REPORT OF THE SPECIAL SENATE SUBCOMMITTEE ON HEALTH COSTS

Senate Health, Welfare and Corrections Committee

MINNESOTA STATE SENATE

December 1974

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March 5, 1975

This report addresses the serious problem of increasing health costs in Minnesota. The alarming increases in health costs in recent months combined with their inevitable affect on every Minnesotan were responsible for the creation of the Special Senate Subcommittee on Health Costs. The Subcommittee unique in itself, having both Senate and public members, over a period of nine months conducted hearings and compiled extensive information from questionnaires, on-site visits, and staff investigations. The findings and recommendations of this work are the subject of this report.

During the course of the Subcommittee's work some abuses were discovered and there are several areas where definite improvements can be made to provide quality health care at a reduced cost. However, it can be said on the average that health care in the State is of high quality, delivered by competent, well-qualified professionals. Minnesota is in addition fortunate in having medical centers of the stature of the Mayo Clinic and the University of Minnesota. There remains, however, major problems in many rural areas of the State where health care, because of availability and costs, is nearly unobtainable.

The work of the Health Costs Subcommittee represents the first coordinated attempt to investigate health costs in this state, and it is the Subcommittee's belief that the effort has provided a sound basis for the recommendations contained in the report as well as for future monitoring of health care problems.

The approximate cost of this report is $3500. This includes legislators' and public members' per diems, travel expenses, postage and printing costs. Staff salaries for two individuals were paid by the Robert Wood Johnson Foundation through the Citizens Conference on State Legislatures.

George R. Conzemius

GEORGE R. CONZEMIUS
State Senator

Chairman, Special Senate Health
Costs Subcommittee

ACKNOWLEDGEMENTS

The subcommittee expresses its gratitude to all of those people who have provided the subcommittee with help and assistance in its hearing and in the preparation of its report. Special thanks are expressed to all those individuals who took the time and effort to prepare presentations to the subcommittee, and especially to InterStudy in Minneapolis which provided several very helpful speakers. The State Auditor's office was very generous in making available the very valuable assistance of Dwight A. Smith in the area of hospital auditing. The staff support made available through the Model Committee Staff Program (sponsored by the Citizens Conference on State Legislatures and the Robert Wood Johnson Foundation) was very valuable to the subcommittee.

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TABLE OF CONTENTS

OTHER DATA (continued)

List of Tables, Charts, Maps, and Other Data (continued)

CHARTS

MAPS

OTHER DATA

LIST OF TABLES

PART ONE: INTRODUCTION

I. THE PURPOSE OF THE SUBCOMMITTEE

The questions of health care costs, quality, and availability have been the subject of increasing public and legislative concern in recent years. Minnesota is fortunate to have a good health care delivery system. However, for many Minnesotans, obtaining adequate health care remains as a problem which requires attention. There are many reasons for this. Health care technology has made major strides in recent decades, but much remains to be done. The distribution of health manpower remains as a serious barrier to making health care available to many people in Minnesota. For many people, the problem is primarily one of the high cost of health care. The latter problem affects all segments of society. It is especially acute for the aged, the working poor and the uninsured, but even those with access to health insurance and government health programs are affected by it.

Because of the great importance of the problems of health care costs and because of the widespread public concern about

rising costs, the Senate Health, Welfare and Corrections Committee decided to establish a special Senate subcommittee to undertake a study of health care costs. The membership of the subcommittee included five senators and five public members. The public members were appointed to the subcommittee to provide a representation of diverse public interests and public concerns.

Because of the pervasive nature of the problem of high health care costs, the subcommittee chose to focus its attention almost exclusively on that problem. This is not to say that the other health care problems are not important, or that they should not be dealt with. They do deserve attention, but the time constraints facing the subcommittee forced it to concentrate on its priority concern - health care costs.

This subcommittee, therefore, set two goals for its work. The first was to obtain and analyze data relating to health care costs. The second was to become acquainted with and analyze possible ways for reducing costs as a barrier to adequate health care. It was to these ends that the subcommittee devoted its nine months of hearings and meetings.

II: PROCEDURES USED BY THE SUBCOMMITTEE

The subcommittee selected several components of the health industry on which to focus its primary attention. The subcommittee held hearings on each of the areas which it had selected to examine. At these hearings, the subcomitteee heard speakers discussing the health cost segment under consideration, analyzing its effect on overall health care costs, and suggesting possible ways to lower costs or reduce the rate

of inflation.[1] The subcommittee also considered background material on the various components of health care costs which was submitted to it by its staff and other individuals. In the hospital cost area, the subcommittee also relied on questionnaires and site visits to increase its knowledge and understanding of particular problems. (Since hospitals constitute the largest portion of health care costs and since hospital costs are rising and have been rising at a very rapid rate, the subcommittee devoted more attention to the area of hospital costs than it did to costs in some other segments of the health care industry.)

III. OVERVIEW OF HEALTH CARE COSTS

It is not the purpose of this report to set forth voluminous statistics on health care costs. This information is available in the subcommittee files and in many other studies and reports which have been published. The primary purpose of this report is to analyze the causes for the high costs of health care in the State and to examine possible legislative action which can be taken to counteract the high cost of health care.

However, a brief overview of the nature and scope of the problem will provide a framework in the reading of this report.

A. INFLATION OF HEALTH CARE COSTS

With the exception of a brief period during the economic stabilization program, inflation of health care costs has generally exceeded the overall national rate of inflation since 1960:

COMPARATIVE INFLATION RATES

Period	All Items CPI	Physicians' Fees	Semi-Private Hospital Room Charges
Pre-Medicare and Medicare			
1960-65	1.3%	2.8%	5.8%
Post Medicare and Medicaid			
1966	2.9%	5.8%	10.0%
1967	2.9	7.1	19.8
1968	4.2	5.6	13.6
1969	5.4	6.9	13.4
1970	5.9	7.5	12.9
1971	4.3	6.9	12.2
Economic Stabilization			
1972	3.3%	3.1%	6.6%
1973	6.2	3.3	4.7
1974 (Jan. thru May, annualized) . .	12.6	12.6	10.1
1974 (Mar. thru May, annualized)	11.8	16.8	9.1
Post-Economic Stabilization			
1974 (May-annualized)*	10.7%	13.0%	19.1%
1974 (June-annualized)*	11.1	11.0	17.7
1974 (July-annualized)*	11.8	9.7	14.5
1974 (Aug.-annualized)	16.5	16.9	31.7
1974 (Sept.-annualized)	14.5	13.2	14.2
1974 (Oct.-annualized	N.A.	N.A.	16.2

(Source: Consumer Price Index, Bureau of Labor Statistics
*Computed from Bureau of Labor Statistics figures.)
N.A. - Not Available

The cost of medical care in the United States almost tripled between 1947 and 1972. One of the largest areas of increase was hospital room rates which increased sevenfold:

CONSUMER PRICE INDICES FOR SELECTED HEALTH CARE ITEMS

In the United States (1967=100.0)

Year	All Items	All Medical Care Items	Physicians' Fees	Dentists' Fees	Optometric Examination and eyeglasses	Semi-Private Hospital Room rates	Prescriptions and Drugs
1947	53.9	48.1	51.4	56.9	67.7	23.1	81.8
1950	72.1	53.7	55.2	63.9	73.5	30.3	88.5
1955	80.2	64.8	65.4	73.0	77.0	42.3	94.7
1960	88.7	79.1	77.0	82.1	85.1	57.3	104.5
1961	89.6	81.4	79.0	82.5	87.8	61.1	103.3
1962	90.6	83.5	81.3	84.7	89.2	65.3	101.7
1963	91.7	85.6	83.1	87.1	89.7	68.6	100.8
1964	92.9	87.3	85.2	89.4	90.9	71.9	100.5
1965	94.5	89.5	88.3	92.2	92.8	75.9	100.2
1966	92.7	93.4	93.4	95.2	95.3	83.5	100.5
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	105.1	105.6	105.5	103.2	113.6	100.2
1969	109.8	113.4	112.9	112.9	107.6	128.8	101.3
1970	116.3	120.6	121.4	119.4	113.5	145.4	103.6
1971	121.3	128.4	129.8	127.0	120.3	163.1	105.4
1972	125.3	132.5	133.8	132.3	124.9	173.9	105.6
% Increase							
	151%	175%	160%	133%	84.5%	653%	29%

(Source: Consumer Price Index, Bureau of Labor Statistics.)

There was a slower rate of increase during the Economic Stabilization Program. At the time the special subcommittee on health care costs was formed, it was know that price controls were going to be lifted. The Cost of Living Council predicted that the lifting of controls would result in increased inflation in health care costs as follows:

* Hospital charges would rise by 16-17% per year as opposed to 10-11% with controls.
* Physician fees would rise by 9% per year as opposed to 4% with controls.
* Nursing home charges would rise by 14% per year as opposed to 6.5% with controls.
* Overall costs for health care would rise by $4 billion in fiscal year 1975
* Consumer out-of-pocket costs would rise $1 billion in 1975 and another $2.25 billion in 1976.
* Insurance premiums would rise $1.5 billion in 1975 and another $3.4 billion in 1976.
* State government spending for health would rise $500 million in 1975 and another $1.1 billion in 1976.

Figures cited earlier show that the Cost of Living Council projections were somewhat conservative for some months. Some of the rapid increase since April 30, 1974, when the price controls were lifted, is due to the fact that the health care industry was kept under controls longer than most other segments of the economy. During the latter part of the wage price freeze, hospital and physician costs such

as supplies and salaries were not frozen and were rising. During this period hospital and physician charges were still controlled. This allegedly caused some financial problems for hospitals. It resulted in a tendency on the part of many hospitals and physicians to seek to "catch up" with the rest of the economy after controls were lifted. The decline in the rate of increase in hospital charges in September may indicate that the "catch up" period is ending and that there may be a leveling off of the rate of increase.[3] The annualized rate of increase for October, however, was up again for hospitals.

The magnitude of the increased health care costs is presented graphically in Tables 1-3 taken from the National Health Insurance Resource Book prepared by the staff of the Committee on Ways and Means of the United States House of Representatives.

Recently released figures for fiscal year 1974 show a 10.6% increase over fiscal year 1973 in health care expenditures nationally to a total of $104.2 billion. This amounted to $485 per capita. Total expenditures are a result of prices for health care services, the quantity of services, and the mix of services. Despite the increase in prices, the percentage of Gross National Product being spent for health care services remained at 7.7 percent. The government share of the total expenditures increased form 38.0% to 39.6%. The changes from fiscal year 1973 to fiscal year 1974 were:

TOTAL HEALTH CARE EXPENDITURES IN THE UNITED STATES

	Fiscal Year 1973		Fiscal Year 1974		
	Amount*	Percent of total	Amount*	Percent of Total	% Increase 1973-1974
Total	94,235	100.0	104,239	100.0	10.6
Hospitals	36,174	38.4	40,900	39.2	13.1
Physicians	17,518	18.6	19,000	18.2	8.5
Dentists	5,767	6.1	6,200	5.9	7.5
Other Professionals	1,803	1.9	1,990	1.9	10.4
Drugs	8,942	9.5	9,695	9.3	8.4
Eyeglasses & Appliances	1,985	2.1	2,153	2.1	8.5
Nursing Homes	6,650	7.1	7,450	7.1	12.1
Expenses of Insurors/HMOs	3,753	4.0	4,224	4.1	12.5
Gov't public health prgms.	1,685	1.8	2,126	2.0	26.2
Research	2,285	2.4	2,684	2.6	17.5
Construction	4,145	4.4	4,372	4.2	5.5
Other	3,528	3.7	3,445	3.3	(2.4)

* In millions

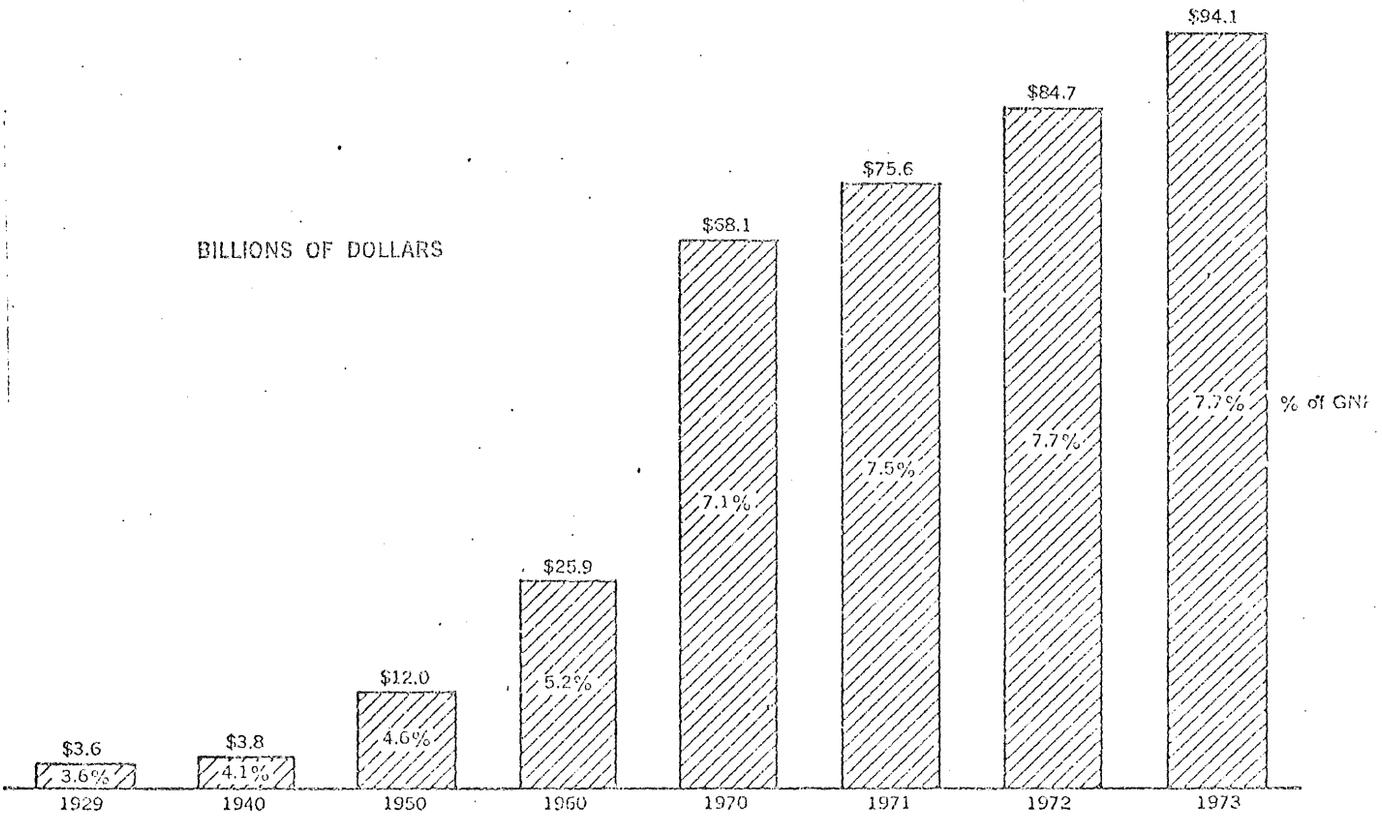
Source: "National Health Expenditures, Fiscal Year 1974", Research and Statistics, United States Department of Health, Education and Welfare, November 29, 1974.

TABLE I

—Health spending today—$91.1 billion—is eight times the spending of 20 years ago

The past few years have witnessed sharp increases in the amounts spent for medical care. In fiscal 1973, this Nation spent $94.1 billion for health and medical care—3½ times the amount spent in 1960 and almost eight times the amount spent in 1950. Growth in medical care spending has outdistanced that of the economy in general. In fiscal year 1950, medical care expenditures totaled $12.0 billion and represented 4.6 percent of the gross national product (the total market value of the Nation's annual output of goods and services). By fiscal 1960 their share of the gross national product (GNP) had reached 5.2 percent. The rate in 1970 was 7.1 percent, and last year it moved up to 7.7 percent.

Part of the increasing share of GNP attributable to health is due to the higher prices for medical care compared with other items. There has also been an increased demand for health services resulting from population growth generally, rising per capita incomes, and growth of private health insurance and prepayment plans. Additional contributing factors include a rising proportion of elderly in the population, higher educational levels, a shift from acute illnesses to more expensive long-term illnesses, introduction of new medical techniques and procedures to treat conditions that formerly could not be treated at all, and, finally, the growing awareness of the benefits of medical care.



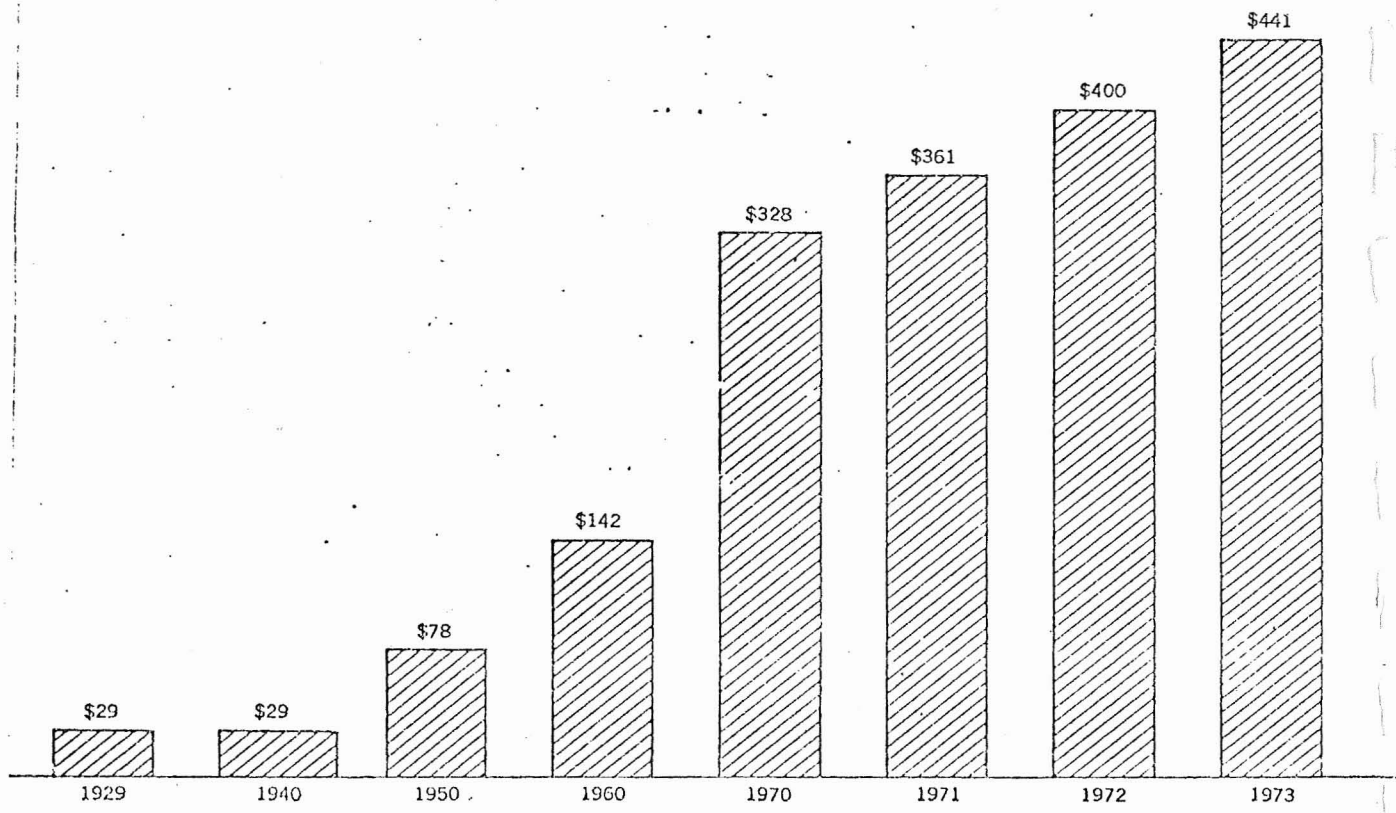
Source: Cooper, Barbara S., Worthington, Nancy L., and Piro, Paula A. "National Health Expenditures, 1929-73" *Social Security Bulletin*, February 1974, U.S. Department of Health, Education, and Welfare.

TABLE 2.

In the past 24 years, each person's average bill has grown from $78 to $441

In fiscal 1973, the average health bill for each American was $441. In 1960, the average health bill was about a third that amount—$142—and in 1950, it was less than one-fifth the 1973 amount. This growth, from $78 in 1950 to $441 in 1973, represents a 465-percent increase over the 23-year period—2½ times as great as the increase in wage levels (average hourly earnings in manufacturing industries).

Included in the total personal health bill are payments for health care services under government programs, private health insurance payments, voluntary health giving, and direct payments for health care by individuals.



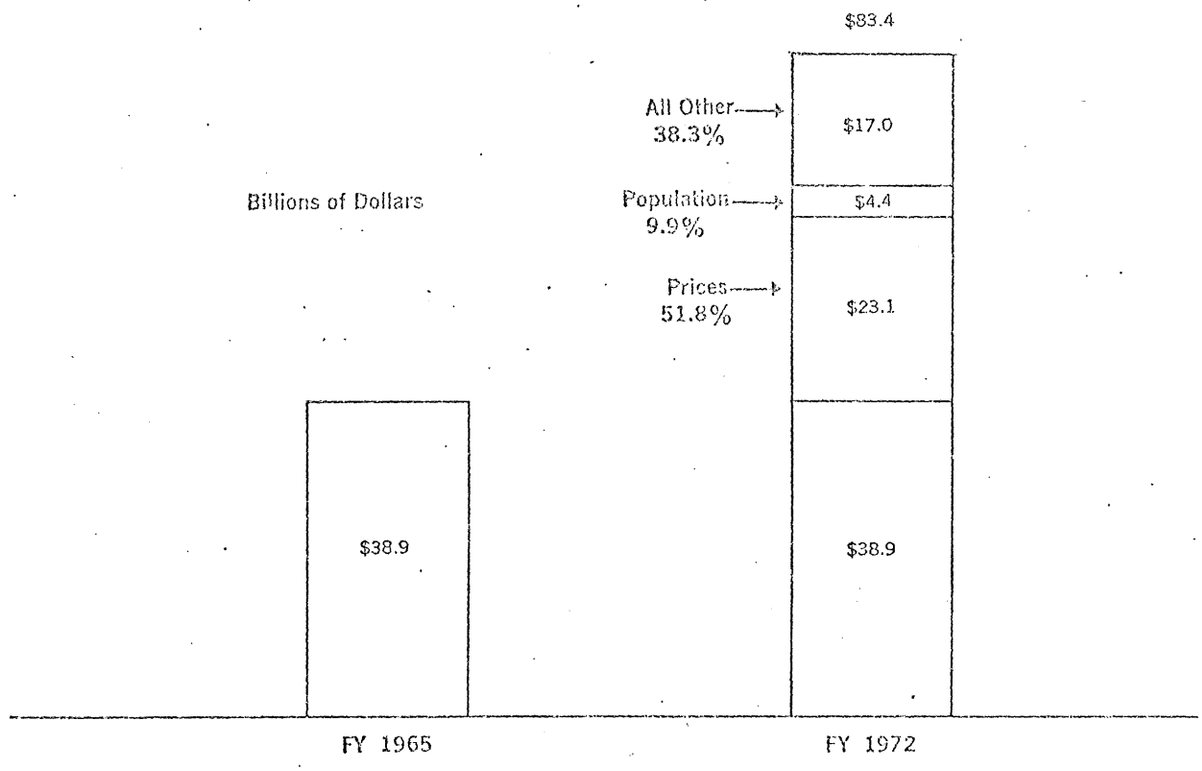
Source: Cooper, Barbara S., Worthington, Nancy L., and Piro, Paula A. "National Health Expenditures, 1929-73." *Social Security Bulletin*, February 1974, U.S. Department of Health, Education, and Welfare.

TABLE 3

—Higher prices caused nearly half the 20-year growth in personal health care expenditures

During the period 1965–72, personal health care expenditures (those for the direct benefit of the individual, e.g., hospital care, physicians' services) rose by $45.8 billion. The spiraling increases in such expenditures during that period resulted from three major factors:

- About 52 percent, or $23.1 billion, can be attributed to price increases.
- Another 10 percent, or $4.4 billion, results from population growth.
- The remaining 38 percent, or $17.0 billion, is due to increased use of services and the introduction of new medical techniques.



Source: *Medical Care Expenditures, Prices, and Costs: Background Book*, Department of Health, Education, and Welfare, Social Security Administration, Office of Research and Statistics, September 1973.

B. DISTRIBUTION OF HEALTH CARE COSTS

In addition to the high level of health care costs, their distribution points out many inequities. Health care costs are paid by a variety of sources. The source of funding has shifted significantly in recent years. Government and insurance payments constitute a much larger proportion than they did in 1966:

SOURCES OF PAYMENT FOR HEALTH CARE COSTS

	Fiscal Year 1966	Fiscal Year 1972
Patient Outlays	51%	35%
Private Health Insurance	25%	26%
Government	22%	37%
Others	2%	2%

(Source: "The Size and Shape of Medical Care Dollar", U.S. Department of Health, Education and Welfare, 1972, p.21.)

For the various health care provider recipients of the health care dollar, the source of payment varies considerably:

SOURCE OF PAYMENT BY SERVICE

	Hospital Care	Physician's Services	Other Health Services
Patient	8%	41%	68%
Government	53%	23%	25%
Private Health Insurance	38%	36%	5%
Others	1%	--	2%

(Source: "The Size and Shape of the Medical Care Dollar", U. S. Department of Health, Education and Welfare, 1972, p. 23.)

Expenditures for health care and the need for health care vary dramatically according to age, income level and race. Senior citizens have far higher health care expenses than the younger segments of the population:

ANNUAL HEALTH CARE COSTS BY AGE GROUP

	Hospital Care	Physician's Services	Other Health Services	Total
Under 19	$ 46	$ 46	$ 56	$148
19-64 years	$169	$ 80	$110	$359
65 years & over	$484	$177	$321	$982

(Source: "The Size and Shape of the Medical Care Dollar", U. S. Department of Health, Education and Welfare, 1972, p. 19.)

People with low incomes suffer a higher incidence of acute and chronic or disabling conditions than people with higher incomes:

DISABILITY DAYS BY FAMILY INCOME AND TYPE OF DISABILITY

In the United States, 1971

Type of Disability	Under $3,000	$3,000 $4,999	$5,000 $6,999	$7,000 $9,999	$10,000 $14,999	$15,000 and over
Restricted Activity						
Days *	665	439	414	479	573	402
Days/ person per year	33.7	20.7	15.3	12.8	11.8	11.3
Bed Disability						
Days*	249	178	155	186	226	160
Days/person per year	12.6	8.4	5.7	5.0	4.6	4.5
Work-Loss Days						
Days*	41	42	57	74	93	65
Days/person per year	9.4	6.6	5.7	5.0	4.5	4.0

*000,000 omitted

Note: The data refer to disability because of acute and/or chronic conditions. The category "All incomes" includes unknown income. The category "Work-loss days" applies to currently employed persons.

