact of the reform options examined. However, they should not be viewed as precise estimates of how health spending would change under these reforms. As we will discuss in Chapter 4, estimating changes in health spending is difficult because most

of these reform options have not been attempted on a broad scale in the United States. These reforms substantially alter the incentives of consumers, employers, providers, and insurers. Their response to these reforms is not possible to predict with precision. The estimates are sensitive to the assumptions made about the behavioral response to new incentives created by reform, as well as assumptions about general economic growth and health care cost trends.

Managed care savings are difficult to forecast.

The estimated utilization savings under MinnesotaCare are particularly difficult to forecast. Lewin-VHI's estimates are based on observed experience in existing managed care environments. It is possible that the delivery system changes envisioned under MinnesotaCare would result in substantially more managed care savings than estimated here. Greater savings could result if ISNs achieve a greater share of the health care market than was assumed in this analysis or if ISNs are able to affect medical practice more than is the case in already established HMOs. However, it is also important to consider that such savings may take years to achieve as the health insurance market changes and matures. Change may take longer in rural parts of the state where HMOs have a low current market share and ISNs may be slower to develop than in the Twin Cities metropolitan area.

Long Run Implications for Health Spending

These estimates focus on how much each reform option would probably affect health care spending in 1997. However, these reforms have more than a one-time impact on health care costs. For example, a single-payer plan that reduces spending by $575 million in 1997 (or 2.8 percent of spending) would likely result in spending in future years that is also about 2.8 percent lower than would have occurred without the plan. Similarly, an individual mandate approach that increases 1997 spending by 0.6 percent would likely result in similar percentage increases in future years.[28]

Additional savings may occur under any of the reform options to the extent that effective cost controls are implemented along with the reforms. Single-payer advocates suggest that physician fee schedules and government-set hospital budgets would further constrain health care spending under a single-payer plan. Similarly, it could be suggested that MinnesotaCare currently envisions a set of cost controls on ISNs and overall health care spending, as well as fee schedules for physicians providing services outside of ISNs. Either approach could restrict health spending below the levels forecast earlier in this chapter. In fact, the potential savings from effective cost controls would overwhelm the estimated changes in health spending which were presented above. Applying the same overall cost controls to the reform options examined in this chapter would not change the relative ranking of the options in terms of overall cost, but the savings from the cost controls would magnify over time the initial cost differences among the plans in 1997.

28 The net savings, or cost increases, would grow with inflation over time as would overall spending in the absence of reform. The percentage savings should stay relatively constant over time in percentage terms, unless the sources of savings were expected to grow at different rates than overall health spending.

Lewin-VHI estimated the impact of several reform options on health spending from 1997 to 2004, using similar assumptions about cost controls. Lewin-VHI assumed that overall limits on health care spending would reduce the rate of spending growth by 10 percent each year from 1998 through 2004. Compared with a no-reform scenario, our consultant estimated that the cumulative savings through the year 2004 from the reform options that exclude Medicare would be $23.9 billion under the single-payer plan with cost sharing, $15.0 billion for the individual mandate, $14.9 billion for the employer mandate, and $13.1 billion for the tax-financed government payer model with managed care.

Clearly, the potential savings from cost controls far exceeds the impacts estimated in the previous section. For example, the cumulative impact of the individual mandate from 1997 through 2004 is an estimated increase in costs of about $1.4 billion. Assuming effective overall cost controls under MinnesotaCare changes the result to a net cumulative savings of $15.0 billion.

Cost controls would further reduce spending under any of the options, but their impact is very difficult to predict.

However, as we will discuss in Chapter 4, estimating how effective cost controls would be in controlling health spending is extremely difficult. Most national estimates of the effectiveness of cost controls are based on analysts' judgments, and the analysts admit that their assumptions in this area are "highly uncertain."[29] Whether cost control mechanisms under a single-payer plan would be more effective than those envisioned under MinnesotaCare is also uncertain.

Furthermore, even if the impact of cost controls were fully understood, the major disadvantage of cost controls is the effect they may have on other important aspects of the health care system. For example, cost controls could affect access to certain types of care, provider accessibility, and the rate of technological change.[30] Cost controls can also affect the efficiency of health care. Even though government-set budgets may have controlled Canadian hospital expenditures, Canadian hospitals find it "advantageous to keep patients longer because the use of resources per day declines as the stay lengthens." As a result, hospital stays are reportedly 40 percent longer in Canada than in the United States.[31]

Estimated Impacts on Employers, Families, and Government

Our consultant also provided estimates of how some of the reform scenarios would affect health care spending by Minnesota employers, families, and various levels of government. It was assumed that each reform option was fully

29 Congressional Budget Office, paper on H.R. 1200, American Health Security Act of 1993 (December 16, 1993): 10. Also, see Office of Technology Assessment, Congress of the United States, *Understanding Estimates of National Health Expenditures Under Health Reform* (May 1994): 67-68.

30 Congressional Budget Office, 11.

31 Thomas Rice, "An Evaluation of Alternative Policies for Controlling Health Care Costs," in *Building Blocks for Change: How Health Care Reform Affects Our Future*, Jack A. Meyer and Sharon Silow-Carroll, eds. (1993): 32.

funded and that state government would collect payroll taxes and income taxes sufficient to fund each option. Table 3.6 shows the costs of six of the options in 1997 and a way in which they could be financed. The total costs of the various options differ because of their cost implications for health care spending and also because of their coverage. Two of the single-payer options cover Medicare patients and, as a result, have larger program expenditures.

The revenue sources for the various options include existing public funding, payroll taxes or premiums paid by employers and employees, premiums paid by non-workers, and personal income taxes. Figure 3.13 shows that the

Table 3.6: Program Expenditures and Revenues Under Alternative Reforms, 1997 (in Millions)

	(1) Canadian Single-Payer	(2a) Single-Payer with Cost Sharing	(2b) Single-Payer with Cost Sharing (excludes Medicare)	(3) Government Payer (with Managed Care)	(4) Employer Mandate	(5a) Individual Mandate
Covered Services[a]	$13,616.4	$11,293.7	$7,024.4	$7,003.6	$7,011.2	$6,957.5
Insurer Administration	284.9	330.1	252.1	1,115.4	882.1	877.1
Program Administration[b]	NA	142.1	114.1	151.4	209.4	205.6
TOTAL PROGRAM EXPENDITURES	$13,901.3	$11,765.9	$7,390.5	$8,270.4	$8,102.7	$8,040.2
Medicaid[c]	$1,444.3	$1,444.3	$1,188.3	$1,178.6	$1,178.6	$1,178.6
Medicare	2,576.3	2,576.3	NA	NA	NA	NA
Other Public Funds[d]	415.1	440.4	408.0	353.5	369.5	367.9
Subtotal: Current Program	$4,435.7	$4,461.0	$1,596.3	$1,532.1	$1,548.1	$1,546.5
Employer Premium Payments	NA	NA	NA	NA	$4,906.6	$3,922.4
Employer Payroll Taxes	$6,521.2	$5,140.2	$4,299.6	$5,019.3	NA	NA
Employer Premium Subsidy	NA	NA	NA	NA	(963.0)	NA
Subtotal: Employer Payments	$6,521.2	$5,140.2	$4,299.6	$5,019.3	$3,943.6	$3,922.4
Employee Premium Payments	NA	NA	NA	NA	$1,222.1	$1,439.9
Employee Payroll Taxes	$1,612.1	$1,285.9	$1,072.5	$1,250.4	NA	NA
Non-Worker Premiums	NA	NA	NA	NA	1,307.3	2,026.6
Premium Subsidies	NA	NA	NA	NA	(1,128.9)	(1,282.1)
Personal Income Tax	1,332.3	878.8	422.1	468.6	1,210.3	386.9
Subtotal: Family Payments	$2,944.4	$2,164.7	$1,494.6	$1,719.0	$2,610.8	$2,571.3
TOTAL PROGRAM REVENUES	$13,901.3	$11,765.9	$7,390.5	$8,270.4	$8,102.7	$8,040.2
Total Payroll Tax Rate	11.44%	9.04%	7.91%	8.82%	NA	NA
Employer Share	9.17	7.23	6.33	7.06		
Employee Share	2.27	1.81	1.58	1.76		
Tax Rate on Personal Income	1.96%	1.37%	0.64%	0.69%	1.78%	0.55%

Source: Lewin-VHI.

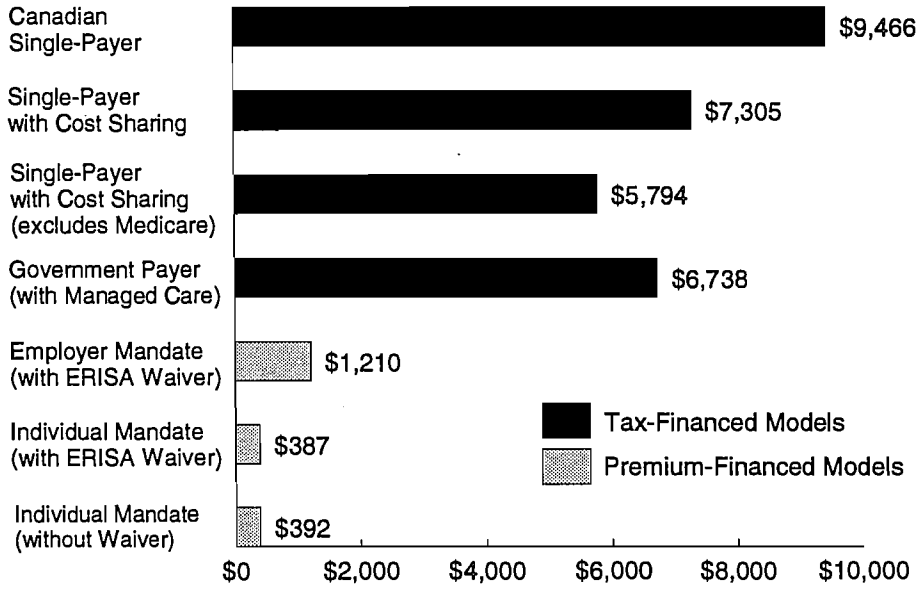
[a]Also includes cost-sharing subsidies, where applicable, and Medicaid expenditures for supplemental benefits for persons currently eligible for the program.

[b]Includes the cost of administering premium and cost-sharing subsidies and the public cost of facilitating consumer choice among integrated service networks.

[c]Includes the state, county, and federal shares of Medicaid funding for all services except long-term care and, where applicable, supplemental coverage for low-income Medicare recipients.

[d]Includes other state program funding less the net increase in state employee health benefit costs.

Figure 3.13: Additional State Taxes Required to Implement Reforms, 1997 (in Millions)



Source: Lewin-VHI.

options vary considerably in terms of the additional state taxes required to implement them. In particular:

- **The tax-financed options would require a substantially greater increase in taxes ($5.8 billion to $9.5 billion) compared with the premium-financed options ($0.4 billion to $1.2 billion).**

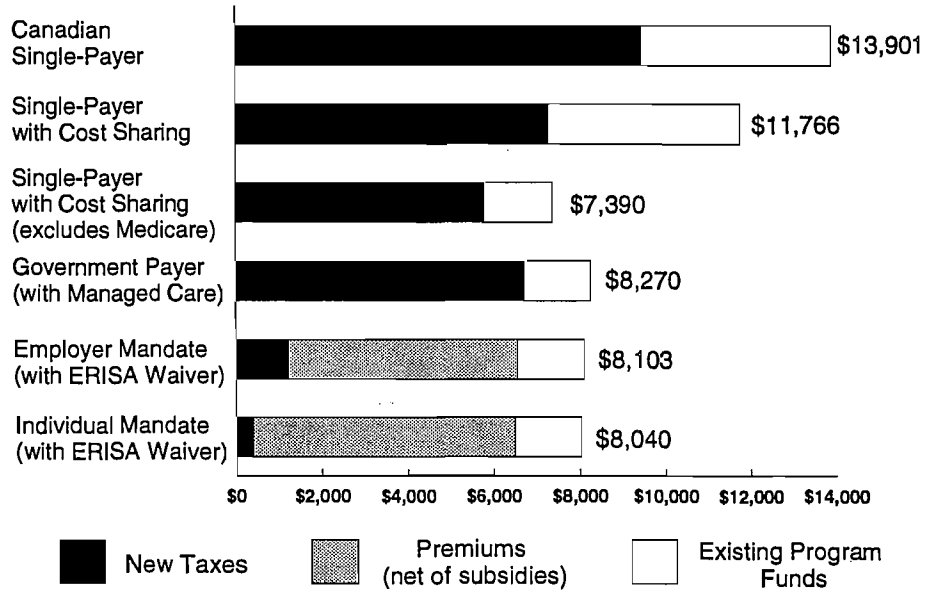
However, as Figure 3.14 shows:

- **The difference in the reliance on taxes is generally offset by a lower reliance on insurance premiums paid by employers and individuals.**

For example, under the individual mandate, taxes would fund only about $0.4 billion of the program's $8.0 billion in costs. Premium payments (net of premium subsidies) would provide $6.1 billion, and funding from existing public programs would provide $1.5 billion. In contrast, the single-payer option with cost sharing (excluding Medicare) would not require any premium payments. Only taxes ($5.8 billion) and existing program sources ($1.6 billion) would be used to fund a $7.4 billion program.

Lewin-VHI's estimates of the additional taxes necessary to fund each option do not include the additional state funds implicit in the consultant's baseline forecast. The estimates are being made for 1997 and rely on a baseline forecast of future health spending between 1994 and 1997. Spending is expected to grow from $15.8 billion in 1994 to $20.8 billion in 1997. That baseline forecast assumes growth in both public and private insurance programs. In particu-

Figure 3.14: Source of Funding for Alternative Reforms, 1997 (in Millions)



Source: Lewin-VHI.

lar, the forecast assumes that the MinnesotaCare subsidy program will be expanded to include adults without children with incomes between 125 and 275 percent of the poverty level beginning in October 1995. The consultant's baseline forecast assumes that spending on the insurance offered by MinnesotaCare, plus administrative costs, will increase by about $192 million between calendar years 1994 and 1997. Part of that increase would be funded by state funds and part by premium contributions made by program participants. Consequently:

- **Lewin-VHI's estimates of additional state taxes needed to implement various reform options do not include the additional state taxes necessary to expand MinnesotaCare in 1995.**

In addition, these estimates do not include any additional state funds necessary to finance growth in the Medicaid or General Assistance Medical Care programs between 1994 and 1997. Finally, the estimates do not consider the implications for state finances of the health care reform waiver which Minnesota has submitted to the federal government.