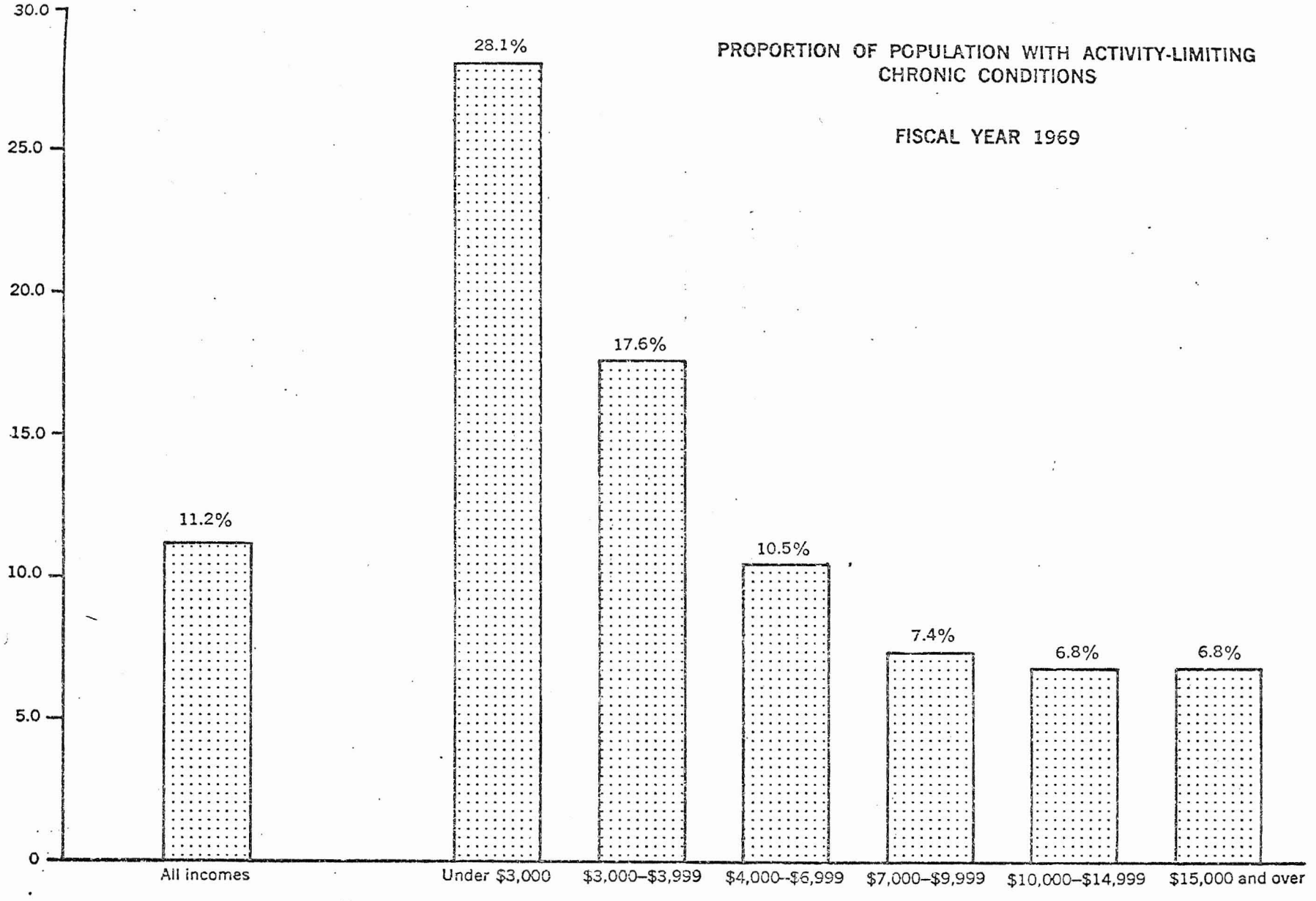
(Source: National Health Survey, U.S. Department of Health, Education and Welfare, 1972.)

See also Table 4

TABLE 4

PROPORTION OF POPULATION WITH ACTIVITY-LIMITING CHRONIC CONDITIONS

FISCAL YEAR 1969



Source: *Age Patterns in Medical Care, Illness, and Disability, United States, 1968–1969*. Vital and Health Statistics, Series 10, No. 70, National Center for Health Statistics, U.S. Department of Health, Education, and Welfare, April 1972.

The difference in the incidence of disabling conditions requiring medical care also varies according to the race of the person involved. Non-whites have a higher incidence than whites.[4] These figures indicate a higher demand for health care services by poor and minority people.

The actual out-of-pocket expenditures for health care do not reflect the same distribution based on age, income level, and race as those found in the information setting forth total costs or incidences of acute disease.

1970 PERSONAL OUT-OF-POCKET EXPENSES FOR HEALTH CARE*

U. S. Average - $183

Age	
Under 17	$105
17-44 years	177
45-64 years	272
65 and over	299

Region	
Northeast	$183
North Central	168
South	182
West	212

Race	
White	$190
Non-White	133

Income Level	
Less than $3,000	$156
$3,000-$4,999	173
$5,000-$6,999	164
$7,000-$9,999	163
$10,000-$14,999	188
$15,000 or more	254

*Includes insurance premiums

(Source: Monthly Vital Statistics Report, U. S. Department of Health, Education and Welfare, April 1973.)

The difference in the figures for out-of-pocket expenditures, as compared to total expenditures, is a reflection of different levels of utilization of health care services and different coverage by third party reimbursement mechanisms. For instance, although senior citizens have more than triple the average amount of health care expenses, their out-of-pocket

expenditures are less than 50% above the average because of the existence of Medicare and other third party reimbursement mechanisms. A comparison of sources of payment by age group shows:

SOURCES OF PAYMENT BY AGE GROUP

	Health Care Expenses	Out-of-Pocket	Insurance	Government	Other
Under 65					
1966	$155	50.9%	27.1%	19.3%	2.5%
1972	$272	37.5%	34.2%	26.5%	1.8%
65 and Over					
1966	$441	53.1%	15.9%	29.9%	1.1%
1972	$981	28.1%	5.7%	65.6%	.5%

(Source: "Age Differences in Medical Spending, Fiscal year 1972", published by U.S. Department of Health, Education and Welfare, 1973. p.15)

As previously stated, this report was not designed to present a comprehensive detailed picture of health care costs. Nor was it possible to obtain a separate set of statistics on the specific situation in Minnesota for many of the areas discussed. Specific cost figures for Minnesota are given in later sections of this report to the extent that they are available. The figures do document the basic parameters of health care costs.

FOOTNOTES

[1]See Appendix A for a list of speakers.

[2]Letter from John T. Dunlop, Director of the Cost of Living Council, to Rep. Wright Patman, March 22, 1974.

[3]See, e.g., National Health Insurance Reports, November 4, 1974, p.4.

[4]"Age Patterns in Medical Care, Illness and Disability", United States Department of Health, Education and Welfare, April, 1972.

PART TWO: NATIONAL HEALTH INSURANCE

For many years, national health insurance has been suggested as a possible method for reducing financial barriers to health care for all citizens of the United States. Various forms of national health insurance are already law in many nations, especially those in Europe.

The Subcommittee heard explanations of four proposals for national health insurance at its hearing. Dr. George Martin outlined Medicredit, the American Medical Associaton proposal. Dr. Richard Hall of the United States Department of Health, Education and Welfare discussed the Nixon Administration proposal. The National Health Security Act was presented by Dr. Charles Mayo II, and the Health Insurance Association plan was explained by Mr. Gordon Williams.

There are currently more than a dozen different national health insurance proposals pending before the United States Congress. They represent the views of various interest groups and political philosophies. They can be roughly categorized into four types.

1. National Health Security: Under this approach, the government would pay all covered health care expenses. There would be no co-payments or deductibles. It would be funded by payroll taxes and administered by a separate governmental agency. (See, e.g., the Kennedy-Griffiths bill, S.3/H.R.22.)

2. Government Insurance Program: Under this approach, all covered health care expenses would be paid through a government insurance program. There would be some

co-payments and deductibles. The program would be funded by payroll taxes and administered by the Social Security Administration through private insurance carriers. (See, e.g., the Kennedy-Mills bill, S.3286/H.R. 13870.)

3. Private Insurance Mechanism: Most proposals utilize some variation of this approach. Under these proposals, the government would subsidize private health insurance premiums for the poor. The non-poor would either receive mandatory health insurance coverage through their employment or would be encouraged to purchase it by the use of tax credits for premiums. Most administration of the program would be done through health insurance carriers. Examples of these proposals include: "Medicredit", the American Medical Association proposal, S.444/H.R.2222; the Nixon Administration Proposal, (CHIP) S.2970/H.R.12684; and the Health Insurance Associaton proposal, S.110/ H.R.5200.

4. Catastrophic Health Insurance: Under this approach the government would provide increased health care coverage for the poor. Other people would receive Federal coverage once their health care expenses reach a specified level. (See, e.g., the Long-Ribicoff bill, S.2513/H.R.14079.)

The possibility of enactment of a national health insurance bill by Congress has been the subject of considerable speculation. Since many political leaders, health care provider groups and public groups support the enactment of some

form of national health insurance, there was considerable speculation that a bill would be enacted in 1974. The House Ways and Means Committee held hearings on the subject beginning in April and continuing for many months. Yet, nothing happened; there is no consensus as to the best form of national health insurance.

The current proposals would have varying effects on health care costs in Minnesota. Since most of them primarily deal with financing, the major effect would be on the method of paying health care expenses, and the effects on total cost would be secondary. Most proposals would reduce direct out-of-pocket payments by consumers and several would reduce state expenditures for programs such as Medicaid. These costs would be covered by revenue raised from other sources - usually income or payroll taxes.

A recent study indicated that the enactment of national health insurance would increase the demand and expenditure level for health care services as follows:

INCREASED DEMAND AND EXPENDITURES
UNDER
NATIONAL HEALTH INSURANCE

	Increase in Demand	Increase in Expenditure
Full Ambulatory Physician Coverage	75%)	
Full Hospital Coverage	5-15%)	$8-$16 billion
Ambulatory Physician Coverage with 25% Co-insurance	30%)	
Hospital Coverage with 25% Co-insurance	5%)	$3-$7 billion

(Source: Policy Options and the Impact of National Insurance, Rand Study, June 1974.)

Inclusion of dental and drug coverage with hospital ambulatory coverage would result in a total increase in expenditures by $20-$30 billion under a full coverage plan and by $10-$20 billion under a 25% co-insurance plan.

PART THREE: HOSPITAL COSTS

I. OVERVIEW OF HOSPITAL COSTS

> The rise in hospital costs is a major reason for the growing public concern about a "health care crisis" in the United States. There are at least two basic causes for this concern: (1) Hospital costs . . . are rising rapidly-much more rapidly than costs for most other goods and services; and (2) Visibility of this cost rise is becoming greater.
>
> Ronald Andersen and J. Joel May, Annals of the American Academy of Political and Social Science, January, 1972. Page 63.

A. THE HEARINGS

Hospital costs are the largest single component and one of the most rapidly increasing segments of health care costs. In addition, the institutional nature of hospitals makes them more susceptible to government regulations and controls than other parts of the health care delivery system. Primarily for these reasons, the Subcommittee devoted more of its attention to hospital costs than to some other cost segments.

The Subcommittee sought to achieve a balance in the testimony at its two hearings on hospital costs. It heard three spokesmen from the industry itself. They were Mr. Stephen Rogness, Executive Director of the Minnesota Hospital Association; Mr. Arne Moe, Administrator of Buffalo Memorial Hospital; and Mr. William N. Wallace, President of United Hospitals, St. Paul. Mr. Rogness supplied the Subcommittee with his asociation's perspective. Mr. Moe provided members

with an overview of the question of hospital costs from the perspective of an administrator of a small hospital outside the seven county metropolitan area. Mr. Wallace provided the perspective of a large metropolitan hospital. Hospital regulation was presented from several different perspectives. The argument against sole reliance on government regulation, without accompanying structural reforms of the health care industry, was presented by Dr. Walter McClure of InterStudy. Mr. Frank Baker explained the structure and operation of the new Washington State Hospital Commission which he heads. Minnesota's experience with the wage price controls for hospitals under the economic stabilization program was outlined by Mr. Charles House, CPA. Potential incentive reimbursement programs were outlined by Dr. Max Bennett, InterStudy. Additional perspectives were presented by Mr. Robert Nichols of the Oklahoma Consumer Protection Acency, speaking as a critic of hospitals, and by Dr. Chester Anderson, who represented the Minnesota State Medical Association. In addition, the Subcommittee considered material submitted to it by the speakers, material presented to it by its staff, hospital cost questionnaires, and hospital site visits in reaching its conclusions.

B. MINNESOTA PICTURE

Most statistics on health care costs are aggregate national figures. It is difficult to ascertain exactly how much Minnesotans spend for health care costs, or components thereof. Some rough approximations can be made using the

national statistics presented in the introductory part of this report. Minnesota has slightly less than 2 percent of the total national population, but expends a slightly higher per capita amount of most health care costs. Thus, taking 2 percent of national expenditures would provide a very rough estimate of Minnesota's expenditures. Nationally, Americans spent $94 billion for health care in 1973. Approximately 38 percent of this was for hospital services. Using these figures, and the admittedly tenuous assumptions set forth above, it can be estimated that Minnesotans spent approximately $700 million on hospital related expenses in 1973. Using figures from the 1974 American Hospital Association (AHA) Guide, it is estimated that 1973 expenses of all hospitals in the state amounted to approximately $660 million.

According to figures released by Blue Cross and Blue Shield of Minnesota, the average charge per patient day for Blue Cross enrollees in Minnesota hospitals was $113.48 for the year ending on June 30, 1974. This was an increase of $9.82 or 9.5 percent over the figure for the previous year. The average charge per patient day, based on the Blue Cross figures, was 4 percent less than the national figure of $118.26 (American Hospital Association statistic). A brief summary of the trend in hospital costs of Blue Cross subscribers is set forth in Table 5. The increase in the daily average room charge from 1969 through mid-1974 was 57.3 percent. This was

TABLE 5

CHANGES IN HOSPITAL CHARGES FOR

MINNESOTA BLUE CROSS SUBSCRIBERS

1. Average Per Diem Charge

Hospital	1969	1973	1974	%Increase 1973-1974	%Increase 1969-1974
Minneapolis	$82.53	$119.46	$129.24	8.2	56.6
St. Paul	73.92	105.72	118.11	11.7	59.8
Duluth	63.86	89.90	98.69	9.8	54.5
Rural	61.52	89.25	98.01	9.8	59.3
Statewide	72.12	103.66	113.48	9.5	57.3

2. Average Length of Stay

Hospital	1969	1973	1974	%Decrease 1973-1974	%Decrease 1969-1974
Minneapolis	7.96	7.58	7.57	.1	4.9
St. Paul	8.58	8.17	8.01	1.9	6.6
Duluth	8.87	8.27	7.88	4.7	11.2
Rural	6.28	5.82	5.69	3.0	9.5
Statewide	7.42	6.99	6.84	2.0	7.8

3. Total Average Bill

Hospital	1969	1973	1974	%Increase 1973-1974	%Increase 1969-1974
Minneapolis	$657.16	$905.72	$978.83	8.1	48.9
St. Paul	634.51	863.34	945.80	11.0	49.1
Duluth	566.39	743.08	777.48	4.6	37.3
Rural	386.42	519.77	553.53	6.5	43.2
Statewide	535.27	724.09	776.49	7.2	45.1

4. Average Charge Per Outpatient Visit

Hospital	1969	1973	1974	%Increase 1973-1974	%Increase 1969-1974
Minneapolis	$20.43	$29.33	$34.68	18.2	69.8
St. Paul	20.50	28.84	33.32	15.5	62.5
Duluth	21.60	28.43	34.27	20.5	58.7
Rural	16.47	21.89	24.82	13.4	44.6
Statewide	19.04	26.21	30.38	15.9	59.6

* 1974 figures only through June 30, 1974

(Source: Blue Cross and Blue Shield of Minnesota.)

partially offset by a 7.8 percent decrease in the average length of stay which resulted in a total average bill that was 45.1 percent higher than 1969. Charges for outpatient visits increased at a slightly higher rate than the charge for hospital visits.

In comparing hospital costs in Minnesota with those throughout the nation, some interesting facts become apparent.

InterStudy has compiled some figures for 1973 that show how Minnesota compares to the United States average in certain indicators of hospital cost and utilization. (Their figures are based on overall hospital costs, not solely those for Blue Cross subscribers, and upon some additional sets of data.) According to their findings Minnesota ranked below the national average in cost per day, but did poorly on a number of other indicators:

SELECTED HOSPITAL DEMOGRAPHIC STATISTICS

	Minnesota	United States
Average Cost Per Diem	$ 88.60	$ 105.00
Average Length of Stay (days)	8.7	7.9
Average Case Cost	$770.99	$ 830.13
Admission Rate (per thousand)	16.8%	14.7%
Case Cost Per Capita	$129.53	$ 122.03
Per Capita Income	$4332.00	$4519.78
% Per Capita Income	3.0%	2.7%
Beds/1000 Population	5.7	4.2
Occupancy	71.6%	75.4%

Based upon InterStudy's computation, Minnesotans have a significantly longer length of stay, a significantly higher admission rate, and pay 3.0 percent of their per capita income for hospital expenses as opposed to the national average of 2.7 percent. They also have a much larger number of hospital beds per capita and a lower hospital occupancy rate. See also Table 6.

The figures are, of course, subject to varying interpretations. It is often said that Minnesotans tend to be more health conscious than people in many other parts of the country. The presence of sophisticated medical centers such as those at the Mayo Clinic and the University of Minnesota has some effect on Minnesota statistics. Also, 10.7 percent of Minnesota's population is over 65; nationally, the figure is 9.7 percent. However, these figures also indicate that Minnesota may have too many hospital beds per captia, and this may be one factor which increases hospital costs in the state.

C. KEY FACTORS IN HOSPITAL COSTS

> As you know, we are spending far too much for hospital care, and when I say far too much, I mean that these same expenditures could give us a much greater return in terms of health if spent in other types of care programs. We are hospitalizing patients too much; we are keeping them in too long; we are treating in an excessive, high cost, high technology style, and in overly elaborately equipped institutions.
>
> Testimony by Dr. Walter McClure, InterStudy, hearing May 17, 1974.

The high level of hospital costs, and their continuing

TABLE 6

SELECTED HOSPITAL AND DEMOGRAPHIC STATISTICS FOR COMMUNITY HOSPITALS

Basic Indicators	Iowa	Minnesota	No. Dakota	So. Dakota	Wisconsin	United States
Average Cost Per Diem	$ 69.99	$ 79.47	$ 68.59	$ 64.56	$ 80.61	$ 92.31
Average Length ofStay	8.3	8.9	7.8	7.3	8.5	8.0
Average Case Cost	580.92	707.28	535.00	471.29	685.19	738.48
Admission Rate	12.4%	16.9%	19.6%	16.6%	15.9%	14.6%
Case Cost Per Capita	72.03	119.53	104.86	78.23	108.95	107.82
Per Capita Income	3876.00	3974.00	3383.00	3446.00	3880.00	4138.00
% Per Capita Income	1.9%	3.0%	3.1%	2.3%	2.8%	2.6%
Operating Indicators						
Payroll Expense/Total Expense	56.8%	59.9%	56.5%	57.9%	59.4%	58.2%
%Change in Avg Per Diem/1966	78.5%	66.4%	88.2%	70.6%	89.8%	91.7%
%Change in Case Cost/1966	82.9%	80.0%	79.0%	75.3%	109.5%	94.2%
%Change in Avg Per Diem/1969	34.3%	29.6	33.8%	35.7%	33.2%	32.0%
%Change in Case Cost/1969	36.0%	28.1	25.7%	25.4%	41.5%	27.2%
OPV/1000 Population	379	451	268	377	567	719
Patient Days/1000 Population	1032.8	1512.6	1526.6	1248.6	1347.2	1182.6
Average Yearly Wages	$5607.18	$6393.18	$5564.49	$5338.96	$6279.12	$6529.13
Capital Indicators						
Beds/1000 Population	4.1	5.7	6.5	5.3	5.1	4.2
Beds/$100,000 Total Assets	3.82	3.68	4.28	4.40	2.23	2.93
Occupancy	69.2%	72.3%	64.7%	64.2%	73.0%	76.7%
Total Assets/Total Expense	1.48	1.30	1.44	1.50	1.44	1.32
Average Hospital Size	118	125	72	66	145	148
General Indicators						
Physician/100,000	67.3	129.0	83.4	72.2	108.5	127.8
Impatient Days/Outpat. Visits	2.72	3.35	5.69	3.31	2.37	1.63

Source: American Hospital Association, Hospital Statistics, 1971 (August 1, 1972);
Current Population Reports, U. S. Department of Commerce Series, Page 25, No. 468, October 5, 1971;
Per Capita Income, Survey of Current Business, April 1972, Volume 52, No. 4
The Profile of the Medical Practice - 1972, CHSR & D, American Medical Association, 1972

increases, are the result of many factors. Some of these factors are beyond the control of hospitals. To a certain extent, consumers, professional health care providers, insurors, and the government, must share the responsibility with hospitals for the escalation in costs.

The Subcommittee has identified and considered numerous factors which have an impact on hospital costs. Not all of them will be discussed in this report. However, the Subcommittee has identified eight major factors which it feels deserve special comment.

1. HEALTH CARE DELIVERY REFORMS

In recent years, a great number of suggested reforms in the health care delivery system have been postulated. These include such things as health maintenance organizations, utilization review programs (for example, the Professional Standards Review Organization - PSRO - under federal law), outpatient surgery centers, increased use of physician extenders such as nurse practitioners and physician assistants, and increased coverage of preventive and outpatient services (as opposed to hospital services) on the part of third party reimbursers.

These types of reforms do offer a potential for more economical health care and reduced hospitalization. HMOs for example, can substantially reduce the amount of hospitalization required and thereby reduce the need for hospitals. In Minnesota a survey of hospitalization rates for selected HMOs and the general population shows:

COMPARATIVE RATES OF HOSPITALIZATION FOR HMO's AND THE GENERAL POPULATION

	Minnesota 1972	Group Health 1971	Ramsey Plan 1973	St. Louis Park 1973
Average Length of Stay	8.7 days	5.29 days	5 days	4.77 days
Average Case Cost in Hospital	$770.99	N/A	$810.00	$646.50
Admission Rate	16.8%	N/A	N/A	7.8%
Hospital Days 1000 Population	1461 days	415 days	488 days	375 days
Age Adjusted Hospital Days/ 1000*	1220	N/A	N/A	475
Beds Used/1000 Population	5.7 beds	1.6 beds	1.9 beds	1.4 beds

*Adjustment to account for age difference in HMO population and general Minnesota population.

(Source: Material prepared by InterStudy, Minneapolis, Minnesota)

Comparable Minnesota figures for group health insurance policies were not available. According to Northwestern National Life Insurance Company figures for the North Central Region (Minnesota, Wisconsin, Michigan, Iowa, and Illinois), employees in group plans had a 9.8 percent admission rate, an average length of stay of 8.6 days, and 843 hospital days for 1,000 enrollees. Wives of employees in group plans had an 11.1 percent admission rate, an average length of stay of 8.7 days, and 966 hospital days for 1,000 people. For children of employees, the figures were 11.9 percent, 4.9 days and 583 days for 1,000 people.

The Minnesota comparative figures do not fully take into

account the varied demographic makeup of the various population groups. A controlled study was done in Washington, D.C. This study evaluated the experience of a group of medical assistance recipients before and after enrollment in an HMO. The study found that the hospital admission rate declined from 17.2% to 9.5% when they switched to HMO's. Their hospital days declined from about 879 per 1,000 people to 608 per 1,000 people when they changed. Ambulatory visits increased from 3.64 visits per year to 3.85 visits. The figures from this study probably provide a more accurate picture of the differences in hospitalization since it involved a control group.[1]

The Subcommittee also recognizes that, with the exception of increased utilization of physician extenders by hospitals, the listed delivery changes could result in a decline in the frequency of hospitalization and in the length of stay in hospitals. Unless some way is found to concurrently reduce the number of hospital beds in the state and hospital overhead costs, those persons who are hospitalized will have to pay a higher hospital bill to make up the deficit for those who are no longer hospitalized or who are hospitalized for a shorter period of time. Under present conditions, a hospital which undertakes delivery reforms can end up reducing its income. This dilemma was pointed out by Mr. Stephen Rogness in his testimony about efforts being made by hospitals in these areas:

> Ironically, the forward-thinking administrator who institutes new services with the convenience and

> the pocketbook of his patient in mind may find his own budget in trouble, for in providing more innovative outpatient facilities for the patient he may be running up his own operating costs. It is an old axiom that it is cheaper to treat a vertical patient than a horizontal one. Cheaper, that is for the patient; not necessarily for the hospital.[2]

There is a potential that delivery reforms reducing hospitalization, coupled with inflation and already low occupancy rates, could put several hospitals even closer to bankruptcy or into bankruptcy. As Mr. Robert Nichols said in his speech to the Subcommittee, they may reach a situation in which, "they can't cart enough money in the front door to pay the bills out the back door".[3]

2. CAPITAL CONSTRUCTION COSTS

The Subcommittee did not devote a great deal of attention to the question of capital costs. In the past four years, there has been a dramatic shift in the funding for hospital construction by private non-profit hospitals. There have been significant declines in government support for construction, support from philanthrophy, and use of hospital generated revenue. There has been a significant increase in the need for hospitals to rely on long-term debt financing:

SOURCES OF FUNDS FOR CONSTRUCTION
BY PRIVATE NON-PROFIT HOSPITALS

	1969	1973
Total Government Support	16.6%	8.3%
Philanthropy	17.9%	11.8%
Hospital Revenue	26.0%	17.6%
Long-Term Debt	39.6%	59.4%

(Source: A Statististical Profile of Short-Term Hospitals in the U. S. as of 1972, InterStudy, Page 35.)

Long term debt financing is the most expensive form of hospital financing. The interest on it can add a significant amount to patient costs.

During the 1974 Session of the Legislature, a bill was proposed by a variety of health care groups, including hospitals, which would have established a State Health Facilities Funding Authority as part of the current Higher Education Facilities Construction Authority. The proposal would have provided for state-backed bonds for the construction of health care facilities. This approach would theoretically have enabled these facilities to sell their bonds more easily and at a lower cost. At that time it was argued that this was needed because of the recent cutbacks in Hill-Burton funds for hospital construction.