Table 3.7 shows the net financial impact of the four scenarios that incorporate MinnesotaCare reforms on various groups: employers, families, and various levels of government. For all of these options, the net change in health care spending is set equal to zero for state government because it is assumed that additional tax revenues exactly offset the additional costs to state government

Table 3.7: Changes in Health Spending by Payer Under Alternative Reforms, 1997 (in Millions)

	Scenario 3: Government Payer (with Managed Care)	Scenario 4: Employer Mandate	Scenario 5a: Individual Mandate (with ERISA Waiver)	Scenario 5b: Individual Mandate (without ERISA Waiver)
PRIVATE				
Firms that now insure	$310.1	$(402.8)	$35.7	$19.7
Firms that do not now insure	629.5	414.7	NA	NA
Subtotal: All private employers	$939.6	$11.9	$35.7	$19.7
Premium payments	$(2,084.9)	$(771.0)	$(28.5)	$(32.5)
Out-of-pocket payments	(190.2)	(189.1)	(129.9)	(121.1)
Tax payments	1,719.1	1,210.2	386.9	391.8
Subtotal: All households	$(556.0)	$ 250.1	$228.5	$238.2
PUBLIC				
State government	$0.0	$0.0	$0.0	$0.0
Local governments	7.4	(18.5)	(41.1)	(44.5)
Federal employee benefit costs	(85.7)	(112.2)	(103.1)	(36.4)
Subtotal: All levels of government	$(78.3)	$(130.7)	$(144.2)	$(80.9)
Net Change	$305.4	$131.3	$120.0	$177.0

Source: Lewin-VHI.

of implementing each option.[32] The three premium-financed options increase annual employer spending by relatively modest amounts, ranging from $12 million to $36 million, while the tax-financed option increases employer costs by $940 million. Opposite trends occur for households. The premium-financed options increase household spending by $228 million to $250 million, while the tax-financed version reduces household spending by $556 million. In all four of the models, the federal government's cost of providing health benefits to federal employees in Minnesota goes down significantly—with reductions ranging from $36 million to $112 million.

Table 3.8 shows the net impact of several options on employers of various sizes and in different industries.[33] Generally, health care spending by the largest employers would decline under all three scenarios examined, particularly the employer mandate and individual mandate model. Health care costs for small employers increase under all scenarios. The increase is the largest under the tax-financed government payer approach. Under this option, annual costs per worker would increase $1,011 for firms with 1 to 9 employees and $702 for firms with 10 to 24 employees in 1997.

The employer mandate and individual mandate options would provide significant cost reductions for industries such as construction and manufacturing that

32 State government costs increase significantly under each of these alternatives, particularly the tax-financed one, but additional tax revenues offset the additional costs.

33 The individual mandate model in Tables 3.8 and 3.9 is the scenario with an ERISA waiver.

Table 3.8: Net Changes in Health Care Spending for Private Employers Under Alternative Reforms, by Firm Size and Industry, 1997

	Scenario 3: Government Payer (with Managed Care)		Scenario 4: Employer Mandate		Scenario 5a: Individual Mandate	
	Total (millions)	Average Change Per Worker	Total (millions)	Average Change Per Worker	Total (millions)	Average Change Per Worker
PRIVATE EMPLOYERS BY NUMBER OF EMPLOYEES						
1-9	$552.0	$1,011	$152.1	$278	$163.6	$300
10-24	137.1	702	60.8	311	37.2	190
25-99	121.2	385	23.6	75	43.8	(139)
100-499	29.9	111	(35.6)	(132)	44.7	(166)
500-999	119.8	878	58.8	431	74.7	547
1,000-5,000	27.1	130	(63.4)	(305)	(61.5)	(295)
5,000 or More	(47.4)	(120)	(184.4)	(466)	(89.8)	(227)
PRIVATE EMPLOYERS BY INDUSTRY						
Construction	2.5	22	(80.4)	(702)	(93.4)	(816)
Manufacturing	(43.3)	(116)	(173.7)	(465)	(94.6)	(253)
Transportation, Communication and Utilities	15.7	112	(78.6)	(563)	(26.4)	(189)
Wholesale Trade	7.7	76	(30.5)	(300)	(26.9)	(264)
Retail Trade	300.5	745	183.0	454	115.9	287
Services	367.1	560	138.6	212	62.4	95
Finance	145.8	1,098	(9.0)	(67)	(7.4)	(54)
Other	143.7	987	62.5	429	106.0	728
CURRENT INSURING STATUS						
Currently provide insurance	310.1	196	(402.8)	(255)	35.7	23
Do not now provide insurance	629.5	1,301	414.7	857	—	—
Total private	939.6	455	11.9	6	35.7	17

Source: Lewin-VHI.

already provide good health benefits to their workers. Retail trade and service industry firms would face increased health care costs. The tax-financed option would increase costs significantly for those industries which do not currently provide a high level of health insurance. Costs per worker would increase $1,098 for firms in the finance industry, $745 for retail businesses, and $560 for service businesses.

The three options also vary in how they affect firms currently providing insurance and firms not providing insurance. The individual mandate does not impact firms currently without insurance benefits and increases costs by $23 per worker in firms currently offering insurance. In contrast, the employer mandate increases health care costs by $857 per worker in firms without current insurance and decreases costs by $255 per workers in firms with insurance. The

tax-financed option increases costs to both types of employers. However, the increase per worker is greater for firms not currently providing insurance ($1,301 versus $196).

It is also useful to examine how these three options affect Minnesota families. Table 3.9 shows the net impact of several options on families of various incomes—computed before and after possible wage effects. Generally, the three options have progressive effects when measured across family income. Costs to low-income families generally decline, while costs to high-income families increase. This conclusion is more apparent for the tax-financed and employer mandate options than for the individual mandate. Because the tax-financed model lowers family spending considerably and shifts it to employers, even families with incomes in the $75,000 to $100,000 range would experience a small reduction in health care costs under this option.

Table 3.9: Average Change in Health Spending Per Family Under Alternative Reforms, 1997

			Average Change in Family Health Spending Under MinnesotaCare[c]					
			Before Wage Effects			After Wage Effects		
	Number of Families[a] (in thousands)	Average Family Spending Under Current Policy[b]	Government Payer	Employer Mandate	Individual Mandate	Government Payer	Employer Mandate	Individual Mandate
Less than $10,000	155.1	$1,301	$(652)	$(552)	$(571)	$(956)	$(708)	$(528)
$10,000 - 14,999	109.4	1,371	(492)	(259)	(95)	(516)	(55)	(37)
$15,000 - 19,999	81.1	1,783	(402)	(145)	80	(638)	(17)	109
$20,000 - 29,999	200.1	2,326	(677)	(180)	(60)	(829)	(210)	(32)
$30,000 - 39,999	171.7	2,928	(641)	(147)	160	(671)	(103)	231
$40,000 - 49,999	159.0	3,487	(759)	(99)	139	(863)	(106)	67
$50,000 - 74,999	284.3	3,979	(531)	172	282	(258)	166	282
$75,000 - 99,999	123.9	4,437	(47)	682	353	979	752	497
$100,000 or more	126.7	4,895	1,286	1,878	871	4,653	2,019	983
All Families	1,411.3	3,061	(388)	120	127	26	143	165

Source: Lewin-VHI.

[a]Includes only families headed by a person under age 65.

[b]Includes premiums and direct payments for acute care services only.

[c]Includes changes in premium, out-of-pocket expenses, taxes earmarked to fund health reform, and after-tax changes in wages resulting from employer funding requirements.

Most economists agree that changes in employer health care costs affect employee wages. Based on a review of the literature, our consultant assumed that 88 percent of the cost changes would be eventually passed on to employees through wage adjustments. Thus, firms experiencing cost increases would be expected to correspondingly reduce their employees' wages, or at least reduce the rate of growth in wages. Thus, Table 3.9 shows that the overall cost impact on families is greater after wage effects than before. Since the tax-financed option increases employers' costs the most, its overall impact on families changes from a $388 reduction per family to a $26 increase per family after wage effects. Although not shown in Table 3.9, it would also be expected that the negative wage effects would be the largest under the tax-financed option for employees in small firms, firms not currently provid-

ing insurance, and firms in the finance, retail trade, and service industries. Positive wage effects would be experienced by large employers and employers in the construction, manufacturing, transportation, and wholesale trade industries under the employer mandate and individual mandate options.

SUMMARY

Using Minnesota data supplemented by other data sources, Lewin-VHI has estimated that health spending in Minnesota was $15.8 billion in 1994. Approximately $2.4 billion, or 15 percent of spending, was for administrative costs. About 53 percent of administrative costs were incurred by health care providers. Private and public sector insurers accounted for 45 percent of the administrative expenditures. The remaining 2 percent was spent by employers and government regulators.

Health reform options examined in this chapter appear likely to have fairly modest impacts on overall health care spending. The least costly scenario examined was a single-payer plan with patient cost sharing. This scenario would reduce health spending by 3.4 percent. However, this scenario would require federal permission to include Medicare patients in the plan. A version of this approach which excludes Medicare is estimated to reduce overall spending by $575 million in 1997, or 2.8 percent.

Four other scenarios are expected to increase health spending by 0.4 to 0.6 percent. These options and the expected 1997 cost increase for each option are: 1) a Canadian-style single-payer plan, which includes Medicare ($93 million); 2) an individual mandate with MinnesotaCare-like reforms and an ERISA waiver ($120 million); 3) an employer mandate with MinnesotaCare reforms and an ERISA waiver ($131 million); and 4) an individual mandate with MinnesotaCare reforms but without an ERISA waiver ($177 million).

The most costly option examined was a tax-financed government payer option that retains an insurance industry and health care delivery system as restructured under MinnesotaCare. This option is estimated to increase health spending by $305 million in 1997 primarily due to significantly higher insurer administration costs.

The results make it apparent that there are some trade-offs between the goals of reducing administrative costs and containing overall health spending. The Canadian single-payer option reduces administrative costs the most ($1.3 billion) but is expected to increase health care spending by almost as much as several options that increase administrative costs.

The options examined vary considerably in their needs for additional state taxes to fund them. The additional state taxes range from $0.4 billion to $9.5 billion, plus the cost of expanding MinnesotaCare as currently called for in Minnesota law. Single-payer options would require $5.8 billion to $9.5 billion

in new state taxes, while the individual mandate ($0.4 billion) and employer mandate ($1.2 billion) approaches would require significantly less. However, because the single-payer plans would be financed only by tax revenues, they would not require the premium payments by employers and employees needed to finance the individual mandate ($6.1 billion) and employer mandate ($5.3 billion) options.

Discussion

CHAPTER 4

In Chapter 2, we discussed what national studies have concluded about the effect of a single-payer system on health care administrative costs and overall health care spending. In Chapter 3, we reviewed Lewin-VHI's estimates of the impact of alternative health care reforms on administrative costs and overall spending in Minnesota. This chapter attempts to place those results in perspective. Two key issues are addressed:

- **In general, how much uncertainty surrounds analysts' estimates of changes in administrative costs and total spending under various health care reforms?**

- **What additional issues beyond administrative costs and overall spending need to be considered in a discussion of single-payer reform?**

Our discussion of these issues is largely based on critiques of national studies. A particularly noteworthy critique of analysts' estimates at the national level was recently prepared by the Office of Technology Assessment (OTA) of the United States Congress. Our discussion of the uncertainty involved in estimating national health care costs under various reforms borrows heavily from the OTA report.[1] OTA's conclusions are also relevant for the estimation of health care costs at the state level.

UNCERTAINTY

General Concerns

Those who have made or reviewed estimates of changes in health care spending under reform would generally agree with the following observation from Robert Reischauer, the director of the Congressional Budget Office:

> All the numbers that will be generated for the health reform debate will be highly uncertain and should be treated accordingly. Estimating the impact of policy changes becomes increasingly difficult the further one projects them into the

1 Office of Technology Assessment, Congress of the United States, *Understanding Estimates of National Health Expenditures Under Health Reform* (May 1994).

future, the more radical the policy changes, and the more moving parts there are to interact with one another.[2]

Reischauer also characterized health care reform as a "nightmare" from the analyst's perspective and suggested that estimating the effects of major health care reforms was "probably the most difficult and uncertain estimating challenge possible."[3]

The Office of Technology Assessment, in its review of various analysts' estimates of the effects of health care reform stated that: "In general, the research evidence leaves many questions unanswered." Furthermore, OTA concluded that: "Even when research evidence does exist, it is not always clear how it should be interpreted."[4]

Estimating the impact of reform proposals on spending is very difficult.

The following general problems confront analysts of health reform proposals:

- **Frequently, health care reform proposals do not specify all of the implementation details.**
- **Data needed to make estimates are not available or are less than perfect.**
- **It is very difficult to estimate how people will change their behavior under alternative health care systems.**

We mentioned in Chapter 3 some of the difficulties of estimating the effect of the various reforms planned in Minnesota due to incomplete knowledge about implementation details. Many of the details about benefit levels, patient cost sharing, methods of achieving universal coverage, and financing have not been determined at this point. This problem for analysts also occurs at the national level for various types of reform proposals, including single-payer proposals.

The second problem facing analysts is incomplete or inadequate data.[5] An example of this problem is the unavailability of data on health care administrative costs incurred by employers and consumers. In addition, analysts do not have access to administrative cost data for providers and insurers which are organized by functional categories relevant for policy analysis purposes. For this study, such data are organized by functional categories; however, there are concerns about the data's accuracy, particularly because this is the first time these data have been collected in Minnesota.