3. GENERAL INFLATION AND NATURE OF HOSPITALS AS INSTITUTIONS

Much of the recent increase in hospital costs can be attributed to the overall inflation that is afflicting the entire economy. Hospital costs for wages, drugs, supplies,

food, fuel, and so forth have risen rapidly. These costs can be partially offset by the increased use of discounts that are available through joint purchasing, and efficient utilization of hospital personnel. By and large, though, these cost factors are not easily controlled by hospitals. (Many experts feel that the major cause of inflation of hospital costs is not the cost-push type associated with the overall national rate of inflation, but is rather a demand-pull type of inflation.)[4]

Some examples of increased costs to hospitals resulting from general inflation were supplied by John A. Kayfes, Administrator of Hibbing General Hospital. He reported increases from 1973 to 1974 as follows:

* 2 inch elastic bandage - up 43%
* gauze - up 21%
* water - up 18%
* light and power - up 14.4%
* bedspreads - up 169%
* sheets - up to 22%
* soap - up 44%
* rental of auto-analyzer- up 82.9%
* service/maintenance of auto-analyzer - up 75.1%

Individual consumers have all had to deal with the problems of inflation. For them, more discriminating spending decisions have usually resulted. The Subcommittee's concern has been whether or not hospitals will do likewise. The Subcommittee does not accept the thought that the overall rate of inflation is the only cause for rapidly rising hospital costs. The question is: How has the most expensive segment of the health care industry attempted to control its costs?

Hospitals are quite different from most other industries.

They are very labor intensive. Between 60 and 70% of their costs are for wages and salaries while 30 to 40% of their costs go to supplies and equipment. In other industries, the ratio is generally the reverse. The percentage of hospital costs attributable to wages has been declining in recent years. (See the results of the hospital survey and Rising Medical Costs in Michigan, Michigan Department of Social Services, 1973.) To a certain extent, many industries can absorb increases in salary costs through increased production of their product. Hospitals have a difficult time doing this because they have little control over admission rates. One out of every three hospital employees is a skilled employee requiring specialized education. In the automobile industry, only one out of 6 employees requires advanced specialized education. Hospitals must remain open and staffed 24 hours a day, seven days a week. In the past, they were able to get by with two twelve hour shifts for their ancillary personnel. Now they must hire three eight hour shifts at higher rates to pay. The Subcommittee recognized the fact that higher wage rates and shorter hours for hospital ancillary personnel, coupled with their recent inclusion under the Federal Fair Labor Standards and State Public Employees Retirement Acts, have increased hospital costs. These increases are, however, a recognition of the fact that wages and benefits for these personnel in the past were lower than general industry standards. The fact that they have started receiving more competitive wages is not to be critized (nor are any excessive demands on their part to be condoned). The wages of ancillary

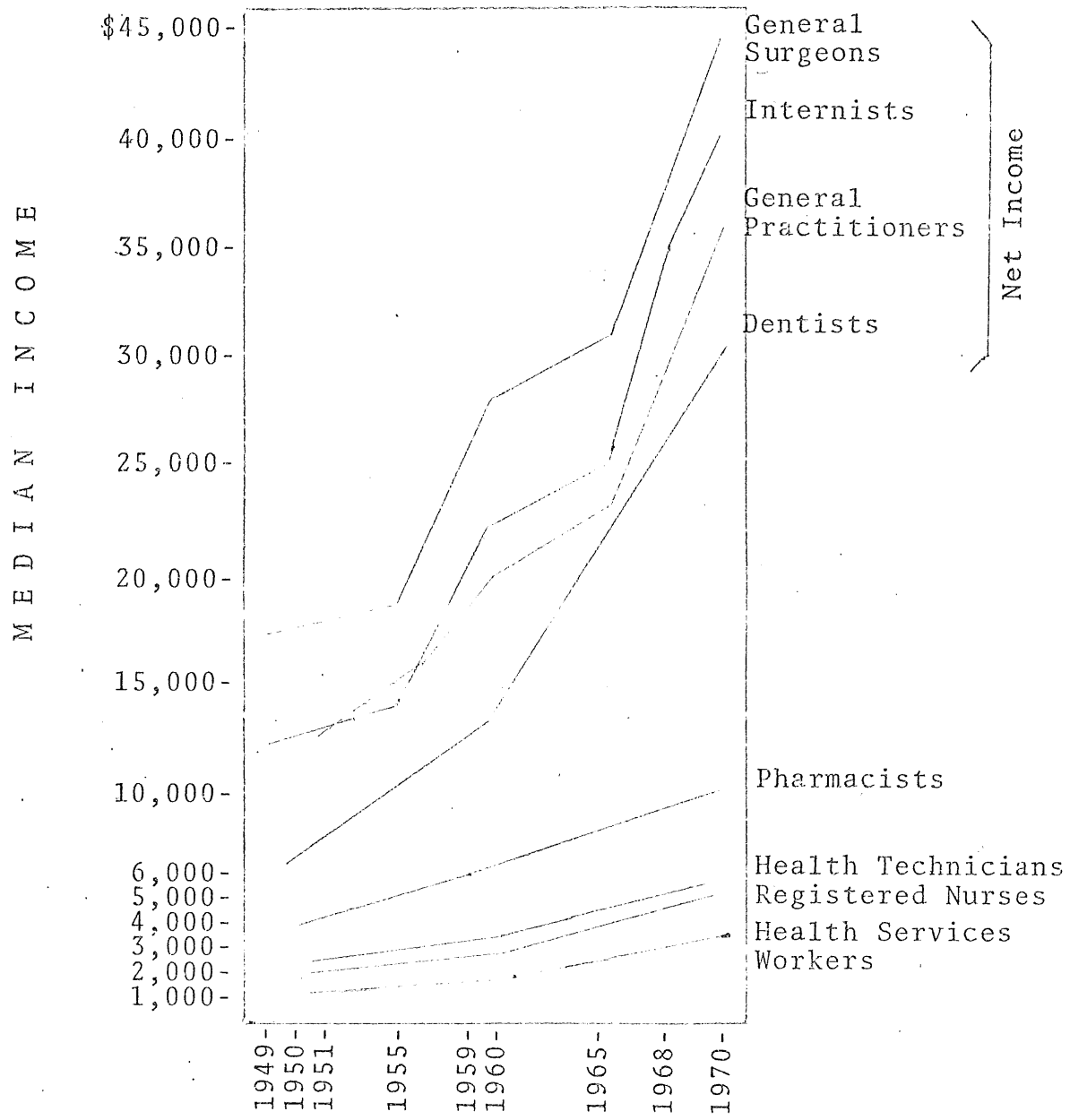
and nursing personnel are very much lower than the income of hospital based physicians. The wages of nurses have risen less rapidly than many physicians'. (See Table 7.) Since wage costs have fallen as a percentage of total hospital expenses, other costs must be rising more rapidly and other factors must be contributing to the inflation rate. (See Table 3.)

Given the nature of hospitals as institutions, there are still changes which can be made which may reduce hospital costs. Many of their specialized facilities and many of their expensive pieces of technical equipment are only used for limited parts of the day. Two examples are the operating room and radiology services. (See Table 9.) Physicians seem to prefer to perform surgery in the morning, and there are no incentives for them to change their habits. The urban hospitals cannot easily ask doctors to plan to use operating rooms and certain specialized facilities in the afternoon if other hospitals where they are on the staff will give them the preferred morning time. On one site visit, the Subcommittee saw a special radiology unit that was just recently installed, but only used a few morning hours, two or three days per week. In a site visit at one small rural hospital with an operating room, the site visit team was informed that non-emergency patients frequently asked to have their surgery performed at a larger hospital in a larger town nearby.

The Maine Coast Memorial Hospital, Ellsworth, Maine, instituted a seven day surgery schedule in 1971. The new schedule was "welcomed by the medical staff members, because

TABLE 7

THE RISE IN INCOME OF SELECTED PERSONNEL IN THE DELIVERY OF HEALTH SERVICES IN THE U.S. 1949-1970



Source:
For income in physicians: "The Survey of Physicians". copyright (c) 1972 by Medical Economics, Oradell, New Jersey. Figures are for self-employed physicians in solo practice, under age 65. For income of dentists: Journal of the American Dental Association, continuing income survey. For income of other wage groups: U.S. Bureau of the Census, 1950, 1960, and 1970. Cited in "Social Policy Issues" by Vicente Navarro, April 25, 1974.

it allows regimens for patients to be carried out quickly and routinely at all times, without special requests and arrangements for staffing. It allows patients to have earlier admissions and earlier discharges". The new schedule resulted in a two day reduction in the average length of stay.[5]

4. HIGH COST TECHNOLOGY

New specialized equipment, new methods of treatment, and sophisticated forms of surgery have advanced health care delivery in many areas. Use of telecommunications equipment has expanded access to health care in the rural areas of the state. However, these advances, especially in the area of highly technical equipment, have had an impact on health care costs. Some of them have been cost saving because they have provided equipment which can be staffed by fewer personnel or because they have provided a cheaper way in which to perform certain procedures. Many have increased costs. The increase in costs derives primarily from three factors: the new equipment is very expensive, it frequently requires additional highly skilled personnel to operate it, and it has resulted in patients receiving more services. According to information provided to the Subcommittee by the Minnesota Hospital Association and Blue Cross/Blue Shield of Minnesota:

* The average patient admitted to a hospital received 37.2% more tests in 1972 than in 1967.

* There are currently more than 200 different technical job classifications for hospital personnel.

* A single kidney dialysis unit costs a hospital about $80,000 to purchase and about $60,000 a year to maintain. Patients using this unit usually must pay about $25,000 per year.

* In 1960 about 10% of the community hospitals in the country had an intensive care unit; today the figure is about 50%.

* It costs a hospital approximately $200,000 to prepare facilities and obtain equipment for an open-heart surgery facility.

* An auto-analyzer providing twelve channels for the analysis of blood chemistry costs a hospital $62,000 to purchase.

The items mentioned above are merely examples. These changes have generally improved the delivery of health care. In the rural areas of the State, technology has helped to increase the availability of health care services. A problem arises because of the tendency on the part of many hospitals to purchase and install a very broad range of the technology which is available. This tendency has been checked, but not ended, by the implementation of the State Certificate of Need Law. Recently a new x-ray machine called a computerized axial tomograph was introduced. It is a safer and more effective machine for brain scanning. It costs around $250,000. In recent months, at least five Twin Cities hospitals requested and received permission from the Minnesota Health Department to purchase these expensive scanners.[6]

The effect of expenditures for high technology and expensive equipment is reflected somewhat in hospital charges. In 1969 the non-room and board part of hospital charges was only 49% of the total. By 1973 it had increased to 53%.[7]

Most hospitals have viewed their mission as the need "to provide the highest quality care at the lowest possible costs" (or in the most efficient manner). This is a commendable goal. However, there is rarely, if ever, an attempt to consider the

real impact of costs on quality of care.

In the hospital survey, many administrators expressed the belief that the increasing public demand for quality care is a contradiction of their cries for lower costs. The services and equipment needed to provide quality care require substantial investments. However, not every hospital needs every type of service, and the fact the consumer is insured for a service does not mean that he or she has to utilize it. More hospitals should understand that they do not all need to offer a very wide range of services. Many specialized services are not wise investments for a small hospital, especially where the utilization is less than 50%. Supporting such services may not be financially feasible, especially if other nearby facilities already have such services available. It is at this point that the strong influence of some medical staffs and some hospital boards come into play. At present, it is difficult for some hospitals to plan purchases around community needs because they feel forced to compete with others for prestige or ability to attract more physicians. In some cases, they act out of fear of losing patients or staff to other facilities, or because certain members of their medical staff may desire an inordinate amount of new equipment.

One element of quality care which many providers seem to under-estimate is the necessity of achieving a cost which the average person can afford. Accessability to basic health care is as important as the availability of specialized services. The simple availability of a special unit is not an absolute measure of quality. For example, if two hospitals

have open-heart surgery units, one of which is used four times a year and one of which is used twenty-five times a year, the latter one probably provides a better quality service because the doctors and supporting staff have more experience and are more readily prepared to deliver the service when the need arises.

5. HOSPITAL FINANCES

There are two major problems with the current financing arrangement of hospitals. First, the reimbursement mechanisms result in varying levels of payment by various paying parties. As a result, some patients are forced to help subsidize others. Second, the present reimbursement basically operates on a retrospective cost or cost plus formula. There is little incentive in this approach for hospitals to contain costs.

a. VARYING REIMBURSEMENT RATES

Hospitals receive their revenue for the treatment of patients from four major sources: Blue Cross, Medicare and Medicaid, private out-of-pocket payments by patients, and commercial insurance. Medicare and Medicaid reimburse hospitals for allowable costs; this figure does not include all costs and does not provide any margin of net profit for debt retirement, new equipment, establishing new services, or write-off of bad debts. Blue Cross negotiates individual contracts with hospitals. In most instances, hospitals recieve 95% of charges or the lower of costs or charges from Blue Cross. They allow an amount equal to approximately 4% of costs for

reserves for capital expenditures. Commercial insurance carriers generally pay the amount of the hospital charges. (Any amount not covered by the insuror must be paid by the patient.) Out-of-pocket payments by patients and payments on behalf of subscribers by private insurance companies must cover not only the costs allocated to their care, but also the disallowed costs and the need for some operating margin which are not covered by Blue Cross or Medicare/Medicaid. Their hospital rates are subsequently higher than those paid by Blue Cross and Medicare/Medicaid:

> Cost reimbursement arrangements have, in many instances, encouraged selected sources of patient income (e.g., Blue Cross Plans, Medicare and Medicaid) to purchase services at a price which was not adequate to meet the institution's total financial requirements.
>
> (Source: Louis A. Orsini, Vice President, Health Insurance Council, in Viewpoint, January, 1974.)

A hypothetical example of this situation is set forth in Table 8.

This example was suggested to the Subcommittee by the administrator of the Bemidji Hospital. Under this hypothetical example, hospitals receive $100 per day from Medicare and Medicaid patients, $104 per day from Blue Cross patients, and $125 per day from private paying patients and commercial insurance companies. The standards for reimbursement under Medicare and Medicaid are set by the federal government. (It can be argued that there is a legitimate public policy in favor of having the care of these patients subsidized by other patients. There is less of an argument to support the subsidization of Blue

TABLE 8

ILLUSTRATION OF EFFECT OF COST/REIMBURSEMENT ASSUMING A FINANCIAL NEED FOR A 4% NET REVENUE ON TOTAL BUSINESS

	(A)	(B) Patient Days	(C) Operating Expense @ $100 Patient Day	(D) Patient Service Revenues @ $125 Patient Day	(E) Gross Revenue Less Expenses	(F) Deductions from Patient Service Revenue	(G) Net Revenue Less Expenses
Blue Cross	15%	3,150	$ 315,000	$ 393,750	$ 78,750	$ 66,150 (1)	$ 12,600
Title 18 & 19	60%	12,600	1,260,000	1,575,000	315,000	315,000 (2)	0
Private and Commercial Insurance	25%	5,250	525,000	656,250	131,250	39,000 (3)	92,250
TOTAL	100%	21,000	$2,100,000(6)	$2,625,000(4)	$525,000	$420,150 (5)	$104,850

(A & B) - Percentages and patient days do not reflect actual utilization - amounts used are for illustration only

(C) - Total costs based on $100.00 a patient day

(D) - Total revenue based on $125,00 a patient day

(E) - Gross revenue less expenses before deductions from patient service revenues

(F) - Deducations from patient service revenues:
(1) Blue Cross contractual adjustment-reimbursement based on 104% of costs $104.00 a day.
(2) Title 18 & 19 - Medicare and Medicaid - reimbursement on cost $100.00 a day
(3) Provision for bed debts - based on 1.86% of total patient service revenue - (4)

Total Patient Service Revenue-	$2,625,000 (4)
Less:	
Deductions from patient service revenue	420,150 (5)
	2,204,850
Operating expense	2,100,000 (6)
Net revenue less expense	104,850

Net revenue Less Expenses - amount that can be used for debt retirement, new equipment, and for establishing new services.

Cross patients by other paying patients.)

b. RETROSPECTIVE REIMBURSEMENT

The second problem is also a significant one. In the normal market place situation, a consumer selects a product and pays for it himself. In the typical hospital situation, the consumer receives the service, but the doctor chooses the hospital and the types of service, and a third-party payor covers the bill. (To the extent that consumers pay for all or part of their hospital care out of their own pocket, the situation is closer to, but still not analagous to, the normal market place situation. The consumer rarely selects the provider of hospital service or the level of service.) This atypical market situation is compounded by the fact that reimbursement has generally been provided to hospitals on a retrospective basis. The hospital determines what its costs have been and charges a rate to cover those costs. "None of the existing reimbursement arrangements contain a realistic management incentive for efficiency. It is generally recognized that retrospective cost reimbursement systems have had an opposite effect. In fact, there is at present no really objective external evaluation of the institution's overall efficiency and of whether further economies could be achieved by the introduction of proven cost-saving techniques."[8]

c. OTHER FINANCING ISSUES

In addition to the two major issues in the area of hospital financing, the Subcommittee feels that several other

issues deserve some mention:

i. Teaching hospitals tend to have a higher average cost than non-teaching hospitals. At United Hospitals in St. Paul, for example, the total cost for all education programs was approximately $900,000 in 1973. This amounted to $5.08 per patient day or 4 percent of the hospital's entire budget.[9] Some of these costs are paid by government and educational institutions. The remainder of the costs are paid for by patients. Medicare and Medicaid pay for training costs only to the extent that the person being trained provides services to patients.

ii. The Internal Revenue Code requires hospitals to provide a certain amount of free or part-pay care to the medically indigent as a pre-requisite for maintaining their non-profit status. The Hill-Burton program requires hospitals which receive its funds to have a program of free or part-pay care. (It is interesting to note that Medicare and Medicaid do not recognize this federally mandated care as an allowable cost when they reimburse hospitals.) Most hospitals seek to control the amount of free or part-pay care provided. Pre-admission financial screening of non-emergency patients is common in the Twin Cities area. This is a sound management policy, but it must not be used as a device to avoid serving free or part-pay patients.

iii. Most hospitals have one or more departments whose expenses exceed revenues. Revenue from more profitable departments is diverted to cover the costs of these departments. In St. Paul, several hospitals have agreed to share and combine services. Under this procedure, some costly or specialized services are assigned to a specific hospital and shared by others. For example, United Hospitals provide open-heart surgery while St. Joseph's Hospital provides cobalt therapy.

iv. There is a considerable amount of diversity in the hospital accounting and billing practices. This makes it difficult to undertake comparative analyses of hospital performance, and makes it difficult for public policy groups to obtain data on which to act. Likewise, hospital policies with respect to disclosure of financial information vary

considerably. Hospitals have been reluctant to deal with the subject of public accountability. Some have only found it necessary to be accountable to their boards of trustees and their medical staffs.

v. Size also has an effect on hospital rates. "For individual short-term hospitals, the larger the hospital, the higher the costs per day and per case; this is attributable to the fact that the larger hospitals offer a wider range of services, and their patients tend to have more complex illnesses and to stay longer. A number of research studies have attempted to control for these differences in scope of services and type of patient treated, in order to separate out the effect of size. Although the results have varied considerably, there is a general trend toward finding that standardized costs are high in the smaller hospitals, decline as size increases, up to a point, and then level off for larger hospitals. There is little evidence to show that standardized costs rise for very large hospitals." In Minnesota, 11.6 percent of the hospitals have less than 25 beds; 40.6 percent have 25-49 beds; 16.7 percent have 50-99 beds; and 31.1 percent have more than 100 beds. In the past 30 years, the number of general hospitals in Minnesota has fallen from 188 in 1943 to 180 in 1974. The number of beds, however, has increased from 11,159 to 19,537 (8,378 more beds).[10]

vi. The cost escalation in emergency and outpatient departments of hospitals has caused some of them financial problems. Use of these departments has tripled in recent years. However, hospitals usually cannot charge enough for these services to meet the overhead costs of these departments. By maintaining these departments, hospitals perform a public service, and help meet the shortage of primary care in center cities and rural areas.

6. EXCESS BED SUPPLY

Minnesota has about a third more beds per capita than the national average. An excess supply of hospital beds in the state has contributed to the high level of health care

costs of the state. Dr. Chester Anderson from the Minnesota State Medical Association testified before the Subcommittee that there is over-use of hospitals in the state.[11] There are 5.6 beds per 1,000 people in the Twin City metropolitan area and 6.4 in the rural area of the state. (The figure for the rural area includes Rochester which services people from throughout the world.) The problem of excess beds manifests itself in four distinct ways. First, the existence of the beds creates a pressure to utilize them. This partially explains the higher admission rate and average longer length of stay in Minnesota as compared to the nation. Second, there is the waste of health care dollars in constructing and maintaining the unused beds. Third, there is the additional bargaining power which excess bed supply gives to doctors in their dealings with hospitals. It permits doctors to shop between hospitals to determine where the most beneficial arrangements can be made. It was stated as follows by Dr. Walter McClure in his testimony in the Subcommittee:

> In other words, hospitals don't have patients; hospitals have doctors and doctors have patients. Therefore, if a hospital wants patients, which it depends upon for its income, it must attract doctors. And since doctors like high cost, high technology types of things, and professionally challenging work, etc., the hospital must supply these things in order to attract the physician. So you will find that hospitals will acquire cobalt units, coronary care units, and all the rest of it out of all proportion to the needs of the community. Each hospital has to have them so it can get doctors, the best doctors, etc.... Because the hospital really has little control over its physicians, it is very careful to avoid offending them,

> and an example of this, of course, is the delicate nature of (the way hospital administrators reacted to requests for information on the).....incomes of pathologists.[12]

Fourth, it creates an incentive not to use less expensive outpatient facilities.

It has been estimated that the 1980 demand for short-term hospital beds in the Minneapolis-St. Paul area will be 7,472 beds. The number of beds in operation or under construction as of January 1, 1973, was 8,240. The projected excess bed supply is 768 beds.[13] Dr. Max Bennett of Inter-Study estimates that the capital costs for constructing the excess beds amounted to 35 million dollars. He estimates that the current cost of maintaining and paying the debt retirement on unused hospital beds is $18,250 per year per bed. (The figure is presumably lower in rural areas.) This would amount to approximately 14 million dollars per year (1974 dollars) to maintain the unused beds in the Twin City area in 1980.

The excess bed supply is currently manifesting itself in the lower occupancy rate of Minnesota hospitals as compared to those nationally. Minnesota's average occupancy rate of 71.6 percent is about 4 percent less than the national average of 75.4 percent. The average occupancy rate for the various parts of the seven county metropolitan area in 1972 were as follows:

AVERAGE OCCUPANCY RATES FOR METROPOLITAN AREA HOSPITALS

Minneapolis hospitals	74.1%
Suburban Hennepin County hospitals	73.9%
Scott/Carver County hospitals	64.9%
Anoka County hospitals	74.2%
Ramsey County hospitals	70.0%
Dakota/Washington County hospitals	59.1%
Total Seven County Metropolitan hospitals	69.1%

These figures are especially low in comparison to the ideal occupancy rate of 85 percent established for some hospitals by the Hill-Burton program.

The figures for the rural area of Minnesota are less precise. There are numberous small hospitals in rural Minnesota - sometimes four or five in one county. The bed supply problem there is compounded by the fact that in some instances local pride helps keep a hospital operating when it would not otherwise continue to do so. It is recognized that access to a hospital is usually necessary to attract doctors to a small town, and that in many smaller towns the hospital is one of the major employers. In some areas of the state, the long distance between towns also contributes to the need for a hospital facility that is accessible to the people in need of it. Nevertheless, there does seem to be a direct correlation between having only one hospital per county, and having a lower number of beds per one thousand population and a higher occupancy rate. Comparative figures for three randomly selected pairs of adjoining counties show the following:

COMPARATIVE HOSPITAL DATA FOR
SELECTED RURAL HOSPITALS

	1970 Pop.	Number of Hospitals	No. of Beds	Beds/1000 People	Average Occupancy
Freeborn	38,064	1	115	3.0	72.2%
Blue Earth	20,986	3	111	4.9	50.0%
Todd	22,114	4	131	5.9	58.8%
Douglas	22,892	1	108	4.7	68.8%
Beltrami	26,373	1	142	5.4	81.7%
Itasca	35,530	3	206	5.8	62.6%

(Source: Computed from A.H.A. Guide, 1973 data.)

An examination of the total picture for rural Minnesota (exclusive of Olmsted County/Rochester and St. Louis County/Duluth) show similar results. Forty rural counties in Minnesota have one hospital; twenty-two have two hospitals; and twelve have three or more. A comparision of them shows:

COMPARISON OF OCCUPANCY RATES AND BED SUPPLY
IN RURAL MINNESOTA

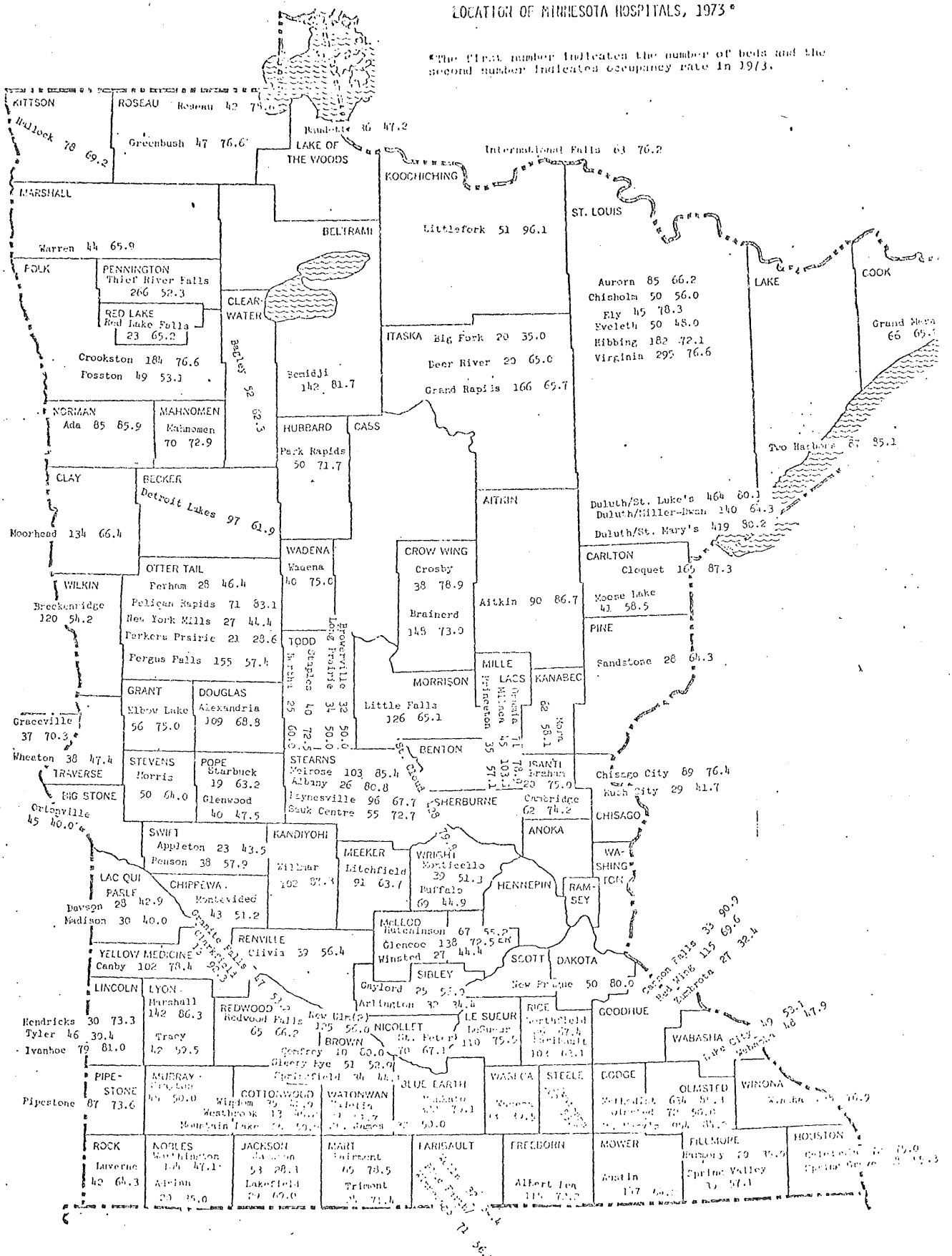
No. of hospitals in County	% of ctys. w/less than 50% occupancy	% of ctys. w/more than 65% occupancy	% of ctys. w/more than 7.0 beds/ 1000 people	% of ctys. w/less than 5.0 beds/ 1000 people
1	12.0%	57.5%	25.9%	55.0%
2	27.3%	40.9%	18.0%	36.3%
3 or more	8.3%	25.0%	41.7%	33.3%

(Source: Computed from A.H.A. Guide, 1973 data.)

See also Map I

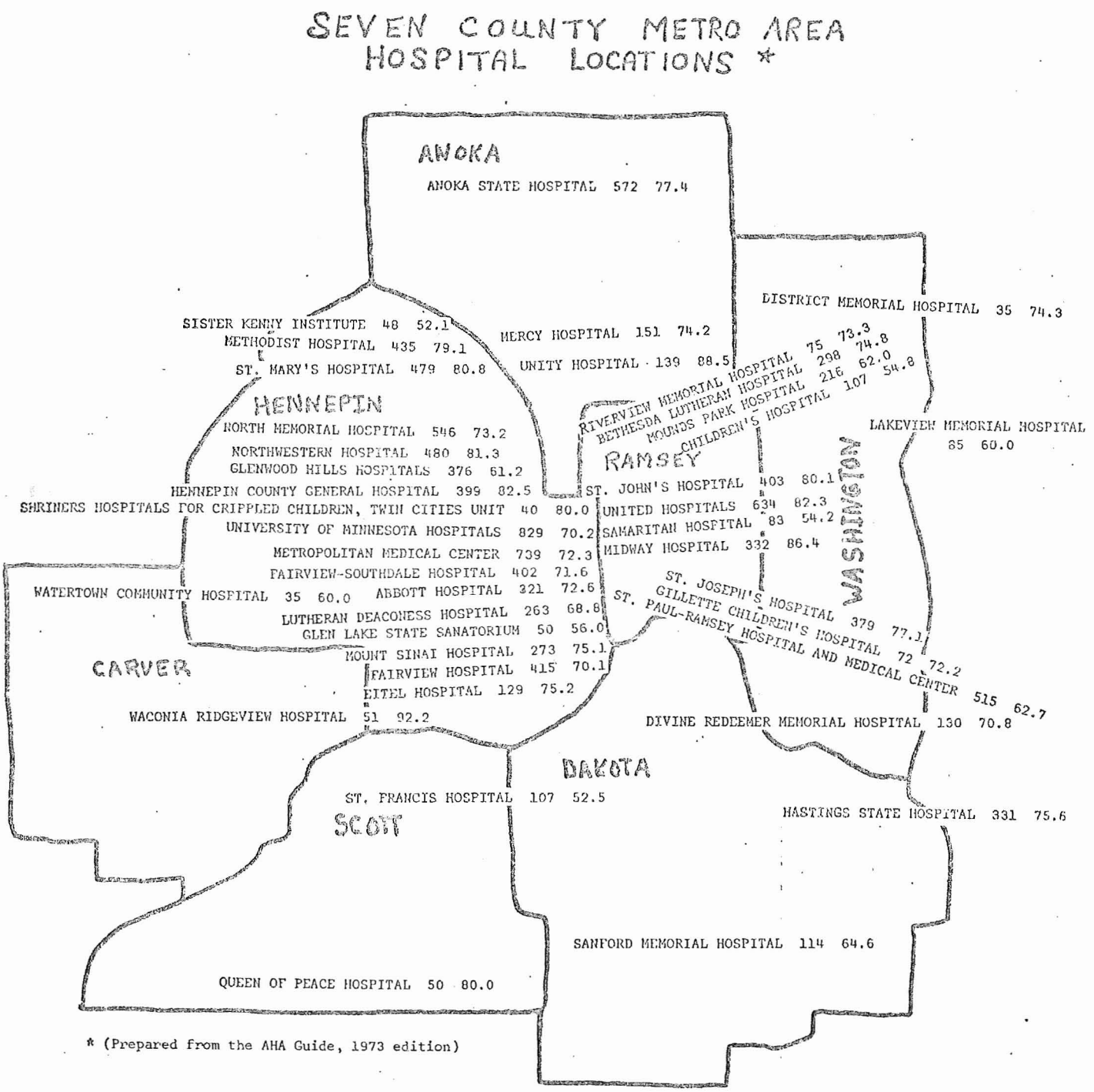
These figures do not, however, take into consideration service area of hospitals and distances between them.

MAP I: OUTSTATE HOSPITALS



Source: Prepared from A.H.A. Guide, 1973, data

MAP II: METROPOLITAN HOSPITALS



Source: Prepared from AHA Guide, 1973, data

7. HOSPITAL MANAGEMENT TECHNIQUES

The term management engineering implies the means by which hospital management can use as much technical management skill and methodology as is available to assist them. There seems to have been a lag in applying many management skills readily used in the business world. Although it is clear that health care is a much more human operation, many industrial engineering techniques are indeed applicable in hospitals. Hospitals should be less reluctant to study and experiment with these ideas. Some hospitals have begun to integrate people with these skills into their staffs or to make use of association reports and services in the financial areas. One such service is the Hospital Administration Survey Reports which provides hospitals with comparative expense summaries by department.

The preceding parts of this section of the report have alluded to some benefits of increased use of joint purchasing, shared services, and better utilization of operating rooms and specialized facilities by hospitals. Evidence of economics achieved by hospitals through joint purchasing, shared services and cooperative management was presented to the Subcommittee in testimony by Mr. Carl Platou.[14] Related to this question is the failure of the boards of directors of some hospitals to become more directly involved in making decisions on matters such as these which have an effect on hospital costs.

In the testimony of United Hospitals and on a visit to Mt. Sinai, the Subcommittee was informed of internal staff utilization reviews and evaluations that were performed to

help administrators control personnel costs. By careful examination of staffing needs and productivity, administrators can begin to plan budgets and services closer to the actual needs. Because of the twenty-four hour service they provide, hospitals must be prepared to deliver a high level of care at all times. When they can more accurately anticipate needs, hospitals can cut down on costly idle time or over-skilled staffing time. Several St. Paul hospitals have instituted a program of shared services and have designated which hospitals will provide certain expensive specialized services.

The use of computers and various other business machines is a decision which must be tempered by the size of the hospital and volume of services rendered. Some hospitals may find that these machines do not offer them the cost benefit needed to justify the investment. Shared computer services are a possibility for these hospitals. Accounting machines may not produce all the information that a hospital is presently generating on a manual basis, so in effect there would be a minimal reduction in staff. The trade-offs of leasing as opposed to buying equipment are discussed in the auditor's general statements on equipment purchasing.

In summary, hospitals should examine closely the available tools and their potential hospital applications. A crucial part of on-going service is the evaluation of current practices and procedures. Many are already being done, but more need to be examined.

8. REPORTING FORMS AND SITE INSPECTIONS

A constant complaint by hospital administrators is the burden of multiple inspections of their facilities and the mountains of reports and forms which must be filled out and filed with various government agencies and insurance companies. The amount of paperwork required for government programs was especially stressed as a problem by administrators during hospital site visits.

The State Health Department conducts those inspections and site visits which are mandated by federal law. However, there are several other agencies, such as the State Board of Pharmacy, involved in hospital regulation and inspection. There is a possibility of saving money by consolidating most or all of the regulatory and inspection authority over hospitals in one agency.

D. ALTERNATIVE WAYS TO COMBAT HOSPITAL COSTS

> The hospital industry has been among the most extensively regulated sectors of the American economy throughout the twentieth century. Professional licensure, hospital accreditation and certification, various requirements to qualify for federal subsidies of services and construction, and governmental oversight of insurors and the third-party payor system generally, have all combined to erect a complex set of institutional restraints on the structure and performance of the hospital industry.
>
> Speech by Roger G. Noll, California Institute of Technology, October 3, 1973.

1. THE NATURE OF HOSPITAL COST INFLATION

Dr. Walter McClure of InterStudy stated that the inflation in hospital costs has been primarily caused by a "demand-pull" rather than a "cost-push":

> Let us ask whether escalating costs is really demand pull or cost push. By demand pull I mean, is the demand for hospital care what is setting the price. In other words, providers keep raising the price because the demand is there and then they put the dollars wherever they need to or want to, to do what they wish. Or is it cost push? Are there other factors in the economy which are pushing up the cost of the hospitals and forcing them to set the prices that they do or the expenditures that they do? I think the evidence is quite strong that both factors are operative but the dominant factor is demand pull. In other words, it is not the cost of factor input. It's not the cost of the nurse or whatever that is pushing up the cost of the hospital care; rather, the hospital can demand a higher price and then pay its people better. And we have to be careful because this is a very funny sort of demand; this is not really a consumer produced demand. In this system, the medical care system, demand is generated in good part by the behavior of the supplier, by the behavior of the providers of care so there's a great danger here that is if you try to regulate supply without changing the pressures on providers which produced demand, these pressures will express themselves in other ways, perhaps even more perversely than now. You have to be very careful when you consider controls on this system.[15]

Dr. McClure pointed out that the highest rate of inflation in hospital salaries was for the wages of health personnel. The increases in wages for janitors and other positions that are transferrable to non-hospital settings were less. This, he says, supports the conclusion that the major factor for the increase in hospital costs is caused by increased demand rather than external cost increases. Dr. McClure's viewpoint is shared by many other experts on health care costs. (See, e.g., "Perspectives on Rate Regulation", by Ralph E. Berry, Jr., Harvard School of Public Health, January 1974.) Dr. Berry noted that a tremendous increase in demand for hospital services resulted from the enactment of Medicare and Medicaid and increased insurance coverage during the 1960's. These changes provided easier financial access to hospitals for

millions of people:

> Higher real incomes, population growth, a change in population mix, and most especially an increase in both private and public insurance coverage have led to an increase in the demand for hospital care. The increase in demand has led to higher prices; higher prices have led to an increase in net revenues earned by hospitals; and these higher revenues have been employed in large part to increase the quality and complexity of the scope of services provided with a consequent increase in the cost of hospital care over time.[16]

Dr. Berry found that the annual increase in hospital labor costs between 1965 and 1970 was 6.5%. During this same period, non-labor costs rose 11.6% a year. He also noted that the number of hospital employees per patient day doubled between 1960 and 1970. He suggested that these factors were a result of the tendency of hospital administrators, hospital boards, and medical staffs to react to their increased revenues by expanding the amount of prestige and quality-enhancing equipment which is frequently expensive and requires additional personnel. Dr. Berry concluded:

> If the inflation of hospital costs does in fact approximate the process that was outlined in the previous section, then rate regulation would seem to have the potential to control hospital inflation. If rates are controlled, then revenues are controlled. If revenues are not available then there is a real constraint on the ability of hospitals to add to the quality and complexity of the scope of services provided. Rate regulation should moderate the rate of inflation. [17]

Dr. McClure, on the other hand, says that reducing demand is the most effective way to reduce hospital costs. He suggested that requiring all insurance programs (public and private) to have coinsurance and deductibles would reduce costs by up

to 10%. "It would be politically unpalatable, but it would work," he stated. Another way to reduce demand would be to change the incentives on providers. One way of doing this, he stated, is through HMOs. The reduction in demand can be supplemented by creating a squeeze on hospital revenues by rate regulation. This would result in less revenue for hospitals to purchase prestige-enhancing equipment.[18]

2. FORMS OF GOVERNMENTAL REGULATION

Governmental regulation of hospitals has taken many forms. In his speech to the Subcommittee, Dr. Walter McClure outlined five types of cost controls which have been or enacted:

> First, price control. Second, utilization or quantity control and those divide into two types, which are retrospective and prospective. Third, facilities control; that is, trying to cut down the number of places where these things are done. Certificate of need is an example. Fourth, manpower control - trying to cut down the number of professionals who can do this kind of work. You can either cut them off at the source, the medical school, or you can try to franchise the number of slots in your area. For example, control the number of surgeons who are allowed to practice in the Twin Cities areas, and so on. And fifth is total expenditure control, such as they do in England where they allocate the total budget; the budget is decided on in advance and then it's given to the medical care system to perform their job.[19]

In a paper entitled "Utility-Like Regulation of Health Facilities by the States", Gary J. Clarke of Georgetown University used a different categorization. He outlined six types of regulations:

Franchising Authority: This refers to either certificate of need statutes or similar provisions within a more comprehensive statute. In either case, the state has given itself the power to limit construction (usually of $100,000 or more) and any changes of service within a hospital....(and) to limit both market entry and product or service competition among health facilities.

Rate Regulation Authority: Under this authority, the state would assume the power to regulate the rates charged to consumers for services. In fact, most hospital bills are paid by third party payors, and this would refer to rates charged to them for services to large numbers of persons.

Uniform Accounting: Under the authority, states would require health facilities to keep accounts in a uniform method. This is necessary to insure comparability of accounts between hospitals, to set rates in a uniform manner, and to oversee hospital finances without getting mired in myriad accounting systems....Also, a regular report of the financial condition of each hospital is required to be made available to the state, such information usually being made available to the public.

Budgetary Authority: Under this authority, states would have the authority to adjust the overall amount of an institution's budget.

Licensing and Quality Control: This refers to the states' traditional authority to protect the public "health and safety" by establishing and enforcing standards for cleanliness, fire protection, etc. Conceivably, this authority could have a significant impact on hospitals costs and quality, as strict standards for staffing and available services could be set.

> Federal Economic Stabilization Act: Under the program established to combat inflation, the health industry was an industry singled out for special stringent controls. Formerly, for instance, hospitals....could not exceed allowable percentage increases in revenue, wages and non-wage costs, except upon application to and the approval of the Cost of Living Council, which had responsibility for implementing the Act. Special agencies were designated by the governor of each state to review and comment on all applications for exceptions to the allowable percentage increase rule before such applications were sent to the Council.

One traditional form of governmental control over industries - the use of tax incentives or penalties - has not traditionally been used in the health care area. Because of the nature of the services provided, and the fact that all hospitals in Minnesota are non-profit institutions, hospitals in Minnesota have been exempt from taxation.*

Across the country today, much attention is being given to price or rate control mechanisms. These mechanisms can take numerous forms including rate disclosure, voluntary rate review, mandatory rate review, budget review, controls through third party reimbursors such as Blue Cross, and prospective or incentive reimbursement. As of mid-1974, eleven states had some form of mandatory rate review, five had voluntary rate review programs, eight had controls using Blue Cross, three were developing voluntary programs and four had legislation pending.[20] Twenty states have some form of incentive

*A case is currently pending before the State Tax Court as to the property tax exemption of certain hospital service facilities not located on the hospital site.

reimbursement according to the testimony of Dr. Max Bennett of InterStudy.

Three approaches to rate controls were presented to the Subcommittee by speakers.

Mr. Frank Baker outlined the operation of the Washington State Hospital Commission. He is the executive director of the Commission. The Commission is structured and operates as follows:

STRUCTURE OF COMMISSION

Five members appointed by the governor and confirmed by the Senate, generally representative of consumers, labor, business and hospitals. Four-year terms; no compensation; expenses only.

TECHNICAL ADVISORY COMMITTEE

Appointed by the governor, four-year terms; no compensation; expenses only. Membership includes: One certified public accountant knowledgeable in the financial affairs of hospitals; one health care practitioner knowledgeable in hospital administration; five persons to represent hospitals; one representative of consumers; the Secretary of the State Department of Social and Health Services or his designee; the Director of the State Planning and Community Affairs Agency or his designee; and one of the commissioners.

The Technical Advisory Committee has the duty, upon request of the Commission, to consult and make recommendations to the Commission on matters of policy, rules and regulations proposed by the Commission, analyses and studies of hospital costs and other matters which the Commission may refer.

STAFF

Full-time executive director and a deputy director appointed by the Commission.

Additional staff, as needed, from the Department of Social and Health Services. The Commission may also employ consultants.

FUNDING

Expenses of the Commission will be financed by an assessment against hospitals in an amount to be determined biennially by the Commission, but not to exceed four one-hundredths of one percent of each hospital's gross operating costs.

DUTIES AND RESPONSIBILITIES OF THE COMMISSION

(1) Establishment of uniform accounting and financial reporting for hospitals, effective not later than two and one-half years from the date of formation of the Commission. The Commission must consider the existing systems of accounting and reporting presently used by hospitals, differences between hospitals according to size, financial structure, methods of providing services and other distinguishing factors.

The accounting system, where appropriate, must be structured so as to establish and differentiate costs incurred for patient-related services rendered by hospitals, as distinguished from those incurred with references to educational, research and other nonpatient-related activities.

(2) Make analyses and studies relating to hospital health care costs and the financial status of hospitals.

(3) From a date not less than 12 months or more than 24 months after the adoption of uniform accounting and financial reporting, rate review by the Commission will be started to assure purchasers of hospital services that the total costs of a hospital are reasonably related to the hospital's aggregate costs, and that rates are set equitably among all purchasers or classes of purchasers of services without undue discrimination or preference.

(4) In the interest of promoting the most efficient and effective use of hospital health care service, the Commission may promote and approve alternate methods of rate determination and payment of an experimental nature that may be in the public interest.

(5) The Commission will require the filing of information concerning the total financial needs of each hospital and the resources available or expected to become available to meet needs, including the effect of proposals made by area-wide and state comprehensive health planning agencies.

(Source: Taken from material submitted by Mr. Frank Baker, May 17, 1974, hearing.)

Mr. Baker stated that the Commission is designed to meet the needs of all concerned parties. Consumers, government and insurors want price justification and predictability. Insurors also want a fair competitive arrangement. Hospitals want adequate revenue to meet their needs.

Various forms of incentive reimbursement systems (also known as prospective reimbursement) were outlined by Dr. Max Bennett of InterStudy in his testimony before the Subcommittee.

1) Target rate: A prospective rate per patient day or per admission is determined either by a formula or by negotiation. Both of these approaches take into account such factors as hospital size, case mix of patients, quality of care produced, and teaching and research programs. The target is normally set with reference to the average rate for similar hospitals.

2) Capitation: A capitation fee is a specific dollar amount per person that is paid to a hospital in exchange for the hospital's commitment to supply services to enrollees upon order by a physician. The payment is not based upon what hospital services are actually supplied, but based

> upon what is expected. If actual services supplied are less than expected, the hospital benefits financially. The hospital receives from the insurance plan a dollar amount equal to the capitation times the number of enrollees selecting the hospital.
>
> The individuals select a primary hospital in which they want to receive the majority of their hospital care. If an enrollee is admitted to another hospital, the primary hospital's total capitation payment is reduced by the expenses incurred in the other hospital.
>
> 3) Budget Review: Budget review can be directed toward: a)total hospital cost; b)departmental costs; or c)specific services, i.e., room charges, laboratory test charges, etc....The budget review body normally evaluates individual hospital budgets in relation to the hospital's prior experience and to similar hospital budgets. A major problem with this approach is the time and administrative cost required to review each hospital's budget.[21]

Dr. Bennett suggested the capitation and target rate approaches as his first and second recommendations for Minnesota.

Incentive reimbursement systems encourage hospitals to plan their financial needs in advance, to bill for services on the basis of those plans, and to receive financial rewards if their costs are kept under their approved rate or budget. Further, these systems penalize those hospitals which are less efficient and exceed their planned needs. These systems avoid some of the major deficiencies in the present system of retrospective reimbursement.

Andy Schneider urged the Subcommittee to mandate Blue Cross to include cost control mechanisms in its negotiations with hospitals. Such an approach has been tried in Pennsyl-

vania. (See Part Six for a further discussion of M Schneider's remarks.)

There are many arguments for and against government regulation of hospitals. (See, e.g., Noll Supra, Clarke, Supra, and the testimony of Dr. McClure.)

Opponents of regulation usually cite industry capture of the regulatory body as a major danger. Dr. McClure, who advocates controls over demand in conjunction with regulation stated:

> The general conclusions of economists and other scholars who have studied regulation is that all too often there is industry capture of the regulatory agency...The industry can afford to spend full time trying to influence the regulators whereas the public with its spread out interests cannot. And this type of capture tends to be used to prevent competition in the industry, to exclude the entry of innovative new forms of producers who would threaten the status quo. And it seems to me that one of the important things we need to do in this industry is to bring pressure against the status quo and to move for change. For example, it costs you...$1000 more to build a house in St. Paul then it does in Minneapolis because St. Paul's building codes are so out of date and you can't use new cost-saving technology. Now, when you look at medical care you already face the situation where the government really doesn't know how to run the medical care system and so it has only one group of people to turn to and that's the medical care professionals themselves. And so you are automatically inviting capture by the industry.22
>
> Testimony by Dr. Walter McClure of Inter-Study, May 17, 1974, hearing.

Dr. McClure urged the Subcommittee to concentrate on system reforms that would let the "market-place" operate as the

control over hospital costs.

Proponents of hospital regulation frequently cite three factors which they feel make the market-place inadequate to control hospital costs. (See, e.g. Clarke, Supra, and Noll, Supra.) First, there is the retrospective reimbursement system which was discussed earlier. Second, there is presently little price competition within the hospital industry. Health Maintenance Organizations and surgicenters can provide some competition, but there are very few of them in operation at the present time. Finally, the typical buyer-seller relationship is usually not present in the purchase of hospital services. As was pointed out earlier, the physician rather than the patient usually selects the hospital and level of service. Consumers seem to have little information on charges for various procedures at various hospitals. If a procedure is covered by insurance, there are few financial incentives for the patient or the doctor to select a less expensive hospital.

3. THE MINNESOTA EXPERIENCE

Minnesota has some experience with most of the types of controls mentioned above.

In the area of price controls, the Minnesota Hospital Association initiated a voluntary rate review system in May of 1974 when the wage price controls were lifted from hospitals. Hospitals with about 75% of the beds in the state are participating. The guideline used by their program is a limitation on annual increases of 7.5 percent. Increases in excess of 7.5 percent are to be reviewed by a rate review

panel. The voluntary program reviewed rate increases of about twenty hospitals by late 1974. In June, the University Hospitals increased their rates by 12 percent; they received Association approval. In October, Metropolitan Medical Center increased their rates by 11 percent; their increase is being considered by the review panel. In October, Hennepin County Medical Center increased their rates by 12-15 percent; they do not participate in the review program.[23] The hospitals cited are not the only ones in the state to increase their rates in excess of 7.5 percent. (In 1960 Blue Cross of Indiana instituted a voluntary rate review/program. It has been estimated that between 1960 and 1972 the residents of the state have probably been saved one-half billion dollars which they would have paid if the Indiana hospital costs had kept pace with the national average. These savings resulted in part from the integration of the rate review process with the planning process as well as the Indiana Hospital Association's initiative in developing programs for service sharing and management engineering for member hospitals.[24])

Minnesota also has some experience with mandatory rate approval programs. During the Economic Stabilization Program, the governor established an Institutional Cost Evaluation Committee as part of the state-wide comprehensive health planning advisory committee. This committee was required by the Federal government. They considered and made recommendations on requests by hospitals and nursing homes for rate increases in excess of the wage-price control levels. Between December of 1971 and April of 1973, this committee

considered 166 requests for exceptions from wage-price standards. The average requested increase was 15.2 percent. The committee denied 37 requests, modified 35, and approved 94. In terms of dollars, they considered requests for annual increases of $20,345,000; they reduced these requests to $11,610,000.

In the area of utilization control, the Foundation for Health Care Evaluation has been the most active organization. A private cooperative effort between insurors and physicians, the Foundation has undertaken voluntary review of fees and utilization. They will be serving as the P.S.R.O. for the Twin City Metropolitan area. In addition, it is common for larger hospitals to have their own utilization review committees.

Minnesota's Certificate of Need law was passed in 1971. As of October 1973, certificates had been granted for 1856 hospital beds. Of these, only 249 (mostly in the Rochester area) were for new beds. The remainder were for replacement or modernization of previously existing beds.[25]

Manpower controls in Minnesota are more indirect. They include the power to fund manpower training programs and the licensure of health personnel. (This form of control is primarily exercised by State licensing boards. It was designed to regulate quality rather than cost.)

Institutional licensure controls in Minnesota have been used to regulate quality rather than cost or scope of services provided by hospitals. Some of the licensure requirements have added to hospital costs according to hospital administrators.

Some types of mechanisms or controls have not been tried for hospitals in Minnesota. These include uniform accounting and disclosure, budgetary review authority, incentive reimbursement and total expenditure control.

II: REPORT OF HOSPITAL SURVEY

A. FINDINGS OF SURVEY

The survey has provided a useful basis of information for the Subcommittee and the State Legislature. It will permit a better focus on some of the parameters of hospital care costs and provide the Legislature with information on some of the components of these costs. Based on the survey, the Subcommittee gained a better idea of the average costs in Minnesota for general acute hospital services rendered. The hospitals in the state have also had an excellent opportunity to explain their rising costs and their beliefs as to the causes in their institutions. These findings will also serve as a basis for indications of where more research is needed and point out areas that need special attention for future consideration of cost controls.

Detailed information from the questionnaire is presented in four parts and summarized in Tables 9-11. About 96 percent of the hospitals in the state returned their survey form. There were seven hospitals which made no response. Most data is based on survey figures submitted for 1973, the most recent complete year. (There were a few hospitals which used their last fiscal year figures which included part of 1974.) The approach was to outline a comparative numerical picture

indicating the minimum, mode, median, mean*, and maximum for each factor summarized.[26] Tables were prepared to show these figures for metropolitan and outstate hospitals separately, and all hospitals collectively. It must be understood that the figures are only as good as the responses given. It was obvious that some hospitals took this responsibility more seriously than others. Many responses were incomplete. In others there were obvious mistakes, and the staff was forced to check their accuracy. Due to time constraints, they sometimes relied on respondents' inputs corroborated by the AHA Guide. (Some problems were also due to technical difficulties in the wording of the survey.) Many efforts were made to adjust and refine the data.