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2 Robert D. Reischauer, "Costs of Health Care Reform," *Social Science and Modern Society*, Vol. 32, No. 1 (Nov./Dec. 1994), 67.

3 Reischauer, 67.

4 Office of Technology Assessment, 6.

5 For example, see Gail R. Wilensky, "Inside the Black Box," *Social Science and Modern Society*, Vol. 32, No. 1 (Nov./Dec. 1994), 68-69.

Most analysts would agree that the biggest problem they face is in estimating how people will change their behavior under alternative health care systems.[6] Analysts must estimate how much consumption of health care services by the currently uninsured will change, how the health care industry will respond to different incentives and regulation, and how consumers will respond to changed incentives and health care options. In many reform proposals, government is given new responsibilities and new institutions are created. Reischauer has suggested that the effects of such dramatic change are very difficult to estimate:

> Although we have some grasp of how providers and consumers respond to small changes in incentives in the current environment, it is questionable whether this grasp provides an adequate basis for estimating the responses that should be expected from major shifts in incentives in a radically transformed environment.[7]

Specific Findings

These general comments about the difficulty of estimating health spending under various reforms are useful. However, it is also important to examine the more specific challenges facing analysts. The Office of Technology Assessment's recent report on estimates of national health spending provides more detailed findings about health care cost estimation under reform proposals. OTA reviewed four key areas in which analysts must make assumptions based on data and empirical evidence in order to estimate the financial impact of health care reform proposals. These areas were:

1. the impact of proposed administrative changes,
2. the effects of providing coverage to uninsured people,
3. the impact of encouraging managed competition and health maintenance organization enrollment, and
4. the effects of applying government cost controls.

According to OTA, estimates in these four areas are among the most important factors in analyses of health care spending under alternative reforms.[8]

In each of these areas, OTA concluded that analysts face uncertainty in making estimates. OTA found that the assumptions used by most health care analysts were consistent with available empirical evidence, particularly regarding the general direction of the effect. However, OTA noted that, in many cases, the available evidence could support alternative assumptions about the magnitude of the effect.[9]

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6 For example, see Wilensky, 69, and Reischauer, 67.

7 Reischauer, 67.

8 Office of Technology Assessment, 6.

9 Office of Technology Assessment, 9.

Significant administrative savings can be expected only from single-payer plans.

In the area of proposed administrative changes, OTA concluded that the empirical evidence suggests that:

> analysts are correct in predicting that administrative costs could be reduced under a single-payer system and that relatively small changes in administrative costs would result from reforms to the private insurance market.[10]

However, OTA said quantifying specific administrative cost savings under a single-payer system is difficult. In particular, OTA questioned whether insurer savings would be as much as most analysts have estimated. OTA suggested that administrative functions under a single-payer system might differ from those in Canada or under the U.S.'s Medicare program. The OTA study also expressed concern about the uncertainty involved in estimating changes in administrative costs under insurance market reform proposals. OTA noted that no studies have documented whether buying insurance through purchasing pools lowers the administrative costs passed on by insurers to small employers.[11]

Regarding analysts' estimates of the costs of insuring the currently uninsured, OTA concluded that:

> Empirical evidence, though imperfect, suggests that analyses are correct in assuming that expanding coverage to currently uninsured people would increase national health expenditures.[12]

OTA noted that analysts' estimates of the additional costs are difficult to interpret because they use different baselines and account for current levels of uncompensated care in different ways. However, OTA concluded that estimates from different analysts fall into a relatively narrow range.[13]

Another key area is estimating how much managed competition reforms would reduce health care spending by restructuring the health care market. Typical features of managed competition proposals include standardized benefits, capitated payments to health plans, and possibly a limitation on employer contributions on behalf of employees to the cost of the lowest priced health plan. Managed competition seeks to encourage more active health care shopping by consumers and the expansion of managed care as delivered, for example, by health maintenance organizations (HMOs). Minnesota already has a significant HMO presence but is seeking to develop integrated service networks (ISNs) to further encourage cost control.

According to OTA, analysts typically assume that HMOs have lower premiums than fee-for-service plans and that increased enrollment in HMOs will cause health care spending to decline. OTA concluded that, although there is evidence suggesting that these assumptions are correct, "...the evidence sug-

10 Office of Technology Assessment, 17.

11 Office of Technology Assessment, 17-18.

12 Office of Technology Assessment, 17.

13 Office of Technology Assessment, 17.

gests that it is difficult to develop exact savings estimates."[14] Analysts have made different assumptions about the percentage of people switching to HMOs. Furthermore, their estimates of the premium savings for HMOs compared to fee-for-service plans have varied from 3 to 15 percent.[15]

Although analysts generally agree that managed competition will reduce health care spending, OTA found disagreement about whether managed competition could also lower the future rate of growth in spending. OTA concluded that there is not yet adequate empirical evidence to support a conclusion that HMOs lower the rate of growth in spending compared with fee-for-service plans.

Finally, OTA reviewed analysts' estimates of how proposed government cost controls would affect future health care spending. Through regulation or negotiation, cost controls generally establish limits on expenditures or prices in a sector of the health system. According to OTA, the empirical evidence from the United States and other countries, while imperfect, suggests that cost controls can reduce the rate of spending growth in targeted services. Furthermore: "government controls with more 'teeth' (i.e., that put providers at more financial risk through strictly enforced expenditure caps)" are more effective in controlling costs than "controls with less teeth (i.e., that set fee schedules and 'targets' rather than caps)."[16]

The impact of cost controls is difficult to estimate.

However, there are two problems in estimating the effect of cost controls. First, the empirical evidence is not sufficient for analysts to determine exactly how effective a certain set of cost controls would be. An analyst will typically assign a reform proposal an "effectiveness rating" based on the analyst's judgment about the particular set of cost controls involved. Second, some health care researchers have questioned whether evidence from particular states or countries is valid for the reforms contemplated.[17] They have questioned, for example, whether cost control techniques used in Germany would work in the United States due to differences in political culture.[18]

Regarding Canada's single-payer system, OTA said there has been "surprisingly little analysis of the effect of prospective (hospital) budgeting." The analyses which have been done show Canadian hospital costs increasing slower than those in the United States, but OTA noted that these studies do not control for a variety of variables which affect spending or for other factors such as cultural differences.[19] OTA found that inflation-adjusted physician expenditures per capita grew at about the same rate in Canada as in the United

14 Office of Technology Assessment, 16.

15 Office of Technology Assessment, 16.

16 Office of Technology Assessment, 67.

17 Office of Technology Assessment, 15.

18 For example, see Thomas Rice, "An Evaluation of Alternative Policies for Controlling Health Care Costs," in *Building Blocks for Change: How Health Care Reform Affects Our Future*, Jack A. Meyer and Sharon Silow-Carroll, eds. (1993): 31.