B. GENERAL STATISTICS

Table 9 is a statistical summary of some of the variables responded to in the survey. All hospitals in the seven county metropolitan area (38 hospitals) were considered to be urban, and the remaining outstate hospitals were counted as the rural institutions (125 hospitals). However, the Subcommittee realizes that a different rural-urban breakdown could possibly be reflected by considering the Twin Cities, Rochester and Duluth as urban. The procedure used tends to depress the metropolitan figures and inflate the outstate ones. The approach follows the prevalent pattern of metropolitan - outstate division used in the state and the Subcommittee feels that the aggregate figures do show the meaningful overall Minnesota picture. It should also be noted

*The mean was not adjusted to size or volume of the hospital.

that in the metropolitan area, the Shriners' Hospital for Crippled Children has the smallest bed size in the metropolitan area (40), and it has been excluded in the cost figures as their services are without charges.

Minnesota hospitals show a mean length of stay (LOS) of 7.0 days (Table 9, Item 4.) This figure was slightly higher for metropolitan hospitals at 7.8 days, compared to 6.7 days for outstate hospitals. The LOS figures were not adjusted for the bed size of hospitals; they merely average the responses from individual hospitals. Since larger hospitals generally have a longer length of stay than smaller hospitals, the state-wide LOS is probably somewhat higher than the figure given. The Minnesota Hospital Association offers a weighted tabulation 6.91 days based on a sample of survey returns. The national average LOS for non-profit hospitals in 1973 was 7.9 days.[27] This figure fell from 8.0 days in 1971,[28] and is expected to continue to fall in the future. Blue Cross and others consider this to be due to the advent of utilization review. It must be remembered that these national figures are weighted and not directly comparable with the survey data.

The average bedsize[29] (Table 9, Item 1) in Minnesota hospitals is 129 (307 for the metropolitan area and 82 for outstate). However, the number of beds per thousand in the metropolitan area is 5.6 and 6.4 for outstate areas. Calculations are based on 1970 census figures in conjunction with survey data on bed supply. The statewide figure for 1972 was 5.7 beds per thousand people.[30]

A problem expressed by some hospitals was that of generating the capital required to change their operations. This is a handicap in correcting the present oversupply of hospital beds by converting beds and facilities to other uses. One administrator suggested that the hospital construction design regulations should mandate hospitals to be flexible in their inital construction or additions. This would allow more adaptability to the varying design needs of different programs and services. There have been instances where a hospital has followed a long range plan and prepared to install a new service only to find that after the lag time in approval of a Certificate of Need, the funds are no longer available for the program.

Some of the larger hospitals base their budgets on a projected occupancy rate of 85 percent. The Hill-Burton program uses 85 percent as a basis for projection in planning bed needs.[31] This means that rates are set on expected patient revenues from this level of occupancy. It is expected that many other hospitals base their budgets on their experience of the past few years.

The national average occupancy rate in 1973 for AHA member hospitals was 77.5 percent.[32] The median rate for hospitals surveyed was 63 percent. The mean occupancy rates for Minnesota (Table 9, Item 2) was 68 percent for the metropolitan area, 57 percent for outstate, and 59 percent overall.[33] The urban hospitals tend to do better, and some are operating above 85 percent. At this point, some administrators claim they must expand to meet continuing high demands. Low occupancies generally correlate to higher costs

per bed. If hospitals are not meeting expected revenues, then they must borrow to meet expenses. The cost of borrowed money is added on to the already higher bed costs.

The average daily census (ADC) (Table 9, Item 3) is a function of the occupancy rate and the size of the hospital. The figures given are the average number of beds occupied per hospital and not a total number of patients in any category. For example, the approximate ADC for the metropolitan area would be 35 (hospitals) times 200 (mean ADC) or 7000; the same approximation for outstate yields 2530. The actual number for both are 7143 (metropolitan) and 2414 (outstate) for a total of 9557.

A calculation which controls for population size is admissions per thousand. The Minnesota figure is 188 per thousand or 18.8%.[34] This compares to national numbers which have gone from 14.8% in 1963 to 16.4% in 1973.[35] Thus, Minnesota's hospital admission rate is about 15% higher than the national rate.

The mean estimated increase in salary expense for 1974 was 5.8 percent over all categories (Table 9, Item 5). This is not to say that all types of employees are expected to get this percentage of increase. Many hospitals indicated no expected change in salaries for the current year. This figure is simply an average of those that are expected to rise. Those groups receiving raises vary depending on individual hospitals involved. When unionized employees are involved, wage rates are generally negotiated for a group of hospitals, especially in the Twin Cities area.

The average total bill (Table 9, Item 6) figure is a

total of the average daily service charges and the average daily ancillary charges multiplied by the average length of stay. A mean of $615.90 was found for the state. This was one of the areas where a considerable difference between metropolitan hospitals ($902.34) and outstate hospitals ($515.26) was noticed.

The average charges for selected operations (Table I, Item 7) reflects a combined figure for five selected procedures (appendectomy, caesarian section, normal delivery, hysterectomy, and cholecystectomy). Hospitals were asked to give the charge per operating room hour for each of these procedures. (There was some confusion on this question as to whether cost or charge should be reported.) These figures were not intended to reflect the physician time charge. This data is only relevant in terms of the perspective it gives on the range and relationship of expenses. It can be seen that the median is lower than the mean throughout. The difference between the means in metropolitan and outstate is about $17.00. This calculation is also sensitive to the choice of state rural-urban division, but still shows the considerable variance in cost around the state, with an overall mean of $325.86.

The average charge for selected procedures (Table 1, Item 8) was calculated in the same manner as for selected operations. The charges were requested for the following procedures: blood test, chest x-ray, electrocardiogram, and electroencephalogram. It is hoped that the internal inconsistencies which appeared were averaged out. Where a

procedural charge was not provided, the average of those reported was used. It would be of more interest and increased accurancy of information if each procedure in this group was calculated individually.

The Subcommittee is skeptical of any findings for the average charge of selected procedures since two problems arose here, both resulting in inconsistencies in replies that seriously weaken any findings. The first was a misunderstanding of the question; the response sought was cost to the patient (i.e. charges), but it is evident that less conversion was made for this section than in the section on operations right above it on the questionnaire. The second was the fact that only three quarters of the items were answered in many surveys, and these replies were used although averaged for the 3 answers.

In the area of drugs, there was a limited selection of items, but from those used (see Note 10, Item 9) the Subcommittee gathered an average cost (purchase price) to charges ratio (Table 9, Item 9) which showed an overall mean of approximately 30 percent but varied as widely as 5 percent to 100 percent. These figures express what percent of the charges paid by the patient which were the actual cost of drugs paid by the hospital. For example, if the ratio given is 30 percent, then the cost to the hospital was $.30 and the patient was billed $1.00. In this case the 100 percent maximum means the patient is billed at the purchase price. Similarly, the percent markup is easily derived by finding the ratio of the percent of patient cost due to hospital cost. That is, in the example, 70 percent of the patient's

bill was not due to hospital cost, and so the "percent markup" is 70/30 x 100 percent or 233 percent, so that the $1.00 paid by the patient represents $.30 cost (purchase price) and $.70 markup. (The purchase price is not the total cost that the hospital incurs in administering drugs. The expense of maintaining the pharmacy and nursing time in drug administration may also be included in the hospital mark-up of drug prices.) In this and the supply area there seemed to be some confusion in the responses. Many recalculations were required in an effort to obtain consistent replies. In the area of supplies, there were typographical errors in the questionnaire and answers varied too widely to make a meaningful analysis.

The average per diem charge (Table 9, Item 10) for Minnesota was found to be $86.68 for all hospitals. (The weighted approximation given by the Minnesota Hospital Association is $98.00.) These figures vary from the widely publicized Blue Cross figures, possibly because they include different types of coverage, and because the reported charges were not weighted by hospital size. Minnesota is not inconsistent with the national trend which is rising costs. The national average adjusted expense per admission is $784.00.[36] The total average bills in Minnesota were $902.34 for the metropolitan area and $528 for outstate with an overall mean of $615.90.

Personnel expenses ranged from about 57 percent to 72 percent of hospitals' operating expenses. Nationally, there has been an increase in the average number of personnel per patient from 1.7 to 3.4 in the past ten years.[37] The mean ratio

of personnel to beds in Minnesota is 1.6 (Table 9, Item 11).

In the area of hospital specialists, the questionnaire data was difficult to evaluate due to the lack of consistent comparative data and to numerous incomplete responses. Many hospitals answered by giving the contractual agreement (such as percentage of the gross revenue of the department) with the specialist without specifying the dollar amount involved. The figures were also unclear where groups of specialists were contracted for. Little information was supplied on the number of specialists serving a hospital or the number of hours per week worked by each. The average "percentage-of-the-gross-revenue" type of contract for radiologists around the state was forty percent. In the ten hospital site visit study, the Subcommittee obtained better information. (See the section of this report dealing with hospital based specialists.)

The last item on which the Subcommittee made calculations in this section was the "absolute changes in the percent of the hospital costs attributed to salaries and wages" (Table 9, Item 12). This was done to verify the trends in this type of expense. The most frequent cause given by hospital administrators for inflation in costs was increases in salaries and wages for a combination of reasons. However, when the Subcommittee looked at the difference in the percent of this factor to total cost between 1969 and 1973, it was found that 90 percent of all hospitals responding (133) to this question showed a decrease. The average increase was 4 percent and the average decrease was 4.8 percent with the average net overall change in salary costs as a percentage of all costs being a

decrease of 1.5 percent. This indicates that other cost factors are increasing faster than wages and fringes. This observation is supported by figures from the American Hospital Association's Second Quarter Report, 1974, which shows that non-payroll expenses increased almost twice as fast as payroll expenses from 1973 to 1974:

CHANGES IN HOSPITAL SERVICE VOLUME AND EXPENSES

	Jan.-March *1974	Jan.-March 1973*	Percent Change
Admissions	8,407,482	8,123,807	+ 3.5
Outpatient Visits	41,742,878	40,771,590	+ 2.4
Average Length of Stay	7.5 days	7.6 days	- 1.3
Personnel	2,429,583	2,326,639	+ 4.4
Payroll Expenses	$4,109,833,898	$3,765,106,374	+ 9.2
Non-payroll Expense	$3,494,343,175	$3,000,125,244	+16.5
All Expenses	$7,604,177,073	$6,765,231,618	+12.4

*The most recent quarter for which data are available. Information in the above table is based on data from 999 hospitals selected from a universe of 5,746 community hospitals registered by the American Hospital Association.

In summary, the Subcommittee would like to indicate that its intent in sending out the survey was to gain a perspective on the cost factors in Minnesota and to verify the trends. Due to the nature of the survey, the survey was not intended to duplicate information was already available.

TABLE 9*

STATISTICAL PICTURE OF VARIOUS FACTORS - MINNESOTA HOSPITALS**

	a) Minimum	b) Mean	c) Median	d) Mode	e) Maximum	Totals
1. Bed Size						
A. Metropolitan[1] (34 responses)[2]	35	307	247	100	801	10425
B. Outstate (128 responses)	8	82	45	27	946	10424
C. Aggregate (162 responses)	8	129	55	27	946	20849
2. Occupancy Rate (%)						
A. Metropolitan (33 responses)[2]	43.2%	68%	72%	72%	84%	2232
B. Outstate (123 responses)	16.9%	57%	57%	51-56%	95%	7037
C. Aggregate (156 responses)	16.9%	59%	61%	51-72%	95%	9269
3. Average Daily Census (# of patients in beds per hospital)						
A. Metropolitan (34 responses)	19	210	179	- -	632	7143
B. Outstate (115 responses)	2.4	22	26	14-26	830	2414
C. Aggregate (149 responses)	2.4	64	35	21-26	830	9557
4. Length of Stay (Days)						
A. Metropolitan (34 responses)	5.2	7.8	7.5	6	18.6	276
B. Outstate (126 responses)	4.4	6.7	6.7	6.3	16.1	839
C. Aggregate (160 responses)	4.4	7.0	6.8	6.9	18.6	1115

*Based on 1973 statistics - the figures are not weighted for volume of admissions or size of hospital.

**Decimal places rounded up to next whole number.

[1]General acute care beds only - no bassinettes or C & NC beds)

[2]Shriners Hospital excluded

TABLE 9* (CONTINUED)

STATISTICAL PICTURE OF VARIOUS FACTORS - MINNESOTA HOSPITALS

Factor	a) Minimum	b) Mean	c) Median	d) Mode	e) Maximum	Totals
5. Estimated Percent Increase Salaries by December 31, 1974(1)						
A. Metropolitan (27 responses)	.	6.2	7.1	8	9.8	
B. Outstate (109 responses)	0.	5.7	5.5	0	43.4	
C. Aggregate (136 responses)	0.	5.8	5.5	0	43.4	
6. Average Total Bill for 1973 (2)						
A. Metropolitan (32 responses)	$320.00	$902.34	$855.45	$819-899(3)	$1,866.00	$28,875.14
B. Outstate (113 responses)	247.73	528.71	515.26	500-549(3)	1,417.00	60,430.68
C. Aggregate (145 responses)	247.73	615.90	559.56	550-599(3)	1,866.00	89,305.00
7. Average Charge for Selected Operations 1973 (4)						
A. Metropolitan (22 responses)	$ 81.24	$339.85	$170.00	$170 (3)	$ 834.00	$ 7,476.71
B. Outstate (86 responses)	39.00	322.29	163.00	---- (5)	997.80	27,717.20
C. Aggregate (108 responses)	39.00	325.86	164.64	---- (5)	997.80	35,193.91

Notes: (1) Salaries estimated to remain unchanged are excluded from the average for each hospital; however, hospitals in which no salaries were estimated to change are included in the figures here i.e., the "Minimum Percent Increase" for Metro, Outstate, and Aggregate is 0%. These averages include estimates for salary or income of all groups listed in survey.

(2) Figures not adjusted for variations in length of stay.

(3) Rounded to $10 intervals (fractions of dollars ignored)

(4) Appendectomy, Caesarian Section, Normal Delivery, Hysterectomy, Cholecystectomy.

(5) Several values occurred twice, but none more than twice.

*These figures are not weighted for volume of admissions.

TABLE 9* (CONTINUED)

STATISTICAL PICTURE OF VARIOUS FACTORS - MINNESOTA HOSPITALS

Factor	a) Minimum	b) Mean	c) Median	d) Mode	e) Maximum	Totals
8. Average Charge for Selected Diagnostic Procedures, 1973 (7)						
A. Metropolitan (32 responses)	$11.44	$19.14	$18.75	$18.75	$26.62	612.78
B. Outstate (104 responses)	7.50	16.39	16.81	-----(8)	28.03	1,704.81
C. Aggregate (136 responses)	7.50	17.04	17.62	18.75(9)	28.03	2,317.59
9. Average Cost-to-Charge Ratio for Selected Drugs (9) (Expressed as a %)						
A. Metropolitan (26 responses)	12%	32%	30%	-----(11)	60%	8.486
B. Outstate (109 responses)	5	31	28	15	100	33.746
C. Aggregate (135 responses)	5	31	29	15	100	42.232
10. Average Per Diem Patient Charge, 1973 (12)						
A. Metropolitan (32 responses)	$61.54	$116.89	$112.29	$131.00(4)	$172.33	3,740.53
B. Outstate (115 responses)	33.48	78.28	78.68	86 (4)	125.00	9,002.43
C. Aggregate (147 responses)	33.48	86.68	82.68	86 (4)	172.33	12,742.96

(7) Blood test, Electrocardiogram, Electroencephalogram, Chest X-ray.
(8) Numerous values occurred three times (including $18.75).
(9) As a group bimodal around 11.00-11.99 and 22.00-31.00.
(10) Aspirin, Darvon Compound, Ampicillin, Tetracycline. Rounded to two decimal places.
(11) No value (after rounding to 2 decimals) occurred more than twice.
(12) Average total bill divided by length of stay.

TABLE 9* (CONTINUED)

STATISTICAL PICTURE OF VARIOUS FACTORS - MINNESOTA HOSPITALS

Factor	a) Minimum	b) Mean	c) Median	d) Mode	e) Maximum	Totals
11. Personnel/Bed Ratio, from AHA figures						
A. Metropolitan (34 responses)	.97	2.4	2.3	2.2	4.3	80.250
B. Outstate (127 responses)	.50	1.4	1.4	1.1	2.9	179.614
C. Aggregate (161 responses)	.50	1.6	1.5	1.1	4.3	259.864

Note: The number of beds in each hospital was available both in the AHA Hospital Guide, 1973 edition, and in the survey. The above calculations were based on AHA figures. In most instances, the differences were minimal.

TABLE 9* (CONTINUED)

STATISTICAL PICTURE OF VARIOUS FACTORS - MINNESOTA HOSPITALS

Factor	a) Minimum	b) Mean	c) Median	d) Mode	e) Maximum	Totals
12. Absolute Change in the Percent of Hospital Costs Attributed to Salaries and Wages, 1969-73 (1) (3)						
A. Metro (32 responses	0 (3)	-1.02	-.15	0	-12.8	-32.48
1) I: Increases(2) (13 Hospitals	.1	3.02	3	2	8	39.20
2) II: Decreases(2) (16 Hospitals	-.3	-4.48	-4.1	-1.4	-12.8	-71.68
B. Outstate (101 resp)	0 (3)	-1.62	-1	0	22.7	-163.75
1) I. Increases (30 Hospitals	.3	4.36	3	3	22.7	130.73
2) II. Decreases (61 Hospitals	-.24	-4.83	-3.2	-1	-18.0	-294.48
C. Aggregate(133 resp)	0 (3)	-1.48	-1	0	22.7	-196.23
1) I. Increases (43 Hospitals	.10	3.95	3	3	22.7	169.93
2) II. Decreases (77 Hospitals	-.24	-4.76	-3.2	-1	-18.0	-366.16

NOTES:

1. "Absolute" as opposed to a "relative change". E.g. if a given hospital attributed 60% of its costs to salaries/wages in 1969, and 54% in 1973, this change would be recorded as -6%, not as -10%. Similarly, a change from 50% to 55% would be recorded as +5%, not +10%.
   All figures shown in the columns are changes in percentages, though the "%" symbol is not shown.
2. Class I includes all (and only) those hospitals showing an increase in the percentage of costs attributed to salaries/wages. Class II includes all (and only) those hospitals showing a decrease.
   Hospitals showing no change are excluded from both classes, but included in the total.
3. There were 13 hospitals showing no change, 3 metro and 10 outstate.

CHART I: SUMMARY OF TABLE 9 (a)

Statistical Factor	Metropolitan (Hospitals)(b) Minimums	Metropolitan (Hospitals)(b) Maximums	Outstate (c) Minimums	Outstate (c) Maximums
1. Bed Size (#) (d)	Watertown (35) Farmington (47)	Abbott N.W. (801) University of Mn(753)	Comfrey (8) Cannon Falls (13)	St. Marys (946) Methodist (640)(e)
2. Occupancy Rate (%)	Farmington (43.2) Watertown (53.5)(f)	Midway (83) St. Johns (80.1)	Cook Community (16.9) Parkers Prairie(29.1)	Blue Earth (95) Rochester Meth.(85.5)
3. Average Daily Census (#)	Watertown (19) Farmington (20)	Abbott N.W. (632) University of Mn(550)	Comfrey (2.4) Cannon Falls (9)	St. Marys (830) Methodist (547)(e)
4. Length of Stay (#)	Forest Lake (5.2) 2 hosp. (h) (5.4)	Gillette (18.6) Golden Valley (13.0)	Cannon Falls (4.4) 2 hosp. (i)(4.6)	Harmony (16.1) Miller Dwan (14.3)
5. Estimated % increase in Salaries by Dec. 31, 1974	3 hosp. (j)(0) no United Hosp.(3.8)chg	Midway (9.8) St. Josephs (8.3)	24 hosp.(k)(0)no chg. Olmsted County (2)	Ely-Bloomenson (43.4) Cuyuna Range (15)(m)
6. Average Total Bills ($)	Forest Lake (320) Stillwater (444)	Univ. of Mn. (1866)(f) Gillette (1594)	Sleepy Eye (247) Olivia (281)	Miller Dwan (1417) Rochester Meth. (1094)
7. Average Charge for Selected Operations ($)	New Prague (81) Farmington (100)	Luth. Deaconess (834) Coon Rapids (808)	Lakefield (39) Adrian (40.50)	Int'l. Falls (997) Tyler (944)
8. Average Charge for Selected Diagnostic Procedures ($)	Hennepin Cty (11.40)(g St. Paul Ramsey(12.87)	Divine Redeemer(26.62) New Prague (26.25)	Winona (7.50) Canby (7.90)	Faribault (28.02) Chisago (26.00)
9. Average Cost/Charge ratio for Selected Drugs	Mt. Sinai (12) Eitel (13)(g)	Univ. of Mn (60) Luth. Deaconess(52)(f)	Clearwater (5) Jackson (7)	Wesley (100)(n) Marshall (70)
10. Average Per Diem Patient Charge ($)	Forest Lake (61.54) Golden Valley (80.15)	Childrens (175.33) Univ. of Mn. (171.19)	Sleepy Eye (33.48) Harmony (35.52)	Willmar (125) Roch.Methodist (115)
11. Personnel to Bed Ratio (%)	Farmington (.97) Golden Valley(1.3)	Kenny Rehabil. (4.3) Gillette (3.7)	Harmony (.5) Jackson (.6)	Willmar (2.9) Ely (2.6)
12. Absolute Change in % of Hosp. Cost Att. to Salaries & Wages	Mt. Sinai (.1)(p) Mounds Park (.3)	New Prague (8) Divine Redeemer (5)	Chisholm (.3) (q) Hibbing Gen'l. (.3)	Monticello (22.7) Marshall (18)
	Farmington (-.3) Fairview (-.4)	Fridley (-12.8) Forest Lake (-10)	Bemidji (-.24) Canby (-.28)	Eveleth (-18) Miller Dwan (-17)

(See following page for footnotes)

CHART I - FOOTNOTES

(a) This chart is based on the adequate responses given for the various factors; that is, there may be hospitals that replace those on this chart, but their answers were insufficient or not usable for the overall calculation.

(b) All based on survey figures for 1973. The 1974 situations are expected to have changed at some hospitals for some factors; although they frequently differed from AHA Guide; the survey was considered more current.

(c) City names appear for outstate facilities due to fact that many hospital names are similar.

(d) Acute hospital beds only (exclude C & NC beds).

(e) Both in Rochester, Minnesota.

(f) Excludes Kenny Rehabilitation Institute.

(g) Excludes Shriners Childrens Hospital.

(h) Stillwater (Lakeview Memorial); Fridley (Unity Hospital).

(i) Wadena (Wesley); Grand Marais (North Shore).

(j) Bethesda Lutheran Medical Center; The Children's Hospital; Hennepin General Hospital.

(k) Tweeten Memorial; Tracy Municipal; Greenbush Community; North Shore; Pipestone County; Watonwan Memorial; Redwood Falls Municipal; Community Hospital (N. Y. Mills); Community Hospital (Luverne); Chisholm Memorial; Mahnomen County & Village; Rice Memorial; Waseca Memorial; Aitkin Community; Ortonville Municipal; Warren Hospital; Princeton Community; Kanabec County; Ada Municipal; Trimont Community; Arnold Memorial; Dr. Henry A. Schmidt Memorial; Swift County (Benson); Louis Weiner Memorial (Marshall).

(m) Large percentage due to pathologist income expected to triple as his services will be increased from one visit per month to one visit per week.

(n) They charge the patient the average cost of the drugs and use a set system for pharmacy services.

(p) Hospitals showing no changes were Riverview Memorial; Gillette Children's; St. Mary's; St. John's.

(q) Hospitals showing no change were Community Hospital (New York Mills); Owatonna City; Rice County District 1; Community Memorial (Winona); Waseca Memorial; Wheaton Community; United District (Staples); Community Memorial (Elbow Lake); Jackson Municipal.

C. BOARD MEMBERSHIP PROFILE

This section of the hospital survey was designed to examine the types of influences which are present in hospital board membership, and to ascertain if any particular profession dominated boards or if potential conflicts of interest appeared numerous. Members were put into the twenty categories which appeared most often. Many managers or supervisors worked for a business named separately on the list. Businessmen were those who were listed as presidents of companies or owners of an enterprise. There was a particular interest in the types of businessmen which were listed separately (insurance men, bankers and contractors). The findings are summarized in Table 10 and show that the group labelled "Other Businessmen" ranked first with 20 percent of the total membership. When contractors and insurance men are included as part of the "businessmen" grouping, the figure goes to 29 percent. A summary of the size of the boards shows:

SIZE OF HOSPITAL BOARDS

	Metro (31 responses)	Outstate (106 responses)	Total (137 responses)
Total Membership	591	928	1519
Average Size	19.1	8.8	11.1

Another issue is consumer representation on boards. They are represented in fair numbers if it is assumed that "Other Workers" ranking fourth and "Housewives" ranking seventh are representative of consumers.

Physicians ranked sixth in percentage of members, but often the Chief of Staff is an ex-officio member of the board.

TABLE 10

PROFILE OF BOARD MEMBERS' OCCUPATIONS*

Rank	Occupation	Current	Retired	Total	% All Board** Members
1	Businessmen - other	296	19	315	20.74
2	Not Stated	167	33	200	13.16
3	Farmers	125	6	131	8.62
4	Other Workers	110	6	116	7.63
5	Sisters (Nuns)	105		105	6.91
6	Physicians & Surgeons	95	1	96	6.32
7	Housewives	78	1	79	5.20
8	Bankers	65	3	68	4.48
9	Government	57	3	60	3.95
10	Attorneys-at-Law	59		59	3.88
11	Educators	52	4	56	3.68
12	Managers	50		50	3.29
13	Insurance Businessmen	39		39	2.57
14	Construction	21	1	22	1.45
15	Ministers	24		24	1.58
16	Accountants	15	1	16	1.05

TABLE 10 (CONT.)

Rank	Occupation	Current	Retired	Total	% All Boards** Members
17	Administrators	13		13	.85
17	Engineers	12	1	13	.85
17	Pharmacists	11	2	13	.85
18	Community Workers	12		12	.79
19	Judges	10		10	.67
19	Nurses, LPNs	8		8	.52
20	Veterinarians	7		7	.46
20	Dentists	6	1	7	.46
	TOTALS	1434	85	1519	99.96**

*Information bases on 137 complete responses.

**Due to Rounding Off.

The second ranking group was the non-stated or unclear responses. The third group was farmers; this is probably reflective of the major occupation in many rural areas of the state.

It is important that board members be cognizant of their duties and responsibilities in setting and being accountable for hospital policies. One member contacted during a site visit made the point that the board members background was not as important as his ability and willingness to work hard and be available for the numerous committee meetings. At another site visit, a new member of a hospital board stated that the board almost always defers to the hospital administrator.

There has been concern that influential businessmen, such as bankers, contractors or insurance men, on hospital boards have swayed other members to pursue a policy that would use their business. This would be a conflict of interest. Although it appears that the various categories of people who serve on boards are well balanced, there are some serious questions to be raised about the interlocking nature of those who sit on various boards. If further study is done, a closer examination should be made of the possible influences that membership on other boards has on their decisions and thinking. The other aspect to review would be the extent to which hospitals contract with the companies of their board members and if competitive bidding was used for contracts. The ultimate question is: How well are consumers' interests represented?

D. LISTS OF CAUSES FOR RISING HOSPITAL COSTS AS PERCEIVED BY ADMINISTRATORS AND THEIR SUGGESTIONS FOR ACTION

Table 11-A is a summary of the responses given to the Subcommittee's request for hospital administrators' opinions on the causes contributing to hospital cost inflation. This has proven to be a valuable part of the survey, bringing out many problems and sound ideas. The most prevalent cause given was salary and wage increases; this was frequently attributed to the effect of unions. However, the survey question asking the percentage of hospital costs due to wages and salaries showed the following changes between 1969 to 1973.

CHANGES IN PERCENTAGE OF HOSPITAL COSTS ATTRIBUTABLE TO PAYROLL COSTS

	Increases		Decreases		No Change		Mean Net Change
	#	%	#	%	#	%	
Metro (32)	13	41	16	50	3	9	-1.02%
Outstate (101)	30	30	61	60	10	10	-1.62%
Aggregate (133)	43	32	77	57	13	10	-1.48%

Decreases clearly dominated increases and overall an average decrease of 1.48% was evident.

This list provides a worthwhile indication of what Minnesota hospital administrators are thinking today.

Table 11-B is a list of suggested legislative actions to alleviate these problems. It is interesting to note that there is much less cohesion among administrators in identifying the solutions to the complexity of problems they have.

TABLE 11 - PART A

LIST OF PERCEIVED CAUSES OF RAPID RISE IN HEALTH CARE COSTS

The dominant causes cited for increased costs were (in order of frequency mentioned with a total of 456 responses).

		Frequency
1.	Unions, salary increases and minimum wage requirements. Since 1969 wage rates have doubled for LPNs and other employees. Although more than 50% citing this as major cause felt that these were justified increases to bring hospital workers up to a living wage scale. Hospitals must pay decent wages to keep good personnel from going to other industries.	98
2.	Overall economic inflation of the U.S. economy. Hospitals are closely tied to inflatable commodities - fuel, food, supplies, labor, construction costs, etc. These increases are beyond their control and have forced some increases in service charges.	89
3.	General government specifications and requirements for federal and state reimbursement programs (Medicare, Medicaid). Many public demands for questionnaires and increased overall paperwork loan for these programs has led to need for additional personnel to process forms.	89
4.	The general population has more access to health services and also more expectations of them. Increases in comprehensive services have resulted. Higher standards of care combined with low-volume highly specialized care is more costly. Quality care demands have increased need for more specialized and expensive equipment. This has also often lead to costly duplication of services. (Another aspect of this problem is the rural physician's demand for equipment not really needed with the implied threat of leaving. This places the board in a bind to keep its doctors.)	83

TABLE 11 - A (CONTINUED)

		Frequency
5.	Higher levels of technical training and increased need for education of other health professionals.	24
6.	More sophisticated equipment and high replacement costs.	23
7.	Duplication of State and local survey efforts resulting in many hours of visits asking same questions. Lack of coordination between various levels of government programs (Medicare/ Medicaid).	16
8.	Costs of meeting new federal and local standards on safety and fire - OSHA (Occupational Safety Health Act)	11
9.	Employees Retirement Act and unemployment compensation costs.	8
10.	Unnecessary use of facilities such as in-patient hospital services, where less expensive ambulatory services would suffice. The emphasis of insurance reimbursement on in-patient services as opposed to out-patient services has supported this practice.	4
11.	Although costs per day have gone up, patient bills have increased less because of the decrease in L.O.S. by approximately two days.	4
12.	Insurance companies (including Medicare) seem to delay payments and consequently hospitals experience a slower cash flow than any other industry. At the same time, costs of supplies and mortgage payments must be met so hospitals end up paying high interest rates to meet their payments.	3
13.	Duplication of hospital beds and services. Existence of Hill-Burton funds in the 1960's encouraged new construction in some parts of the country where consolidation, sharing, or merger with existing facilities would have been more prudent. Development of these facilities, in hindsight, appears to have been in excessive in some areas of the country, and lower occupancy rates have resulted.	3

	Frequency
14. Hospitals and health care institutions have come to rely less on philanthropic monies during this period of time necessitating greater cost recovery from patients, insurance companies and government.	1

TABLE 11-B

SUGGESTIONS AND RECOMMENDATIONS FOR LEGISLATIVE ACTION AND THOUGHT

		Frequency
1.	Generally, legislation should be geared towards basic policy, not minute requirements. If the legislature feel it should continue making procedural laws, it should acquire all possible expertise and thorough understanding of hospital operation to accurately deal with escalating health care costs. Some regulations do not save money; they cost money.	15
2.	The State should consolidate and coordinate its agencies which inspect hospitals and have the various groups of inspectors from all 15 government agencies visit at the same time.	15
3.	Insurance Reform	9
	a) Permit coverage for out-patient (x-ray) service and other services.	(3)
	b) Remove Blue Cross from tax exempt status and help remove hospital discount for Blue Cross Association.	(1)
	c) Make hospital insurance payments payable only to the hospital.	(1)
	d) Look into ways of insuring prompt payments from insurance companies to hospitals (instead of allowing them to make interest on hospital funds).	(1)
	e) There is a need for intelligent legislation regarding health insurance policies. Often patients have been mislead as to their coverages.	(1)
	f) Workmen's Compensation - Many hospital claims are not paid by employers liability coverages because transient, relocated, or terminated employees are not available for proper claims processing.	(1)

		Frequency
	g) Disaster Coverages - There is a need to protect the responsible middle-class population from economic consequences of an economic medical disaster. The majority of this population group do not qualify for government assistance, but yet cannot bear these medical expenses.	(1)
4.	Uniform standards and questionnaire information for surveys. Develop a system of uniform financial reporting to all third party payers and to agencies of government, with public disclosure.	8
5.	Publicly and actively encourage hospitals to share expensive service and eliminate duplicated service and equipment. Physicians may oppose such coordination but it is the only way to reduce under-utilized facilities and services. Change the Certificate of Need Law to insure less duplication of equipment and expenses. Small hospitals should consolidate.	7
6.	The use of state legislator's influence on changing and improving Medicare regulations is desirable. Hospitals would like to see less complicated cost reporting systems, and would like to have Medicare and Medicaid pay our full charges, as private payors do, rather than the percentage their Cost Report allots. It would be interesting to have someone do a study to determine how much of the actual dollar in the Medicare and Medicaid programs is allocated to the bureaucracy and enforcers. The patient seems to be forgotten.	6
7.	Make old-fashioned PERA program voluntary for twelve months to determine truth.	6
8.	Greater emphasis on preventative health care, such as provided Maintenance Organizations and more use of surgicenters.	6
9.	Increase supply of MDs and allied health professionals. Establish a program adequate for State to provide physicians for rural areas, since many times the hospital is used as a stop gap for the doctor shortage.	6

		Frequency
10.	Have Medicare and State Board of Health develop and implement an alternate set of standards and regulations for various size hospitals. Do not lower the standards for small hospitals, just make them more realistic in view of the limited budget and manpower availability and utilization that is necessary in the small hospital.	5
11.	Require participation of hospitals in voluntary rate review (such as the system being offered by Minnesota Hospital Association) or assist MHA in strengthening rate review process if the voluntary approach does not prove to be effective.	5
12.	Legislation to curtail rising labor and material costs.	4
13.	PSROs (Professional Standards Review Organizations). Develop a good, fair reimbursement system tied to PSRO Quality Review.	4
14.	The committee should refer to the document prepared by the Minnesota Hospital Association, "Hospital Costs, an Analysis".* This report contains an excellent analysis of health care costs. The Committee should drop the adversary approach and work with the M.H.A. and hospitals in a true partnership effort.	4
15.	Life/Safety Code and Others (regulatory requirements). When complying with regulations involves large expenditures, hospitals would like to see that money be made available for meeting requirements, or have some standards removed.	4
16.	Investigate suppliers (supplies and equipment) to hospitals.	3
17.	Establish an area-wide regulatory commission with authority in both current financing of health care as well as approval of needed construction.	2
18.	Develop mechanisms for the development of prospective rates for reimbursement relating to utilization with penalties for under utilization of facilities.	2
19.	Education program on personal health, including anti-smoking campaigns, for the general public.	2

*Copy received at May 15 hearing and is on file.

		Frequency
20.	Allow smaller hospitals to buy at same rate as a group.	1
21.	More financial assistance should be given for medical education expenses-grants-in-aid for: a) Management courses for middle management. b) Training of system analysts. c) Cost containment methods. These are areas all hospitals are interested in improving, but for the average hospital in Minnesota costs are presently prohibitive.	1
22.	Encourage the elimination of the traditional method of billing for ancillary services in hospitals and substitute flat rate daily billings.	1
23.	Allow hospitals flexibility in use of beds and stop building so many nursing homes.	
24.	Develop criteria against which to evaluate costs and services. a) What are the <u>needs</u> of the state in health delivery? b) What objectives can we agree upon to meet those needs? c) What programs should be implemented to fulfill the agreed upon objectives?	1
25.	Insure that the same department of government that sets standards also pays the cost. The ideal system is a free enterprise, competitive system where the person responsible for initiating the quality and costs of care is also responsible for the costs of such care.	1
26.	Check into D.P.W. (Department of Public Welfare) computerized billing, it needs revision.	1
27.	National Health Insurance must be passed and set up equitably for all persons and workable administrative regulation must be part of any legislation.	1
28.	A general streamlining of the extremely restrictive licensure laws that constrain hospitals from the effective utilization of <u>personnel</u>.	1

		Frequency
29.	Retire all doctors practicing medicine who are older than 65 years of age.	1
30.	Legislation of mandatory arbitration and a cooling-off period in contract negotiations would be helpful and would reduce the number of inflationary wage settlement agreements that will be forthcoming.	1

E. SPECIAL SERVICES

Of concern is the cost of eight selected specialized services and facilities in relation to utilization and needs for these services in their geographic location. They were picked to demonstrate level of care and distribution of such services. This is an important area as it often reflects the influence of medical staff. A summary of the eight selected special services which were cited in the questionnaire shows:

LOCATION OF SPECIALIZED SERVICES

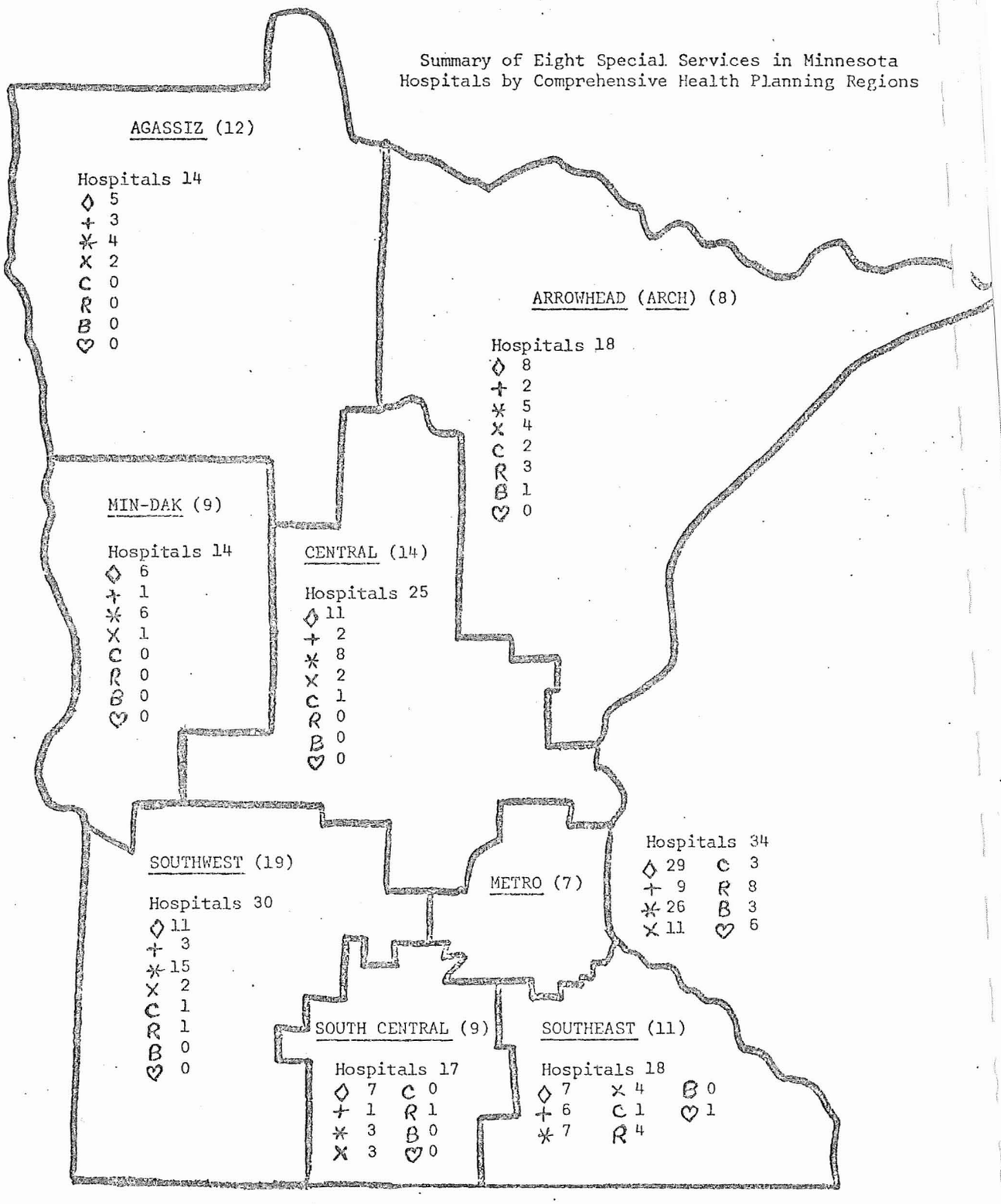
B	4	Burn Care Units
C	8	Cobalt Therapy Units
♡	7	Open Heart Surgery Units
R	17	Radium Therapy Units
X	29	X-Ray Therapy Units
+	27	Premature Nurseries
*	75	Coronary Care Units (CCU)
◇	84	Intensive Care Units

(See also Map III and Chart II)

Where hospitals had combined ICU-CUU, it was counted as an ICU only. A complete list of hospitals and services by Planning Areas is found in Appendix C. Special services are an area where further study should be given to the costs of installing, operating and supporting these services. Alternatives to excessive duplication in the same service area must be developed.

MAP III

Summary of Eight Special Services in Minnesota
Hospitals by Comprehensive Health Planning Regions



KEY

◊ Intensive Care Unit
\+ Premature Nursery
✳ Coronary Care Unit
X X-ray Therapy
C Cobalt Therapy
R Radium Therapy
B Burn Care Unit
♡ Open Heart Surgery
(n) Number of Counties in Region

POPULATIONS (1970 - TOTAL 3,721,198)

1.	Metro	1,874,612
2.	Agassiz	149,173
3.	Arrowhead	346,424
4.	Central	357,839
5.	Min-Dak	182,210
6.	South Central	218,077
7.	Southeast	299,266
8.	Southwest	293,597

For shared services, x-ray and cobalt therapy units were shared in the metropolitan area. In outstate, intensive care units and x-ray therapy units were each shared in three instances. Open-heart surgery units were shared in two hospitals in both the outstate area and in the metropolitan area.

An important aspect of the cost of special services is the utilization rate, just as the average occupancy rate affects the per diem charge.

Judging by the number of facilities that fail to even keep statistics on utilization for the selected special services surveyed, this data shows that the rationale for providing such services has not been economics.

In Chart II, the Subcommittee found that the range of those hospitals not supplying information is from 10 percent to 90 percent. It would appear that a facility which is operating under sound fiscal planning would only open such a service if the projected utilization would yield a break-even return on the investment within a few years after the unit's opening. The missing information indicates that this has not been a major concern of hospitals in their decision to open special units. Quality and accessability are other considerations. However, it is the Subcommittee's belief that both aspects - economics and quality - should be given serious consideration, and that the studied needs of the community should be given priority to the desires of the hospital's attending physicians.

CHART II

SPECIAL SERVICES - UTILIZATION RATES - MINNESOTA HOSPITALS[1]

Selected Special Services	Number Reporting Utilization	Mean(%)[2]	Minimum	Maximum	Total No.[3] Providing Service	% not giving Utilization Rates
Intensive Care Unit(ICU)						
Metropolitan	29	54%	13%	86%	31	
Outstate	27	47%	8%	76%	32	
Aggregate	56	51%	8%	86%	63	11%
Coronary Care Unit (CCU)						
Metropolitan	25	62%	23%	91%	27	
Outstate	37	41%	7%	75%	42	
Aggregate	62	50%	7%	91%	69	10%
Combined ICU - CCU (Concentrated Care Units - all are in outstate segment)						
Aggregate	14	46%	16%	79%	18	20
Premature Nursery						
Metropolitan	7	44%	10%	60%	9	
Outstate	5	18%	0	45%	10	
Aggregate	12	34%	0	60%	19	37%

[1] Excludes state and federal hospitals.
[2] Rounded to two places.
[3] More hospitals indicated offering the service than those which indicated utilization rates; these were not included in mean utilization rates. This number includes those in Column a .

CHART II - Page 2

SPECIAL SERVICES - UTILIZATION RATES - MINNESOTA HOSPITALS

Selected Special Services	Number	Mean(%)	Minimum	Maximum	Total No. Providing	% not giving Utilization Rate
X-ray Therapy						
Metropolitan	3	23%	0	50%	13	
Outstate	5	36%	4%	85%	10	
Aggregate	8	32%	0	85%	23	65%
Cobalt Therapy						
Metropolitan	1	7%	7%	7%	7	
Outstate	1	68%	68%	68%	3	
Aggregate	2	38%	7%	68¢	10	80%
Radium Therapy						
Metropolitan	0	-	-	-	8	
Outstate	2	84%	77%	90%	4	
Aggregate	2	84%	77%	90%	12	83%
Burn Care Units						
Metropolitan	2	59%	49%	69%	4	
Outstate	1	77%	77%	77%	3	
Aggregate	3	65%	49%	77%	7	57%
Open Heart Surgery						
Metropolitan	1	23%	23%	23%	9	
Outstate	0					
Aggregate	1	Insignificant determination				90%

A look at some of the other services which hospitals indicated they shared included:

- Laboratory Services
- Joint Purchasing
- Physical Therapy
- Employee In-Service Education
- Blue Cross Computer Service - Billing/Payroll
- Pharmacy
- Blood Banking
- Medical Record Librarian
- Laundry
- X-ray Therapy
- Purchasing Dietary & Medical Supplies
- Insurance
- Utilization Review

A number of outstate hsopitals also indicated sharing of certain specialized staff. Dieticians, nurse anesthetists, anesthesiologists, pathologists, radiologists, cardiologists, physical therapists and chief engineers were among those mentioned one or more times.

III: REPORT ON SITE VISITS

A. SUMMARY OF OBSERVATIONS

1. DESIGN

The hospital site visits were very helpful to the Subcommittee. The ten hospitals were chosen on a multifactor basis which reflected the size, location and questionnaire response or clarity.

Four visits were made to hospitals in the Minneapolis-St. Paul area: North Memorial, Midway, Samaritan, and Mt. Sinai. The other visits were to outstate hospitals across the state: Caledonia Community Hospital, Murray County Memorial Hospital, Bemidji Hospital, Milaca Area District Hospital, Long Prairie Memorial Hospital and Miller Dwan Hospital and Medical Center in Duluth. (Miller Dwan was considered a metropolitan hospital in the comparison statements).

Each hospital was visited by a team consisting of two members of the Senate Special Subcommittee (one Senator and one public member), a staff person, and an accountant acting as consultant to the Subcommittee on financial matters.

At each hospital the team met with the administrator and the assistant administrator, along with the financial administrator. The director of nursing and a board member were usually with the team for part of the day. Members of the medical staff also sat in for part of the discussion at several of the hospitals.

The teams spent an entire day at each facility and discussed the questions raised in the Subcommittee's letter

to the administrators. (See Appendix D.) The hospitals were asked to supply supporting documents for the team's review. The teams had the opportunity to speak with board members, and a brief tour of special services was made at each hsopital by the visiting team.

The purpose of the visits was to give the Subcommittee an opportunity to learn first hand some of the problems and complexities of hospital management and cost-containment problems.

2. GENERAL OBSERVATIONS

Small hospitals varied in the degree of fiscal soundness. Outstanding debt was a serious problem at two hospitals visited. Hospital officials expressed concern about the various regulations which have an impact on their operations. Problems with the Certificate of Need process, and the need for nursing home beds in some areas were also cited.

There was a variety of approaches to the use of accounting machines and related equipment. Some of the outstate hospitals are purchasing the Blue Cross shared computer service for payrolls and billing. One contracts with a computer firm in Illinois. At the larger hospitals, the administrators are coordinating the administrative teams which carry out the various management functions. The administrator was the primary liaison with the board of directors, and he worked closely with his staff for financial feedback on operations.

The need for special business machines should be weighted carefully against the size and patient days of the hospital.

While it has been suggested that, in larger hospitals, management could be more efficient by using such machines, the cost benefit analysis for smaller rural hospitals does not appear as favorable. In smaller hospitals good internal controls with reliable personnel may be more suitable than machines. One outstate hospital had business machinery which seemed too expensive for its needs. Other suggestions for efficiency, which do not involve equipment but rather improved management techniques, could be applied more universally. One such suggestion, the development of personnel utilization review mechanisms, was proposed in the testimony by United Hospitals.

All of the hospitals expressed a concern for cost but most have pursued only limited cooperation and coordination for planning of services provided in an area. A notable exception was in Duluth. Two hospitals visited had additional sources of funds from foundations and, therefore, had more flexibility for experimenting with innovative programs.

Educational programs do have an effect on expenses of operating. First, from the standpoint of the direct cost of education to the hospitals; and secondly, because facilities for educational training are required to have more services available for students in order to be part of such programs. A possible benefit of the teaching environment is constant introduction and practice of new ideas.

Nursing staff was a concern at most hospitals. There are problems in obtaining nursing staff in the time period prior to the graduation of a new group of nurses. Hospitals are deluged with applications in the spring, but if there is a

need for nurses later in the year, they must plan to hire them at the time of graduation. Stability is not as great a problem with RNs as it has been in the past, but there is a high turnover rate for LPNs and nurses aides. Some hospitals in the outstate areas would like to see local training programs for RNs and LPNs who wish to return to work after having been out of the profession for several years.

Another problem observed with hospitals is the limitations of designs when additions or expansion were built. Inefficient design can result in the overburdening of support services not suitable for the increased volume of operation.

Some hospitals built facilities for physicians' office space. When such facilities are constructed through the sale of revenue bonds, the amount of the net rental is required to be "not less than the amount required to pay the principal and interest" according to Minnesota Statutes, 1971, Section 447.47. This was not always done.

The Subcommittee noticed a diversity in styles of administration of hospitals and in concerns of administrators. It is required that all hospitals have administrators who are duly licensed and registered in Minnesota.

The visits were very helpful to the Subcommittee in gathering and refining information, and in gaining a fuller perspective on hospital operations and concerns with respect to fiscal matters.

3. COMPARISON STATEMENTS

The ten hospitals were divided into two groups of five.

Rural hospitals which all had less than 100 beds, and urban hospitals which all had more than 100 beds. The former group appears in Table 12 and the latter group appears in Table 13.

B. AUDITOR'S COMMENTS

By Dwight A. Smith, State Auditor's Office.

1. MANAGEMENT

In any non-profit or publicly owned hospital, small or large, the governing board is a group of community citizens who are very dedicated people, serving for little or no compensation. They are supposed to give policy direction to the hospital and appoint an administrator and/or director to act as the executive officer of the governing body. His or her ability is a major determinant of whether or not the board is a true governing body or they have little effectiveness.

Following are a few statements which are indicative of a governing body with little effectiveness:

"Have not been able to give much time to hospital operation."

"Do not know what services are needed."

"Have to rely heavily on hospital personnel for recommendations and judgment."

"Administrator and/or director knows what is needed better than we do."

It has been apparent for many years that some board members were not appointed for their ability but for prestige and recognition in their community, or for their financial contributions. It is a tough, time-consuming job to be a well-informed board member.

2. FINANCIAL MANAGEMENT

Generally budgets are prepared directly by the administrator or by finance committee; it has been a general board practice in prior years, if a hospital had shown a profit, not to scrutinize the budgets.

During the economic stabilization program and the present economic situation, a one-year budget for all practical purposes was, and continues to be, a difficult task due to the rapid rise of operating costs. Because of these costs, a monthly update of the annual budget is frequently necessary so an adjustment of charges can be made to reflect the additional costs. At the present time, any budget projected beyond one year would be meaningless, because of spiraling costs of supplies and services.

3. DEBT RETIREMENT

This is an area with which the Subcommittee should be very concerned. Due to the Medicare, Medicaid, and Blue Cross reimbursement formulas, these funds are hard to raise.

4. FINANCIAL CONDITION

Due to the high increase of costs for supplies, equipment and so on, during the economic stabilization program many of the hospitals experienced a decrease in working capital and, in some cases, have had to borrow monies for operating expenses. This is more prevalent in rural hospitals due to the fact that in prior years the revenues did not exceed expenses and Medicare had been reimbursing the hospitals on a cost basis. During the economic

stabilization program, the charges could not be increased enough to compensate for the current year's loss and/or high increase of other costs.

Most hospitals do not have cash reserves set aside for future construction or equipment purchases; therefore, a short or long term liability will have to be considered if any updating of services is to be done.

5. EQUIPMENT PURCHASING

During the past several years hospitals have been investing heavily in major equipment. Each hospital, in its own right, is proud of the service they perform and some equipment purchases have been based on the fact that another hospital has that equipment; therefore, "we" should have it too. In other cases, it has been demanded by the professional staff members, or it has been purchased to remain competitive in the area served by the particular hospital. Usually no monies have been available for purchasing equipment, thus forcing the hospital to purchase this equipment on conditional sales contracts. This increases the total cost of the equipment, in many cases twenty-five percent or more; this in turn must be reflected in charges.