19 Office of Technology Assessment, 56.

States, despite the Canadian use of binding physicians' fee schedules established through negotiation between Canadian provinces and physician associations. Since 1985, however, OTA found that per capita expenditures grew faster in the United States.[20]

Others have argued that overall health care spending has increased much faster in the United States than in Canada. This argument, however, is based on a comparison of trends in health care spending as a percentage of gross domestic product (GDP). Per capita spending trends show that health care spending in the United States has been growing only a little faster than in Canada.[21] The divergence of trends in health care spending as a percentage of GDP has resulted not because of significantly greater cost control in Canada, but rather because of significantly faster overall economic growth in Canada (i.e., greater growth in GDP, which is not the result of health care policies).

Health care spending growth has been high in the U.S., but only slightly higher than in Canada.

Table 4.1 shows that, during the 1960s, inflation-adjusted per capita health care spending grew 6.1 percent per year in Canada compared with 6.0 percent in the United States. Canada's annual real growth rate of 3.7 percent was lower than the U.S.'s (4.2 percent) during the 1970s. However, in the 1980s, the real growth rates were very close—4.3 percent annually for Canada compared with 4.4 percent for the United States.

Table 4.1: Growth of Inflation-Adjusted Per Capita Health Spending, 1960-90

Country	1960-70	1970-80	1980-90
Canada	6.1%	3.7%	4.3%
France	7.8	5.3	3.3
Germany	10.6	4.5	1.5
Italy	8.9	6.2	3.2
Japan	14.0	7.1	3.7
United Kingdom	3.7	4.4	3.1
United States	6.0	4.2	4.4

Source: James M. Poterba, "A Skeptic's View of Global Budget Caps," *Journal of Economic Perspectives*, Vol. 8, No. 3 (Summer 1994): 71.

During the 1980s, the United States had the highest rate of real growth in health spending among the G-7 nations, while Canada was a close second.[22] This trend was not true during previous decades. For example, during the 1970s, Canada had the lowest growth rate, and the United States had the second lowest. During the 1960s, the growth rate in the United States was also the second lowest, while Canada's growth rate was third lowest.

20 Office of Technology Assessment, 63-64.

21 James M. Poterba, "A Skeptic's View of Global Budget Caps," *Journal of Economic Perspectives*, Vol. 8, No. 3 (Summer 1994): 71.

22 The G-7 nations include the United States, Canada, Japan, France, Italy, Germany, and the United Kingdom.

OTHER ISSUES

Most estimates of the effect of health care reform focus on the impact on overall health care spending and, to a lesser extent, on how these financial effects are distributed across people of different income levels or employers of various sizes. Our study is similar in these respects to other studies. However, it is important to recognize that factors other than costs are of significant importance in the policy debate about health care reform. According to the OTA:

> A weakness of models and the way in which their results are sometimes reported may be that they can shift the focus from important policy questions to a discussion of the 'numbers'.[23]

Similarly, Robert Reischauer of the Congressional Budget Office points out that:

> The numbers will be important in the debate, but we should not allow the numbers alone to lead us. They are likely to be uncertain, and a desirable health care system has many non-quantifiable dimensions.[24]

Controlling spending is only one of the goals of health care reform.

According to Reischauer, there are many additional important issues in the health care debate besides the financial impact of reform. Among the issues he cited are access to health care and continuity of insurance coverage, quality and quantity of care received, consumer choice, access to state-of-the-art medical treatments, and the pace of technological advancement.[25] Although controlling health care spending is important to policy makers, other issues are clearly important as well. Policy makers may be willing, for example, to support more expensive health care systems if they deliver better care.

The estimates in Chapter 3 of this report compare health spending across alternative reform proposals. However, we have not made any attempt to measure how the various reforms might affect quality of care, health outcomes, or any other goal of a health care system. Clearly, the reform options may differ in their impact on various goals, although measuring their impact would be extremely difficult and controversial.

We did attempt to standardize the models we examined by comparing only options which included universal insurance coverage. However, even in this area, there may be differences in coverage and access among the various reform options. For example, some individuals may choose to go without coverage under the individual mandate approach due to the additional cost they would incur, while they would choose to be covered under a single-payer plan since they would incur little or no extra costs, depending on the cost sharing arrangements. In addition, there may be differences among the options in terms

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23 Office of Technology Assessment, 12.

24 Reischauer, 67.

25 Reischauer, 67.

of the timeliness of access to treatment and new technology because of the different incentives faced by providers and consumers under the various options.

Spending estimates do not typically factor in certain economic factors.

There is another important reason for not relying too much on the "numbers" from this or other studies. Studies usually include the types of costs which are more easily quantifiable but do not include the economic effects of reforms that are less easily quantified. Some of these economic impacts were mentioned in Chapter 2 when we discussed criticisms of national single-payer studies. Among the potential significant economic effects not usually incorporated in studies are the excess burden of additional taxes, the effect of premium subsidies on incentives to work, and the so-called "hidden costs" of various systems. The hidden costs would include the costs imposed on consumers in the form of additional time and travel commitments or losses in productivity due to waits for care. Hidden costs could also include employer time spent managing health benefits or screening employee applicants for bad health risks and consumer time spent filling out complicated insurance forms and paying health care bills. As pointed out in Chapter 2, some analysts have claimed that these additional hidden costs are significant for single-payer plans and outweigh any cost advantages those plans may appear to have when only accounting measures of costs are included. This area of controversy, however, is not resolved at this point.

Some additional economic factors not included in most studies are the possible effect of additional taxes on taxpayer compliance, the encouragement of early retirement, and possible migration effects. Many health care reforms shift some health care spending which is currently privately financed to the public sector. Single-payer proposals shift significantly more spending to the public sector than other types of reform. As a result, single-payer proposals would likely require significantly higher income or payroll taxes, although they eliminate the employer-financed contributions to employee's health plans. Particularly to the extent that income taxes are used, some would suggest that this could create additional taxpayer compliance problems beyond those currently experienced.

Health reforms that provide publicly-financed coverage to early retirees could also have undesired economic impacts. Such coverage could result in greater numbers of early retirees, since employers would no longer be directly responsible for the costs of health insurance coverage for early retirees.

Finally, most studies do not consider possible movement across state or national borders. Studies providing cost estimates do not generally attempt to quantify how providers and consumers might move in response to various reforms. Of particular interest for state-level reform would be the potential out-migration of physicians as a result of fee regulation or other reforms or in-migration of the uninsured or under-insured as a result of universal coverage.

SUMMARY

In general, there is considerable uncertainty surrounding the estimates of health care spending prepared by analysts evaluating the effects of various health care reforms. That uncertainty results largely from the lack of adequate empirical evidence regarding how the behavior of insurers, providers, consumers, and government agencies will change under significant reform proposals. Incompletely specified reform proposals and inadequate data are additional sources of uncertainty.

The available evidence suggests the direction of major reform impacts. For example, managed competition will probably help to reduce costs by shifting consumers to less costly health plans. However, the evidence is sometimes less than adequate in providing specific cost estimates. As a result, analysts have used a range of estimates in describing the impact of managed competition on health care spending.

Consequently, policy makers should be careful not to rely too much on the cost estimates prepared in this report or elsewhere. Analysts do not agree on the size of some of the key financial effects of reform, and empirical evidence may support more than one point of view. While we are comfortable with the estimates which Lewin-VHI has prepared for alternative reforms in Minnesota, we acknowledge that other analysts may, for legitimate reasons, provide different estimates.

Furthermore, Lewin-VHI's cost estimates for Minnesota, like estimates made at the national level, do not include other factors important for policy decisions. As Robert Reischauer has cautioned: "Remember costs are not everything."[26] Decisions about health care reform will include other factors such as quality of care, access to care, technological development, and consumer choice. In addition, cost estimates typically do not include certain economic costs that some analysts believe are more important than the differences in cost estimates across various reform proposals.

This study was not designed to address all of these issues. In fact, many of these issues have not been resolved by analysts at the national level. This study was intended to provide Minnesota policy makers with estimates of changes in Minnesota health care spending under various reform proposals. The study provides this information, but also cautions policy makers that the "numbers" provided do not address all of the issues which are relevant to a discussion of the relative merits of alternative health care proposals.

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26 Reischauer, 66.

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February 9, 1995

Mr. Roger Brooks
Deputy Legislative Auditor
Office of the Legislative Auditor
Centennial Building
St. Paul, Minnesota 55115

Dear Mr. Brooks:

Thank you for the opportunity to comment on the Legislature's Report, *"Health Care Administrative Costs."* I commend you on the completion of a very difficult study.

I would also like to make two comments that I feel are essential to understanding certain aspects of your report. First, pursuant to the MinnesotaCare Act of 1992, the Minnesota Department of Health has developed a data collection process used to estimate health care spending and trend. Our 1993 baseline data was submitted in the spring of 1994 and we have just completed our analysis. Although the Lewin consultants did use much of the Department of Health's data to establish their estimate of Minnesota health care spending ($15.8 billion for 1994), the Department of Health's estimate is lower ($13.7 billion for 1993).

It is difficult to make a direct comparison between the two estimates. Lewin projects spending for 1994 and we have used 1993 as our baseline. We believe much of the difference between the two numbers lies in their definition of administrative costs and their use of a relatively high estimate of trend from 1993 to 1994. Lewin has provided an all-inclusive definition of administrative costs while we have used a definition related to the administration of personal health care services as developed by the U.S. Health Care Financing Administration, Health Expenditure Accounts. The Lewin estimates serve a particular purpose--to estimate changes in administrative costs under different reform options--and their estimate should be used in this context.

Second, we have expressed concern about using some of the administrative costs breakouts included on the HEP-Revenue and Expense Reports for the physician clinics and commercial carriers. Given that this was the first year of data collection and the categories were new to most respondents, we do not feel that the detailed breakouts are valid. I would caution your audience to focus on the overall results of the study and not on the specific detail related to the distribution of administrative costs.

Thank you for the opportunity to comment on this report.

Sincerely,

Anne M. Barry
Acting Commissioner

Minnesota Health Care Commission

February 13, 1995

John Yunker
Office of the Legislative Auditor
Program Evaluation Division
Centennial Building
St. Paul, MN 55155

Dear John:

Thank you for the opportunity to comment on the January 27, 1995 draft of the report, *Health Care Administrative Costs*, and the January 26, 1995 draft of the Lewin-VHI, Inc. report, *The financial impact of MinnesotaCare under alternative financing models: Administration and benefits costs*. Your office and the consultant have completed a complex, difficult task in a very short amount of time, and I think you should be commended for this effort. I wish to also thank you for your willingness to answer my many calls and to discuss the drafts with me these past two weeks as I had questions or comments. This letter is intended to record the issues we have discussed, and to facilitate further discussion of this important issue. I hope this letter is helpful to your process.

Estimating administrative costs and impacts on health care spending under various scenarios poses several inherent challenges which are documented in your reports. Standard definitions of administrative and other costs are often lacking. Data is often limited to national estimates, or may be nonexistent. There is often little precedent or experience by which to predict future behaviors and outcomes. Models may utilize sophisticated econometrics, but still are often as much an art as a science. Assumptions are crucial to the results of modeling, but may be quite subjective.

It is important that the reader understand the inherent limitations of the analyses being undertaken, and the potential for uncertainty or error in the results. Unfortunately, I did not feel that this information was communicated adequately and early enough in the drafts I reviewed. This might be addressed through two suggestions.

First, the draft executive summary of *Health Care Administrative Costs* does describe some limitations of the study. However, additional limitations, and a caution on how the results should be used, appear much later in the report (Chapter 4). This discussion concludes that there is considerable uncertainty in the estimates of health care spending prepared by the analysts evaluating the effects of various health care reform proposals. It also concludes that policy makers should be cautious in

interpreting and applying the results of the analyses. These are important caveats which should be incorporated earlier in the report, especially in the executive summary, which is most apt to be circulated and read by policy makers.

Second, it would be helpful to have additional information included in the reports about the degree of uncertainty of the estimates. To the extent that statistics can be calculated, it would be helpful to know more about the range, variance, and confidence intervals of the estimates. This would be especially useful in comparing the results of scenarios to know whether the differences which are reported are really significantly different. For example, one version of the Canadian style single payer plan resulted in an overall increase in health care spending of .4%, while a premium-financed option resulted in a net increase of .5% to .6%. While the differences are small, they translate into several millions of dollars and apparently were considered significant enough to report as being different. Were they different, or are they really indistinguishable from each other? Because this information to assess this was not presented in the reports, it was difficult to know.

As mentioned in the reports, the results of the model are very sensitive to the assumptions used. Because the assumptions used in modeling play such an important part in determining the results, they deserve special consideration.

The consultant's design of the MinnesotaCare premium financed scenarios include hypothetical sliding scale premium subsidies to workers and nonworkers below 275% of poverty, and subsidies to employers. This design is radically different than the current design of the MinnesotaCare sliding scale subsidy program now in law, and different than any concept proposed for MinnesotaCare in the future.

The MinnesotaCare sliding scale subsidy program is available only to persons who meet other eligibility criteria for being uninsured at least four months, and without employer sponsored coverage for 18 months. These barriers are intended to encourage continuation of employer based coverage, and to prevent erosion of employer based coverage into MinnesotaCare. Employers are anticipated to continue to administer most health benefits, not the state. Approximately half the state's population have incomes below 275% of the federal poverty guidelines. It has not been, nor as far as I am aware, it is likely to be, the policy of the state to administer subsidies to half the state's population as part of MinnesotaCare.

The consultant, however, assumes a much more significant role of the state in directly administering subsidies than is currently the case, or than is likely to be the case in the future. The result in the model is a significant increase in state administrative costs, which offset savings

from wider use of managed care under MinnesotaCare. While these results may be consistent with the assumptions used, the assumptions themselves do not seem to reflect the design of MinnesotaCare. If the consultant's report is to be entitled *The Financial Impact of MinnesotaCare Under Alternative Financing Models* ..., then it should more accurately reflect the MinnesotaCare program design and operations.