In some hospitals, leasing has been popular and will become more so due to the fact that some third party reimbursements will recognize the rental fee as an operating expense; on a conditional sales contract, they will only allow the depreciation (which is usually less than the yearly principal payment) and interest expense. Again, the cost of rental increases the costs usually by twenty-five percent or more.

6. JOINT OR COMBINED PURCHASING AND/OR SERVICES

In most cases, joint purchasing has been beneficial; but in some areas, it has not. Some hospitals have been able to purchase items at a lesser cost as individuals rather than through group purchasing. It appears that the salesmen have many different price schedules depending upon the situation.

Using facilities of other institutions such as laundry, dietary, administration, and so on, usually increases rather than reduces the cost of these services.

7. ACCOUNTING SYSTEMS

Nearly all hospitals have detailed their accounts to reflect information needed for Medicare and Medicaid cost reporting and generally follow the A.H.A. chart of accounts. The different costs by departments in relation to other hospitals are due to the methods the administration uses for allocation of supplies, indirect expenses and other cost center allocations.

Many hospitals are sold accounting machines with the idea that they are programmed for all general accounting systems. However, after they are installed they are found to not function as expected for all systems and frequently for only one. Therefore, hospitals are left paying for equipment that does not function properly and increases personnel needs without increasing efficiency.

Some computer rental systems are available, but they are not designed to meet the needs of many of the hospitals, and the cost is quite high.

8. HOSPITAL CHARGES

Prior to the Medicare program, most hospitals were using a "rule of thumb" approach to establishing charges* - - i.e.,

Pharmacy	direct costs multiplied by 3
Medical surgical supplies .	direct costs multiplied by 3
Radiology and laboratory. .	direct costs multiplied by 2
Emergency, operating, delivery room, etc. . . .	comparable to neighboring hospitals.
Room rates	comparable to neighboring hospitals.

This usually generated enough revenue to exceed operating expenses.

*This is based on the auditor's many years experience in dealing with hospital accounting in Minnesota county hospitals across the state.

When Medicare came into being, reporting forms required hospitals to allocate all indirect costs to departments or a cost center, based on statistics, revenues or expenses. Based on this information, hospitals could adjust their charges to cover costs of each department or cost center. It became very apparent that charges could not be established using this formula as some charges would be extraordinary in cost centers where there is very little utilization.

Some hospitals are trying to adjust charges to costs in certain departments, but there are many departments where this cannot be done.

Most small hospitals are still using the old rule of thumb with some revisions.

C. AUDITOR'S COMPARISON STATEMENTS OF HOSPITALS VISITED

Tables 12 and 13 were compiled from information taken from financial statements prepared by the site visit hospitals' auditors for the last current or fiscal year.

The financial data presented in this report does not contain costs or revenues of attached nursing homes, extended care, or board and care facilities.

Information furnished in the replies to the hospital survey was not always substantiated in the financial statements.

This report is in conformity with generally accepted accounting principles applied on a basis consistent with one another.

COMPARISON STUDY ON HOSPITAL VISTS

TABLE 12 RURAL*

		Long Prairie	Milaca	Bemidji	Caledonia	Murray County
(1)	Number of Beds	34	45	72	4 months 25 8 months 13	48
(2)	Available Patient Days	12410	16,425	26,280	6,212	17,520
(3)	Number of Patient Days	5659	13,639	20,712	2,987	7,049
(4)	Percent of Occupancy	45.6%	83.04%	78.81%	48.09%	40.24%
(5)	Number of Admissions	955	1866	3465	537	1093
(6)	Patient Service Revenue	$558,295.00	$1,128,411.00	$2,176,295.00	$239,743.00	$467,095.00
(7)	Average Daily Revenue	98.65	82.73	105.07	80.26	66.26
(8)	Average Revenue/Admission	584.60	604.72	628.08	446.45	427.35
(9)	Total Expenses	$606,820.00	$950,712.00	$2004,567.00	$214,142.00	$551,277.00
(10)	Per Diem Cost	107.23	69.71	96.78	71.69	78.21
(11)	Average Cost/Admission	635.42	509.49	578.52	398.77	504.57
(12)	Professional Component					
	Anesthesiology	None	---	1,509.00	---	---
	Radiologist Fees (A)	26,719.00	38,609.00	26,825.00	11,835.00	15,402.00
	Pathologist Fees	1,744.00	3,975.00	77,246.00	D.B.	7,743.00
	Total Professional Cost	$284,463.00	$425,584.00	$105,580.00	$11,835.00	$23,147.00
(13)	Anesthesiology-% of Total Expense	---	---	.075	---	---
(13)	Radiologist - % of Total Expense	4.4%	4.06%	1.44%	5.53%	2.79%
(13)	Pathologist - % of Total Expense	.287%	.418%	3.85%	---	1.40%
(13)	% of Total Expense	4.69%	4.48%	5.27%	5.53%	4.20%

*Based on 1973 figures.

COMPARISON STUDY ON HOSPITAL VISITS

TABLE 12 RURAL*

	Long Prairie	Milaca	Bemidji	Caledonia	Murray County
(14) Deductions from Patient Service Revenues	$ 30,200.00	$ 124,622.00	$ 160,448.00	$14,605.00	$ 4,145.00
(15) % to Total Expenses	4.976%	13.11%	8.01%	6.82%	.752%
(16) % to Total Revenues	5.41%	11.04%	7.37%	6.09%	.88%
(17) Net (Loss) or Gain	$ 60,925.00	$ 82,267.00	$ 70,677.00	$10,996.00	$83,317.00
(18) Average Length of Stay (days)	5.93	7.31	5.98	5.56	6.45
(19) Medicare Utilization	32.00%	43.40%	47.87%	57.95%	57.00%
Other Revenues:					
(20) Non Operating	$ 10,730.00	$ 17,281.00	$ 25,571.00	None	None
(21) Operating	7,070.00	11,909.00	33,826.00	--	$ 5,010.00
Total Other Revenues	$ 17,800.00	$ 29,190.00	$ 59,297.00		$ 5,010.00

(A) - includes readings for E.K.G.s
B.B.- direct billing by physicians

(1) Number licensed by the Department of Health
(2) Number of beds multiplied by 365 days
(3) Patient days recorded by the hospital for year
(4) Ratio of total patient days to actual days
(5) Admissions recorded by the hospital for year
(6) Gross revenues earned from daily patient services for year
(7) Gross revenues divided by patient days
(8) Gross revenues divided by admissions
(9) Total costs required for operations for year
(10) Total expenses divided by patient days
(11) Total expenses divided by admissions
(12) Physician activities which are directly related to patient care or diagnosis and teaching
(13) Costs divided by total expenses
(14) Amounts not received by the hospitals due to contractual, Medicare and Medicaid cost adjustments, policy, administrative, and charity adjustments, and the provision for bad debts.
(15) Total deductions divided by total expenses
(16) Total deductions divided by total revenues
(17) Profit or loss realized from operations
(18) Total days divided by total admissions
(19) Ratio of Medicare days to total patient days
(20) Revenues received such as private contributions
(21) Revenues received from operations other than daily patient services

COMPARISON STUDY ON HOSPITAL VISITS

TABLE 13 METROPOLITAN*

	North Memorial	Midway	Mt. Sinai	Samaritan	Miller Dwan
(1) Number of Beds	546	337	273	150	179
(2) Available Patient Days	199,290	123,005	99,645	54,750	65,335
(3) Number of Patient Days	147,073	100,314	71,446	22,469	42,637
(4) % of Occupancy	73.80%	81.55%	71.70%	41.04%	65.26%
(5) Number of Admissions	24,651	12,467	10,129	1,920	3,026
(6) Patient Service Revenue	$20,089,062.00	$11,060,389.00	$10,352,526.00	$3,035,096.00	$4,773,132.00
(7) Average Daily Revenue	136.59	110.26	144.90	135.08	111.95
(8) Average Revenue/Admission	814.94	887.17	1,022.07	1,580.78	1,577.37
(9) Expense	$19,030,390.00	$ 9,830,736.00	$11,184,401.00A-1	$3,478,232.00A-2	$4,339,831.00
(10) Per Diem Cost	129.39	98.00	156.54	154.81	101.79
(11) Average Cost/Admission	771.99	788.54	1,104.20	1,811.58	1,434.18
(12) Professional Component					
Electrocardiology Fees	$ 62,240.00	$ 42,205.00	$ 62,440.00	$ 12,180.00	$ 5,600.00
Electroencephalogy Fees	41,135.00	2,400.00	10,464.00	--	--
Anesthesiology Fees	D.B.	D.B.	17,354.00	9,379.00	D.B.
Radiologist Fees	D.B.	158,463.00	290,938.00	36,511.00	D.B.
Pathologist Fees	367,809.00	124,864.00	222,274.00	50,970.00	113,490.00
Total Professional Component Fees	$ 471,184.00	$ 327,932.00	$ 603,470.00	$ 109,040.00	$ 119,090.00
(13) Electrocardiology - % of Total Expense	.44%	.43%	.56%	.35%	.13%
(13) Electroencephalogy - % of Total Expense	.22%	.02%	.09%	--	--
(13) Anesthesiology - % of Total Expense	D.B.	D.B.	.16%	.27%	D.B.
(13) Radiologist - % of Total Expense	D.B.	1.61%	2.60%	1.05%	D.B.
(13) Pathologist - % of Total Expense	1.93%	1.27%	1.99%	1.47%	2.61%
(13) % of Total Costs - Professional Component	2.48%	3.34%	5.40%	3.14%	2.74%

* Based on 1973 figures.

COMPARISON STUDY ON HOSPITAL VISITS

TABLE 13 METROPOLITAN (Cont'd.)

	North Memorial	Midway	Mt. Sinai	Samaritan	Miller Dwan
(14) Deductions from Patient Service Revenues	$1,154,840.00	$ 802,360.00	$ 17,737.00	($ 136,661.00)	$ 437,124.00
(15) % of Total Expense	6.07%	8.16%	.16%	3.93%	10.07%
(16) % of Total Revenue	5.75%	7.25%	.17%	4.50%	8.88%
(17) Net (Loss) or Gain	$ 769,980.00	$ 572,345.00	($ 221,362.00)	$ 193,193.00	147,638.00
(18) Average Length of Stay (days)	5.97	8.05	7.05	11.70	14.09
(19) Medicare Utilization	25.00%	35.00%	27.00%	61.10%	31.00%
Other Revenues					
(20) Non operating	--	$ 30,426.00	$ 349,873.00	$ 82,618.00	--
(21) Operating	$ 866,148.00	114,626.00	352,015.00	31,126.00	$ 151,461.00
Total Other Revenues	$ 866,148.00	$ 145,052.00	$ 701,888.00	$ 113,744.00	$ 151,461.00

D.B. - direct billing by physicians

(1) Number licensed by the Department of Health
(2) Number of beds multiplied by 365 days
(3) Patient days recorded by the hospital for year
(4) Ratio of total patient days to actual days
(5) Admissions recorded by the hospital for year
(6) Gross revenues earned from daily patient services for year
(7) Gross revenues divided by patient days
(8) Gross revenues divided by admissions
(9) Total costs required for operations for year
(10) Total expenses divided by patient days
(11) Total expenses divided by admissions
(12) Physician activities which are directly related to patient care or diagnosis and teaching.
(13) Costs divided by total expenses
(14) Amounts not received by the hospitals due to contractual, Medicare and Medicaid cost adjustments, policy, administrative, and charity adjustments, and the provision for bad debts.
(15) Total deductions divided by total expenses
(16) Total deductions divided by total revenues
(17) Profit or loss realized from operations
(18) Total days divided by total admissions
(19) Ratio of Medicare days to total patient days
(20) Revenues received such as private contributions
(21) Revenues received from operations other than daily patient services
A-1 Does not include $73,638.00 nonoperating expense reflected in net (loss) or gain
A-2 Does not include $462.00 nonoperating expense reflected in net (loss) or gain

IV: HOSPITAL BASED SPECIALISTS

A. GENERAL OBSERVATIONS

The situation with respect to hospital based specialists - radiologists, pathologists and anesthesiologists - became a special concern of the Subcommittee. In its questionnaire to hospitals, the Subcommittee asked some questions about compensation paid to them by hospitals, and about the services provided to hospitals by them. Inclusion of these questions was initially opposed by the Minnesota Hospital Association.

The Subcommittee was able to obtain some data on compensation for services of these groups. Information was provided by hospital responses to the questionnaire, but this information was fragmentary. Some hospital administrators did not answer the questions relating to hospital based specialists. Others failed to answer them completely or gave responses which clearly did not deal completely with the intent of the questions. Figures supplied by hospitals at site visits frequently differed from those reported in the survey. A meeting between Subcommittee staff and representatives of the three specialty groups yielded information on the ten site visit hospitals which conflicted in several instances with that provided by the administrators of these hospitals.

Thus, any information or conclusions as to hospital based specialists must be viewed as tentative. More study must be done before any firm conclusions can be drawn.

Even if more information were available, it would be difficult to define the exact nature and scope of the

situation with respect to hospital based specialists. Precise information as to fee arrangements and income of hospital based specialists is very difficult to obtain. Their arrangements with hospitals vary considerably. In some cases, they are salaried hospital employees. In others they receive a percentage of the gross income of the hospital department involved. In some cases they bill patients directly either from their office or through the hospital. In many cases their income is derived from a combination of these approaches plus additional outside fee for service work and independent laboratories. In most cases the specialists, individually or in groups, work for several hospitals (often with different agreements with each). Therefore, without access to their income tax records, it is difficult to determine precisely what these individuals are earning. Further, it is usually impossible to translate professional fees into wage rates for hours worked because most hospitals indicate that in addition to their regular hours, they are "on call" for emergencies. Some utilize hospital laboratories; some their own laboratories. Some must drive or fly to a number of different hospitals. Solo practitioners must also pay for other specialists to "cover" for them when they are not available. This makes it difficult to ascertain their overhead costs.

Some helpful information was provided by Dr. Craig W. Freeman, a pathologist; Dr. John A. Peterson, an anesthesiologist; and Dr. John B. Coleman, a radiologist. According to them there are about 150 pathologists in Minnesota, 226 anesthesiologists in Minnesota and South Dakota, and about 200 radiologists (including residents) in Minnesota.

According to Dr. Peterson, a 1974 survey of Minnesota anesthesiologists shows that gross income and hours of work are as follows:

GROSS INCOME AND HOURS OF WORK
FOR MINNESOTA ANESTHESIOLOGISTS

Gross Income
(106/226 responding)

Income	Number
$10,000-20,000	3
$20,001-30,000	5
$30,001-40,000	15
$40,001-50,000	40
$50,001-75,000	35
$75,000-100,001	3

Hours Worked Per Week
(117/226 responding)

Hours	Number
Less than 20	3
21 - 30	3
31 - 40	7
41 - 50	41
51 and over	63

Dr. Freeman reported that the range of income for pathologists was roughly $35,000 to $80,000.

Based upon information obtained at site visits, it appears that fees of hospital based specialists constitute between four and six percent of total hospital costs when the three groups of specialists are paid by the hospitals. Based on information presently available, it is impossible to definitely say if any of the ten hospitals which were visited are paying excessive compensation to specialist groups. In most cases, it was impossible to ascertain the precise time commitment made by the specialists in return for their compensation. In other cases there was conflict between information supplied by the hospitals and the specialists. For example, Samaritan Hospital reported paying $50,970 for pathology services ten hours a week. The specialists reported their time commitment at about twenty-seven hours per week.

The reported compensation paid for anesthesiology was

generally lower than the other two groups. This is partially a reflection of the fact that five of the ten hospitals do not employ anesthesiologists; four of these five use the services of Certified Registered Nurse Anesthetists (C.R.N.A.). Many of the other hospitals use C.R.N.A.s to supplement the work of their anesthesiologist. Nurse anesthetists receive considerably lower compensation than anesthesiologists, and competition from them could be producing lower compensation for anesthesiologists.

Efforts were made to trace the specialty groups serving the ten site visit hospitals in order to ascertain the number of hospitals served by them and their gross income. Since some specialists bill patients directly, and information was not available from all hospitals, the information is not complete. However, some preliminary conclusions are possible. The typical pathologist's gross income appeared to be slightly in excess of $70,000. The figures include only those sums paid by hospitals and exclude other sources of income such as independent laboratories. In most cases, their expenses for hospital work are minimal, except for travel. The income of radiologists varied more, and there were more instances of direct billing of patients in undisclosed amounts. The largest reported income of a hospital based specialist was $146,610 and was earned by a radiologist. An examination of the information obtained and estimates of the information which was not available indicate that the typical income range (from hospitals) of radiologists and pathologists in Minnesota is $60,000 to $80,000. Most

exceptions to this appear to be on the high side. (See Tables 14 and 15).

A 1971 survey by the Northlands Regional Medical Program found the following gross and net income for reporting physicians:

INCOME OF MINNESOTA PHYSICIANS

Medical Specialty	Number Reporting	Gross Income	Expenses	Net Income
General Practice & Family Practice	284	$63,288	$30,952	$32,336
Radiology	17	55,706	6,700	49,006
Pathology	19	68,263	21,744	46,519
Anesthesiology	24	49,542	11,079	38,463
All Physicians	703	66,603	27,085	39,518

The figures indicate that radiologists' and pathologists' net earnings are about 50% more than family practice/general practice physicians. Anesthesiologists' incomes, as indicated elsewhere, tend to be less than those of the two other hospital based specialty groups.[37]

The concern over hospital based specialists is not unique to Minnesota. "Testimony before the Senate Anti-Trust and Monopoly Subcommittee, a 1967 Justice Department suit against the pathologists and interviews with hospital administrators and pathologists indicate a simple explanation for the high compensation. The pathologist and other hospital medical specialists have a monopoly on the services they offer, and they use it to force hospitals to give them an unusual form of compensation."[38] Since hospitals are required to provide the services of the specialists in order to obtain Medicare certification and accreditation, they can be put in an unfair

TABLE 14

FOLLOW UP OF RADIOLOGY GROUPS FROM TEN SITE VISIT HOSPITALS - 1973 FIGURES

Group Size	Known Hospitals Served	Hospitals Reporting Prof'l Fees	Amount of Fees Reported	Reported Fees per Group Member	Comments
1	6 (rural)	5	$146,610	$146,610	1. One hospital served for 9 months; five hospitals served for entire year. 2. Radiologist hires other radiologists to cover when he is unavailable.
6	4 (urban)	4	$387,042	$ 64,057	1. Group serves two of the site visit hospitals.
1	6 (rural)	5	$ 50,550	$ 50,550	1. One hospital served for three months; five hospitals served for entire year. 2. Radiologist bills patients directly at one hospital.
6	4 (rural)	3	$381,720	$ 63,620	1. Group bills patients directly at one hospital.
1	1 (rural)	1	$ 32,344	$ 32,344	1. Names of other hospitals served were not available.
3	1 (urban)	1	$290,938	$ 96,979	1. Approximately one-third of the $290,938 went into a special fund for the use of the radiology department or the radiologists.
6	1 (urban)	0			1. Direct billing to patients

General Comments:
1. Two site visit hospitals employ radiologists whose primary practice is located outside of Minnesota.
2. Outside income from consulting, independent laboratories, etc. was not reported.
3. One group of six serving an urban hospital bills patients directly. They also have an independent laboratory staffed by a seventh member of the group.

Table 15

FOLLOW UP OF PATHOLOGY GROUPS FROM TEN SITE VISIT HOSPITALS - 1973 Figures

Group Size	Known Hospitals Served	Hospitals Reporting Professional Fees	Amount Of Fees Reported	Reported Fees per Group Member	Comments
1	6 (rural)	5	$ 16,249	$ 16,249	1. No information was reported by the largest hospital served.
2	2 (urban)	2	125,994	62,997	
3	2 (urban)	2	244,871	81,627	
5	3 (urban)	2	183,570	36,714	1. One large hospital did not report.
2	3 (rural)	1	101,000	50,500	
3	1 (urban)	1	222,274	74,091	1. Full time salaried employees.
5	1 (urban)	1	367,809	73,562	
1	1 (rural)	1	77,246	77,246	

General Comments:

1. Two site visit hospitals contract with professional laboratories.
2. Outside income from consulting, independent laboratories, etc. was not reported.

bargaining position in negotiating with them.

During the hospital site visits, some hospital administrators cited instances where hospital based specialists had requested that the hospital install new, and frequently expensive, equipment in their departments. In several instances, the administrators questioned the necessity for this new equipment or the ability of the hospital to afford it. However, in order to retain the services of these specialists, the hospitals puchased the equipment.

The specialists have generally had the support of the other doctors on the hospital staff in their demands for their lucrative contracts. In one instance, a hospital administrator, who asked to have his name kept anonymous, reported on his efforts to obtain a different radiology group for his hospital. He entered into negotiations with a different group of radiologists. At one point he was asked to meet with a representative of this group at a restaurant. When he arrived at the restaurant, he did not see the representative of the group there. Shortly thereafter, a person wearing dark glasses and with his coat collar turned up beckoned him over to an adjoining table. It turned out this was the representative of the new group who was seeking to avoid identification. They discussed a possible agreement which would have provided the hospital with increased services (including weekend radiological services and in-service training of the hospital radiology department employees by the new group) for a price that was substantially lower than the hospital was paying to its existing radiology group.

When they concluded their discussion, the representative of the new group took the piece of paper on which the proposed program of services was outlined so that he could destroy it. When the hospital administrator sought to implement the change from the former group to the new group, he was opposed by his hospital medical staff and was unable to make the change.

In some cases, hospital administrators also reported that their hospital medical staffs supported specialists against the hospital administrators when the specialists were seeking to have the hospital purchase the new equipment. It is unclear why the hospital medical staffs took these positions. In many instances it was undoubtedly a concern for retaining or obtaining a higher quality of medical care. Yet, in some instances, the administrators reported a belief that it was more a case of the medical profession "sticking together". (The Subcommittee recognizes that some of the statements by hospital administrators may have been self-serving attempts to place the blame for high hospital costs on someone else.)

Related to the question of hospital based specialists is the subject of hospital x-ray and laboratory departments. These departments are needed for many crucial tests which must be performed and analyzed quickly. In addition, however, these departments are usually profitable ones for hospitals. The charges for laboratory and x-ray services at hospitals tend to be higher than the charges for the same services at independent laboratories. According to figures supplied by Dr. Craig Freeman, comparisons for an independent laboratory

and a hospital in Minneapolis show:

COMPARATIVE HOSPITAL AND LABORATORY CHARGES FOR TESTS

Test	Hospital Laboratory	Independent Laboratory	Difference
Routine Urinalysis	$ 5.15	$ 4.00	$ 1.15
Complete Blood Count	12.90	3.50	9.40
Pregancy Test	16.50	5.00	11.50
Mono Test	5.30	4.00	1.30
12 Channel (SMA 12)	20.60	6.00	14.60

If the hospitals did not have the profit from these services to use as an offset against losses in their other departments, it is conceivable that they would have to raise the charges for the losing departments. Thus, an increased emphasis on independent laboratories would not necessarily result in a direct dollar for dollar saving in overall health care costs.

B. SPECIALISTS AT TEN MINNESOTA HOSPITALS

Information for this section was obtained from several sources: hospital survey forms, financial reports and site visits. In addition, verification and uniformity of informa-ticnal requests were secured through follow-up phone calls to hospitals' administrators, and representatives of speciality groups. Financial information is from 1973.

1. LONG PRAIRIE

Long Praire is served by nurse anesthetists based in Little Falls, Minnesota. They serve three other hospitals. Time commitment to Long Prairie is variable, but the group treats an average of thirty surgical cases per month. The anesthesiologists are reimbursed on a fee for service basis

with no separate billing to patients. Patients are billed by the hospital according to established rates with 15% added for supplies and general expenses. Total patient revenue for 1973 was $14,545 for anesthesiology. Professional fees expense was $11,292. The department is revenue producing for the hospital.

Pathologic examinations are performed by a Board Certified Pathologist who visits the hospital once a month for approximately two hours and is on call at other times. This pathologist also serves six other hospitals. Reimbursement for referrals from doctors in the attached clinic is based on 35% of gross revenue from tests performed for those doctors. The pathologist receives $200 per month from the hospital. (The hospital issues combined bills to the patient.) Total lab expenses were over $93,000 while other hospital salaries added another $12,197 in the professional expense component. The department was revenue producing for the hospital.

The hospital does all x-rays for the group of doctors in the attached clinic as well as for hospital patients. One radiologist serves the hospital. He serves five other hospitals and allots time, as needed, to Long Prairie. He is usually available four days a week. He regularly spends six to ten hours a week at the hospital plus the time for travel and call-ins. The hospital reimburses the radiologist 40 percent of gross departmental revenue for review of hospital patients less 5 percent for billing. This includes some instances where the clinic doctors, rather than the radiologist, read the x-ray of a hospital patient, subject

to review by the radiologist.. (This situation is not a-typical. It is common in rural areas for the treating physician to read and act upon an x-ray, subject to review later by the radiologist.) The patient receives a bill from the hospital only, and this charge is based on the Minnesota Relative Value Scale. Patient revenue generated by x-ray was $78,000. The radiologist was paid about $21,000 for inpatient radiological services with another $11,000 paid to the clinic doctors for their referrals of outpatient x-ray work. To these expenses must be added supplies, equipment and departmental salaries of $36,800 yielding a total expense of $68,000 for the department. The department was revenue producing for the hospital.

2. MILACA

There are no anesthesiologists employed by the hospital. Anesthesia is administered by a nurse anesthetist who lives in Milaca. The nurse anesthetist can obtain consulation from an anesthesiologist in the Twin Cities at no charge. Patients are billed directly by the hospital for anesthesia.

Two pathologists provide coverage to Milaca Hospital on a part-time basis. They travel to several hospitals and come to Milaca for approximately six hours a month. Reimbursement is a fixed salary of $200 per month for consultation. In addition, a pathologist performs all autopsies for a flat fee of $150 each. Gross revenue from the clinical and pathological lab was $125,987. Total direct lab expenses were $55,388 including $3,975 for professional fees. The laboratory was revenue producing.

Milaca is served by a group of three radiologists. The names of the other hospitals served was not available. Of this group, however, only one routinely comes to the hospital three days per week. Reimbursement is based on 40% of gross departmental revenue. There are no separate bills to the patient. There has been some discussion of a 5% charge for bad debts and general expenses. The radiology department generated $82,713 in gross revenue, which was offset by direct expenses of $62,634. Of this amount, $32,344 were fees for professional services. The department was revenue producing for the hospital.

3. MIDWAY

Midway Hospital uses a group of six anesthesiologists. They serve two other hospitals, but generally three are present at Midway daily through the completion of the surgery schedule. One anesthesiologist is always "on call" for emergencies. The hospital is not involved in reimbursement; the physician anesthesiologists bill patients directly. The hospital does charge patients a fee for the services of nurse anesthetists and the use of supplies and equipment. Anesthesia departmental revenue was $342,914 for inpatients and $3,923 for outpatients. Direct expenses were $211,102. The department is revenue producing.