In addition, the consultant makes two key assumptions regarding the market penetration of managed care and administrative costs of managed care under MinnesotaCare which potentially affect the results of the model to a great degree. The consultant's report states that the cost of administering HMO's in Minnesota is 16.5% of benefits costs (i.e., the costs of health services provided). The Minnesota Department of Health (MDH) reports that for 1993 (the most recent year for which data is available), administrative costs of HMO's in the state totalled 10.9% of HMO expenses, or 12.2% of the costs of health care services provided (calculated from page 22, *1993 HMO Operations in Minnesota*). In addition, the State Employee Group Insurance Plan and other large self-insured plans offering managed care options typically have administrative costs lower than even the 10.9% reported by MDH. These data suggest a level of administrative costs that may be at least 25% lower than used by the consultant. The consultant also cites administrative costs for HMOs as higher than for indemnity plans, and the basis for this assumption remains unclear, especially given the loss ratios reported for some indemnity plans.

The consultant calculated that market penetration by managed care in the state would reach 66% by 1997. The Minnesota Department of Health has recently estimated the indemnity share of the market under RAPO to be approximately 10% in 1997. If the MDH assumption about RAPO is correct, then the penetration by managed care in the state in 1997 might be expected to approach 90% of the market, or approximately a third more than the level predicted by the consultant.

The consultant's health care cost estimates include long term care costs. The impact of including these costs in a model that explores changes in the acute care system is unclear. The consultant apparently projects administrative cost savings based on assumptions that administrative loads on the smallest groups are approximately 40%. In Minnesota, minimum loss ratios have been imposed that prevent such high administrative loads. The consultant uses a different methodology of calculating total health care expenses than is used by MDH, relying apparently on national level data to a greater degree than the state specific data collected by MDH. The consultant's projections also do not take into account the potential impact of the growth limits currently in law.

While both reports are lengthy and seem generally well documented, critical information is often lacking which would better explain the results of the consultant's model. The descriptions of predicted changes in utilization and administrative costs under the various scenarios in particular might benefit from additional detail. There is also no detailed and clear account of how the estimates of state government administrative costs under the MinnesotaCare versions of the model were generated. Without such information, it is very difficult to understand the basis for the consultant's conclusion that the significant costs savings achievable with MinnesotaCare are largely offset by increased state government oversight and administration.

Again, I wish to commend your office and the consultant for undertaking this complex and difficult assignment in a very short timeframe. I feel that some of the assumptions of the consultant could be modified to reflect more accurately the MinnesotaCare program and the environment in which health care reform is being undertaken, and that additional information regarding the consultant's model, data, assumptions, and results would be helpful. However, I recognize that these changes are beyond the scope of the current study. The reports provide a useful framework to consider the topic, and will no doubt contribute to wider discussion of these important issues. Thank you again for the opportunity to discuss the reports. I look forward to receiving a copy of the final versions in the near future.

Sincerely,

David K Haugen

David K. Haugen
Acting Director, Minnesota Health Care Commission

cc: Roger Brooks, Deputy Legislative Auditor
Tom Swain, Chair, Minnesota Health Care Commission

Auditor Comments on Agency Responses

Comments on Department of Health Response

We agree that it is somewhat difficult to make a direct comparison between the health spending estimates prepared by Lewin-VHI and the Department of Health. This difficulty results because the department's estimate ($13.857 billion) is for 1993, and Lewin-VHI's estimate ($15.771 billion) is for 1994. In addition, comparisons are difficult because the department has not yet prepared a complete breakdown of spending by type of service.

The largest source of the $1.9 billion difference is the growth in health care spending between 1993 and 1994, which probably explains at least $1.1 to $1.2 billion. Lewin-VHI's use of a higher growth rate than that suggested by the department explains no more than about $0.2 billion. The remaining differences may be explained in part, as the department suggests, by Lewin-VHI's more inclusive definitions of administrative costs. A more complete comparison of the estimates cannot be done until the department finishes work on its estimate.

Comments on the MHCC Response

1. We agree with the acting director of the Minnesota Health Care Commission (MHCC) that there are important limitations to studies which estimate health care spending under reform proposals. This is why we devoted a page of the executive summary and an entire chapter to this subject.

2. The MHCC response asks for additional information on the degree of uncertainty of the estimates. It is not possible to present any information about the variance of the estimates or to calculate confidence intervals for the estimates, unless one knows the probability distribution of the variables used in the model. It would be "false precision" to suggest that an analyst knows the probability distribution of the various assumptions used in the model.

   We do, however, characterize the variations in estimated health spending across reform options as being rather modest differences. In addition, we suggest that estimated spending for four of the reform scenarios is roughly the same--i.e., those models which increase spending by an estimated 0.4 to 0.8%.

3. The MHCC response comments that the MinnesotaCare scenarios examined by Lewin-VHI are "radically different from the current design of the Minnesota-

Care ... program now in law" and "different than any concept proposed for MinnesotaCare in the future." We do not believe that this is a fair and accurate statement. Our consultant was asked to compare the impacts of various reform options. To make a fair comparison, the consultant assumed that all the options, including those with MinnesotaCare-like reforms, implemented universal health insurance coverage. It would have been unfair to compare premium-financed reforms that did not implement universal coverage with single-payer plans that did. In particular, it would have been unfair to compare the cost of the current MinnesotaCare program to various single-payer plans, since there are significant eligibility barriers for the current program. Furthermore, the inpatient hospital benefit for MinnesotaCare enrollees is limited to $10,000. It was also reasonable to model various MinnesotaCare scenarios with universal coverage, since current law expresses a goal of universal coverage, provided that adequate funding is identified.

4. The MHCC response also suggests that levels of administrative costs may already be at least 25 percent lower than Lewin-VHI estimated. This conclusion was based on comparing the administrative load of 16.5 percent estimated by Lewin-VHI for health maintenance organizations (HMOs) to either a 10.9 percent or 12.2 percent figure from a recent Department of Health report.

   This is a misleading comparison. The 16.5 percent figure includes taxes and assessments paid by HMOs, while the other figures do not include these costs. When taxes and assessments are excluded, HMO administrative costs as a percentage of health care services are 13.0 percent. This figure is very close to the 12.2 percent figure cited in the MHCC response. The remaining difference is that Lewin-VHI's figure is based on non-public data submitted by HMOs, while the 12.2 percent figure is based on public data submitted by HMOs. Slightly higher levels of administrative expenditures were reported in the survey used by Lewin-VHI.

5. The MHCC response also suggests integrated service networks (ISNs) under MinnesotaCare's restructured delivery system might achieve a market share of 90 percent. Thus, managed care savings under MinnesotaCare-like reforms could be greater than those estimated by Lewin-VHI.

   Our report clearly acknowledges the difficulty of estimating managed care savings. It is particularly difficult to estimate the future market share for ISNs. However, a 90 percent market share is probably an upper bound that would not likely be achieved in the short run. Lewin-VHI has chosen to base its estimates on a more modest assumption--namely, a 66 percent market share. We agree that managed care savings could be larger than estimated if ISNs eventually exceed a 66 percent market share or if ISNs are able to alter medical practices more than established HMOs.

6. The MHCC response also requests more detailed information on the state government administrative costs estimated for scenarios involving MinnesotaCare-like reforms. That information has been added to the consultant's report.

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