A group of three physicians do pathological consultation for Midway. This group jointly serves Midway and Mounds Park Hospitals, but provides full coverage to Midway every day as needed. The group is paid as a percent of gross departmental revenue at the rate of 16%. At present, the

total payment for the two hospitals is limited by a range from $150,000 minimum to $165,000 maximum per year. The hospital bills patients directly with no additonal charge. The laboratory had $983,806 in inpatient revenue and $109,816 in outpatient revenue. Direct expense at Midway Hospital alone for the department were $688,353 of which $124,964 were professional fees to the pathologists in 1973.

Midway also uses a professional association of five radiologists. This group also works at two other hospitals. They provide full coverage with three radiologists at the hospital for most of the day, five days a week and coverage on weekends as needed. They are reimbursed on a unit cost system using the Blue Cross Relative Unit Value Scale developed by the Minnesota Radiological Society. The radiologists compute units delivered monthly and bill the hospital. The physicians bill for Medicare directly. Midway charges patients a flat rate, including professional services. X-ray revenue was $617,999 for inpatients and $272,723 for outpatients. Direct departmental expenses were $528,232 including a professional component of $158,463.

4. CALEDONIA COMMUNITY HOSPITAL

Caledonia does not employ or retain an anesthesiologist. A C.R.N.A. comes to Caledonia on a "on call" basis, and surgery is scheduled as he is available. He is paid on a fee for service basis at the rate of $30 for the first half hour and $5 each additional half hour, plus $5 travel allowance. The hospital issues a combined bill to the patient

adding $20 per case to meet its own expenses. Professional fees for anesthesia were $656. Other expenses were included in the operating room. Revenue chargeable to anesthesia was not available.

Pathology is contracted with a group of eight located in LaCrosse. They operate a professional laboratory which performs specialized services for quite a few hospitals over a widely dispersed area. This group has established rates for tests and examinations. The hospital in turn bills patients directly, adding a hospital service charge of $3 on each unit. Another service provided by the group is consultation and staff improvements. To render this service, one of the pathologists visits Caledonia once a month for several hours. The charge for this visit is $200. Revenue for the hospital laboratory was $34,160. Expenses were $22,462.

A group of five or six radiologists rotates their membership through Caledonia. They visit several hospitals on a rotating schedule originating in Iowa. Their weekly stop in Caledonia spans several hours. Remuneration is a flat 40% of gross departmental revenue, less 5% for debts and other expenses. All billing is done by the hospital. The x-ray department had receipts of $29,485 balanced by $14,236 total expenses including $10,409 for professional fees.

5. SAMARITAN HOSPITAL

Six anesthesiologists provide services to Samaritan as well as two other hospitals. They are present only as needed

since the hospital also employs a full-time nurse anesthetist at $15,000 per year. The group is guaranteed a minimum of $5,000 per month but the group bills separately. The hospital was forced to make up a deficit in this monthly guarantee eight months in 1973. Direct charges by the anesthesiologists are unknown. Patient revenue from the department was $66,558, off-set by $51,448 in expenses including $9,379 in professional fees which the hospital paid the group to meet the monthly minimums.

Pathologic examinations are done by a group of five physicians who also serve two other hospitals. They are available at all times but are usually present about ten hours per week. For this they are remunerated on a percent of gross revenue at the rate of 14%. The hospital issues combined bills to the patients. Gross revenue for laboratory was $373,067. Direct expenses for the department were $255,768 including $50,970 in professional fees.

X-rays are interpreted by a group of six professional radiologists, two of whom serve Samaritan regularly. This group works at two other hospitals and covers Samaritan as needed. A radiologist is usually there three to four hours a day during the week. The group is paid a fixed rate of 23% of gross departmental revenue. The department brought $237,910 in revenue against $136,296 in direct expenses. Professional fees paid for x-ray were $36,511; outside professional fees totaled $20,915. In addition, specialized radiology services are provided by a different radiologist who bills patients separately.

6. MURRAY COUNTY HOSPITAL

There are no anesthesiologists salaried or retained at Murray County Hospital. The county guarantees a C.R.N.A. $12,000 a year. Number or location of other hospitals served by this individual were unavailable. Revenue for the department was $4,204. Expenses were $3,872 and used to supplement income from fees to guaranteed amount.

Murray County Hospital's pathological examinations are done by a professional laboratory at established rates. This group of pathologists does not visit the hospital or perform any other services besides interpretation of test and examinations. Patients receive a combined bill with a $2 hospital service charge on each unit of service. Routine tests such as blood counts are performed by technicians on the premises and the results interpreted by the attending physicians. Operating revenue was $44,041. Expenses were $25,626 including $7,676 for "tissue examination fees" paid to the outside pathologists.

One radiologist from a group of unknown size visits Murray County Hospital one-half day a week. All tests and readings are done at this time, although attending physicians utilize and interpret films taken by a technician during the remainder of the week. Remuneration is a fixed 40% of gross x-ray revenue. Total radiology revenue was $32,178. Expenses were $23,382 with $15,402 expended for professional fees.

7. BEMIDJI HOSPITAL

There are no anesthesiologists employed or retained by

Bemidji Hospital. The hospital utilizes three nurse anesthetists. They serve four or more hospitals and practice in a group. They are paid a salary by Bemidji totaling $41,733 or about $14,000 each. The hospital issues one bill to patients including these professional expenses. Departmental revenue was $119,083.

Bemidji employs a pathologist full time. This physician serves five other hospitals from the premises. The pathologist receives 20 percent of adjusted departmental gross. In addition, he is paid $50 per month from each of the five hospitals in the Bemidji area which contract with the hospital for his services. His precise income for 1974 is unknown, but will be 15-20 percent less than the 1973 revenue of $77,246. These fees are in relation to $193,491 total expenses and $226,490 laboratory revenue, excluding blood bank.

The hospital is visited by a radiologist in solo practice. He is on-site three full days, two half days and some weekends. This individual additionally contracts with two other hospitals. The hospital provides him $500 in cash each year to administer the department. He pays the hospital $500 each year to rent office space there. The radiologist bills patients directly, and the hospital has no connection with this reimbursement. In addition, however, the hospital bills patients for other expenses. Departmental revenue was $110,160. Radiology expenses were $72,128.

8. MILLER-DWAN HOSPITAL

Miller-Dwan Hospital and Medical Center uses the services of five anesthesiologists. They serve one other hospital but provide service as needed for surgical schedule and emergencies. The anesthesiologists bill patients directly. There are no associated expenses for the hospital. Other anesthesia expenses are billed to the patient. The amount of these expenses was included with operating room expenses. Revenue was attributed to anesthesia and totaled $9976.

A group of two pathologists (three in 1974) perform all tissue examinations for Miller Dwan and two other hospitals. The group does all their work on the premises (including services to other facilities). Miller-Dwan receives fees for their services to other hospitals. They are reimbursed for 25% of adjusted revenue. Laboratory revenue from 1973 was $422,872. Direct expenses were $274,017 including $113,490 for "outside services". This figure includes other agreements but professional fees were about $101,000 for the pathologists. Total direct and indirect expenses were $351,415.

Six physicians perform radiological services on a rotating basis. They serve several other hospitals and come to Miller daily. They have no contract with the hospital and bill patients directly. Once again, the hospital charges patients separately for technicians and supplies. According to 1973 figures, departmental revenue was $131,145 and direct and indirect expenses totaled $114,352.

9. MT. SINAI HOSPITAL

A group of four anesthesiologists treat patients at the hospital on a full-time basis. They are reimbursed directly by patients on a fee for service basis. These charges were not made available for this report. In addition, the hospital pays the group $15,000 in salary and $2,254 in benefits to provide supervision and education to students at the hospital. The hospital receives $300,308 in revenue from its own bills to patients and $17,254 from the University for the supervision and education of students. This revenue is against $279,412 in direct expenses, including the professional fees and $201,553 for other salaries attributed to the department.

The pathology department has three full-time physicians. They serve no other hospital directly but provide training for students resident or rotating at Mr. Sinai. The annual salary was $77,334 for one and $71,385 each for the other two. These individuals also receive benefits amounting to an average of $9,171 per year. Revenue from the laboratory was $1,353,760. Direct expenses were $1,069,241, including $222,274 in professional fees.

Last year a group of three radiologists provided coverage which was billed at 30% of adjusted departmental revenue. Under this plan the hospital billed $290,938 for professional fees. About $90,000 of this went into a special fund for the use of the department. Effective August 1, 1974, Mt. Sinai contracted with a new group of radiologists. They provide full time coverage. They are reimbursed on a fee for service arrangement based on the

Minnesota Relative Value Scale. In 1973, the department had $874,324 in total revenue and $613,094 in direct expenses. The hospital bills patients directly with a single bill for professional and departmental charges.

10. NORTH MEMORIAL

North Memorial has a contract with a group of five anesthesiologists. They provide services as needed including "call" to Memorial Hospital. The anesthesiologists bill patients directly on a fee for service mechanism. Revenue was not available. The hospital maintains a department of anesthesiology staffed with nurse anesthetists. The department earned $988,106 in revenue while direct expenses totaled $603,789.

A group of five pathologists are available full time to perform examinations and provide supervision and teaching. They also work elsewhere. Reimbursement consists of 17% of gross departmental revenue. The hospital issues a combined bill to patients. Revenue from the laboratory was $2,146,294. Direct expenses, including $367,809 for professional fees, totaled $1,366,770.

North Memorial has no formal contract with the group of six radiologists performing diagnosis and treatment at the facility. The group provides services to others at an independent laboratory staffed by one member of the group, but is available as needed to the department. They bill patients directly and personal income was not available. The hospital bills patients separately for the use of the department: equipment, supplies, personnel, etc. Revenue

from this charge was $1,256,695. Direct expenses were $573,610 and indirect expenses were $278,610.

Table 16

PROVIDER BASED SPECIALISTS AT TEN MINNESOTA HOSPITALS

- REFERENCE SHEET -

Hospital Secialty	Type of Practice	Other Hospitals Served	Usual Time Commitment	Type of Reimbursement	1973 Professional Fees	1973 Departmental Revenue	1973 Direct Departmental Expense
1. Long Prairie Anesthesiology	None	-	-	-	-	-	-
Pathology	Solo	6	1 day monthly	$200/month and combined billing	$2,400 plus direct bil-	$ 95,307	$ 64,123
Radiology	Solo	5	6-10 hours/ week plus on call & travel time	35% of hospital revenue combined billing	$20,500	78,000	68,000
2. Milaca Anesthesiology	None	-	-	-	-	-	-
Pathology	Group (2)	Several	6 hr.mthly	$200 consultation fee $150 ea.for autopsies	3,975	125,987	55,388
Radiology	Group (3)	Several	3 days/ week	40% of gross revenue	32,344	82,713	62,634
3. Midway Anesthesiology	Group(6)	2	Daily	Fee for service/ Physician billing	N/A	346,837	211,102
Pathology	Group(3)	1	Daily	16% of gross revenue $150,000 Min.- $165,000 Max.*	124,864 (Midway only)	1,093,622	688,353
Radiology	Group(6)	2	Daily	Unit Cost (RVI)/ Combined billing/exc. Medicare separate	158,463	890,722	528,232

* For service to two hospitals.

PROVIDER BASED SPECIALISTS AT TEN MINNESOTA HOSPITALS

- REFERENCE SHEET - (Page 2)

Hospital Specialty	Type of Practice	Other Hospital Served	Usual Time Commitment	Type of Reimbursement	1973 Professional Fees	1973 Gross Departmental Revenue	1973 Direct Departmental Expense
4. Caledonia							
Anesthesiology	None	-	-	-	-	-	-
Pathology	Prof. Lab.	Several	Off site exam mthly	Set rate/Combined billing w/$3 chg.	None	$ 34,160	$ 22,462
Radiology	Group (6)	Several	4 hrs./week	40% of gross revenue Combined billing	$ 10,409	29,485	14,236
5. Samaritan							
Anesthesiology	Group (6)	2	About 20 hours/wk	Fee for service/ Physician billing/ $5,000 guaranteed mo.	9,379	66,558	51,448
Pathology	Group (5)	2	2 hrs./day	14% of gross revenue/ Combined billing	50,970	373,067	255,768
Radiology	Group (6)	4	2-3 hrs./day	25% of gross revenue/ Combined billing (inpatient)	36,511	237,910	136,296
6. Murray County							
Anesthesiology	None	-	-	-	-	6,783	6,384.08
Pathology	Prof. Lab.	Several	None	Fixed Rate/Comb. billing w/$2 chg.	7,743	40,675	28,573
Radiology	Group	Several	As needed	40% of gross/ Combined billing	15,402	31,267	22,538

PROVIDER BASED SPECIALISTS AT TEN MINNESOTA HOSPITALS

- REFERENCE SHEET - (Page 3)

Hospital Specialty	Type of Practice	Other Hospitals Served	Usual Time Commitment	Type of Reimbursement	1973 Professional Fees	1973 Gross Departmental Revenue	1973 Net Departmental Expense
7. Bemidji							
Anesthesiology	None	-	-	-	-	$ 119,083	$ 53,901
Pathology	Solo	None	Full time	20% of adjusted gross/Comb.billing('74)	77,246	266,490	193,491
Radiology	Solo	5	3 full - 2 half days/wk	Fee for service/ Physician billing	25,825 Retainer	110,160	72,128
8. Miller Dwan							
Anesthesiology	Group (5)	Several	As needed	Fee for service/ Physician billing	N/A	26,674	Part of O.R. Expense
Pathology	Group (2)	2	Daily	25% of Adj. gross Combined billing	113,006	422,872	274,017
Radiology	Group (5)	2	As needed	Fee for service/ Physician billing	N/A	131,145	81,508
9. Mt. Sinai							
Anesthesiology	Group (4)	None	Full time	Fee for service/ Physician billing	17,354	300,308	279,412
Pathology	Solo (3)	None	Full time	Salary	222,274	1,353,760	1,069,241
Radiology	Group (3)	None	Full time	Fee for service/ Combined billing	290,938	874,324	613,094
10. North Memorial							
Anesthesiology	Group (5)	None	Full time	Fee for service/ Physician billing	N/A	988,106	603,789
Pathology	Group (5)	None	Full time	17% for service/ Combined billing	367,809	2,146,294	1,366,770
Radiology	Group (6)	None	Full time	Fee for service/ Physician billing	N/A	1,256,695	573,610

FOOTNOTES: PART THREE

[1]Clifton R. Gaus, Norman A. Fuller and Carol Bohannon, "HMO Evaluation: Utilization Before and After Enrollment", presented at the American Public Health Association annual meeting, November 15, 1972.

[2]Testimony of Mr. Stephen Rogness, Minnesota Hospital Association, May 17, 1974, hearing.

[3]Testimony of Mr. Robert Nichols, Oklahoma Consumer Protection Agency, May 17, 1974, hearing.

[4]See the discussion in the section of this report dealing with "Alternative Ways to Combat Hospital Costs".

[5]"Small Hospital Implements 7-Day Operation", Journal of the American Hospital Association, October 16, 1973.

[6]Information submitted by the Minnesota Department of Health.

[7]Information submitted by Minnesota Blue Cross/Blue Shield.

[8]Louis A. Orsini in Viewpoint, published by the Health Insurance Council, January 1974.

[9]Testimony of William N. Wallace, President, United Hospitals, June 7, 1974, hearing.

[10]1974 Directory of Licensed Hospitals published by the Minnesota Department of Health.

[11]Testimony of Dr. Chester Anderson, Minnesota State Medical Association, June 7, 1974, hearing.

[12]Testimony of Dr. Walter McClure, InterStudy, May 17, 1974, hearing.

[13]A Statistical Profile of Short-Term Hospitals in the United States as of 1972, InterStudy, 1973, P. 35.

[14]Testimony of Mr. Carl Platou, President, Fairview Community Hospitals, November 15, 1974, hearing.

[15]Testimony of Dr. Walter McClure, InterStudy, September 13, 1974, hearing.

[16]Ralph E. Berry, Jr., "Perspectives on Rate Regulation", January, 1974.

[17]Ibid.

[18]Information submitted by Dr. Walter McClure, InterStudy, November 26, 1974.

[19]Testimony of Dr. Walter McClure, InterStudy, May 17, 1974, hearing.

[20]"Summary of Rate Review Activity", Hospitals, Journal of of the American Hospital Association, July 1, 1974, P.28.

[21]Testimony of Dr. Max Bennett, InterStudy, June 7, 1974, hearing.

[22]Testimony of Dr. Walter McClure, InterStudy, May 17, 1974, hearing.

[23]Information submitted by the Minnesota Hospital Association.

[24]Orsini, Supra, P.5.

[25]Information submitted by the Minnesota Department of Health.

[26]Definitions:

Minimum - lowest value in distribution.
Mode - value that occurs most often; where the concentration of observation is the most dense.
Median - the middle observation or the value above which half of the observations lie and below which half lie.
Mean - the arithmetic average; the sum of the observations in a sample divided by the number of observations in the sample.
Maximum - the highest value in the distribution.

[27]Hospital Statistics, 1974 ed., American Hospital Association, P. 22.

[28]Hospital Statistics, 1972 ed., American Hospital Association.

[29] Whenever an average is used in this section, it refers to survey data and methods previously described in computing figures.

[30]Hospital Statistics, 1972 ed, Supra.

[31]The Hill-Burton plan requires a projection of bed need in an area. The index used combines population projections, utilization experience in the area, and a factor of 85% occupancy. This index has proved fine for hospitals over 300 beds; however, for smaller hospitals, which are the majority in Minnesota, this rate (85%) would not support the services provided. Therefore, the Minnesota Department of Health has had to be flexible in its application of the general rule and make adjustments where needed.

[32]American Hospital Association, 1973 Review, P.14.

[33] Occupancy rates and average daily charges were not weighted by hospital size in determining the state-wide average. The adjusted occupancy rate would probably be higher, but other studies have shown that Minnesota is still lower than the national average. Due to higher costs in larger hospitals, the average bill also would be larger. (The Minnesota Hospital Association finds a weighted average figure of 72.1 percent in occupancy rate.)

[34] Figures based on Minnesota population in 1970 of 3,721,198 (1970 census figures) and the 1973 total admissions of 700,280. (AHA Hospital Statistics, 1974 Edition. P.102.)

[35] American Hospital Association, 1973 Review, P.14.

[36] Ibid.

[37] Northlands Regional Medical Program, A Profile of Medical Practice in Minnesota.

[38] Caveat Emptor, Vol. 4, No. 1, 1973, P.3.

PART FOUR: MANPOWER

I. PHYSICIANS

The physician is the most highly visible component of the modern health care system. Consumers choosing a physician ultimately purchase not only the personal service of the physician, but also other goods and services which the physician will select. The physician will determine the number and kind of tests to be performed; which patients are to be hospitalized; the length of hospitalization; the procedures to be performed in the hospital; the prescription of generic or name-brand drugs; the consultation of specialists; etc. Thus, by exercising broad professional discretion in the treatment of a patient, the physician shapes the ultimate cost to the patient for many other components of the health care system. While physician fees are an important factor in the study of health care costs, they may amount to only a fraction of the costs over which the physician exercises varying amounts of control.

A. PHYSICIANS' FEES

Between 1960 and 1965, national physicians' fees increased at an average rate of 2.8 percent, compared with an average of 1.3 percent for all items listed in the Consumer Price Index.[1] In 1966, national physicians' fees began to increase at a faster rate. Three reasons are commonly attributed to this trend: (1) the inception of the Medicare and Medicaid programs; (2)

the lowering of traditional financial barriers to health care by participation in the government programs and by increased enrollment in health insurance plans; and (3) increased consumer demand for medical services.[2]

The chart below indicates national trends through 1971:

NATIONAL TRENDS IN PHYSICIAN FEES, 1960-1971

Period	All Items CPI	Physicians' Fees
Pre-Medicare and Medicaid		
1960-65	1.3%	2.8%
Post Medicare and Medicaid		
1966	2.9%	5.8%
1967	2.9	7.1
1968	4.2	5.6
1969	5.4	6.9
1970	5.9	7.5
1971	4.3	6.9

Source: Consumer Price Index, Bureau of Labor Statistics

Table 17 shows a cumulative compilation of the percentage changes in national physicians' fees as measured by the Comsumer Price Index during the period 1960-1971. It is clear that physicians' fees rose over 57 percent during the decade, with the largest jump (37.4%) occurring in the period after the introduction of the Medicare and Medicaid programs.

TABLE 17:

PERCENTAGE CHANGE IN THE CPI PHYSICIAN FEE INDEX AND COMPONENTS IN THE UNITED STATES FROM 1960 TO 1971

Procedure	1960-70	1960-65	1965-70	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Physicians' Fee	57.5%	14.6%	37.4%	5.8%	7.1%	5.6%	7.0%	7.5%	6.9%
General Physician									
Office Visits	61.4	15.0	40.3	6.2	7.8	5.8	7.1	8.2	7.1
House Visits	63.3	16.8	39.8	6.8	6.9	6.5	7.5	6.9	6.6
Obstetrical Cases	53.5	12.2	36.8	4.4	7.6	5.2	7.9	7.3	5.2
Pediatric Care									
Office Visits	N/A	N/A	42.9	7.7	8.1	4.9	9.1	7.2	8.3
Pyschiatrist									
Office Visits	N/A	N/A	29.7	4.4	4.0	5.3	7.9	5.2	5.1
Hernjorraphy, Adult	N/A	N/A	26.0	3.8	5.5	4.6	4.0	5.7	7.8
Tonsillectomy & Adenoidectomy	45.8	13.3	28.7	4.3	5.3	4.9	5.2	6.1	6.6

Source: Consumer Price Index, Bureau of Labor Statistics

The escalation of physicians' fees was temporarily slowed under the economic stabilization program (1971-1974). Basically, physicians' fees were limited to an annual aggregate increase of 2.5%, but the charge for any single service could be raised more if the aggregate did not exceed the 2.5% limit. In 1974, the allowable percentage was raised to 4%, but no single service fee could be increased more than 10%. On April 30, 1974, all controls expired. The following figures show the trends under the economic stabilization program:

PHYSICIAN FEES UNDER ECONOMIC STABILIZATION

Period	All Items CPI	Physicians' Fees
Economic Stabilization		
1972	3.3%	3.1%
1973	6.2	3.3
1974 (Jan. thru May, annualized)	12.6	12.6

Source: Consumer Price Index, Bureau of Labor Statistics

It should be noted that the sudden rise in the January-May 1974 figures may be attributable to the expiration of controls during that period.

It would appear that the lifting of controls precipitated sizable increases in physician fees. The following figures, computed from Bureau of Labor Statistics, indicate an upward spiral of fees during the six months since the end of the economic stabilization program. It is not possible at this point to predict what pattern is likely to emerge over the next year

or two, although some observers do not anticipate any significant change if the demand for service increases and the shortage of physician providers continues.[3]

FEES AFTER ECONOMIC STABILIZATION

Period	All Items CPI	Physicians' Fees
Post-Economic Stabilization		
1974 (May - annualized)*	10.7%	13.0%
1974 (June - annualized)*	11.1	11.0
1974 (July - annualized)*	11.8	9.7
1974 (August - annualized)	16.5	16.9
1974 (September - annualized)	14.5	13.2

Source: Consumer Price Index, Bureau of Labor Statistics

*Computed from Bureau of Labor Statistics figures

In Minnesota minimum office and routine hospital visit fees were comparable to the national averages during 1971.

Economic controls appear to have been effective in the state, so that increases reported in the metropolitan area in December of 1973 indicated that fees had remained stable during the year, with minor exceptions.[4] By April of 1974, after the imposition of a 4% ceiling on increases, statewide fees had risen 3% over the previous year, which was less than the general inflation rate of 9%.[5] The Minnesota pattern since the lifting of controls seems to follow the national trend, and an upward swing is discernible. By November 1974, an overall increase of 7.7% was reported, bringing the 1974 fee level 10.7% over the 1973 level.[6]

Sixty-three percent of Minnesota physicians indicated they use the Relative Values Index in computing fee schedules.

Approximately 20% indicated they follow the Index completely.[7]

B. PHYSICIANS' INCOME AND EXPENSES

A study undertaken by the Northlands Regional Medical Program found that the average Minnesota gross income for a physician in 1971 was $66,603. Average expenses were $27,085,[8] or 28% more than the national average.[9] No explanation has been offered for the variance.

A significant portion of the physician's expenses can be attributed to increasing salary for office personnel, rising costs of supplies, office space, and equipment. The cost of medical malpractice insurance may be offered as an explanation for rising fees, but a recent study in Michigan concluded that the average cost of premiums accounted for only 2.4% of average physician revenue.[10] If the Michigan figures are correct, it seems unlikely that an expense which amounts to so small a percentage of the revenues could be a major impetus in rising fees. Another reason mentioned for rising fees is the cost of medical education. This would require a method by which the educational "investment" of the physician can be calculated and reduced to a prorated sum to be charged patients over a span of career years.

In 1971, the national average net income for a self-employed physician under age 65 was $32,371. This figure represents a 26.5% increase over the five years immediately preceding 1971.[11] In Minnesota, the average net income for physicians in 1971 was $39,518.[12] The income figures vary by specialty, with the general and family practitioner on the

lower end of both the national and state scales.[13]

Physician income has risen more dramatically than physician fees during the decade 1960-1971.[14] This would seem to suggest expanded physician productivity, which could be attributed to working more hours, seeing more patients, performing more services for a stable patient load, using support personnel more effectively, delegation of more procedures, or a combination of any of the above factors.

Minnesota physicians worked an average of 54.9 hours per week in 1971, and this figure may be slightly higher than the national average.[15] The average number of hours spent in direct patient care during 1971 was 46.2 (solo and partnership practitioners) and 44.5 (group practitioners).[16] Minnesota physicians worked an average of 5.3 days per week, and 47.0 weeks per year,[17] as compared to 46.8 weeks during 1970. The average weekly patient visit count was 129.1, but the figure varied considerably by specialty.[18] The national average patient visits per week for the same period was 137.[19] If conclusions may fairly be drawn from these figures, the average Minnesota physician serviced approximately 26 patients per ten and one-half hour working day.

Minnesota physicians responding to a questionnaire developed by the Northlands Regional Medical Program indicated that 81% of the daily patients are seen by the physician, and the remaining 19% are serviced by other office personnel.[20] This statement does not appear to correlate with the answer to another series of questions contained in the questionnaire relating to delegation of functions.

When questioned about the percentage of specific services which are delegated to other office personnel, the physicians were almost unanimous in the 100% delegation of the billing function. Only 37% delegated all of the processing of insurance claims; 22% delegated all of the injections, 9% delegated all of the routine dressings, and 3% delegated all of the well person physicals.[21] The figures may suggest a reluctance on the part of physicians to delegate many substantive tasks to subordinates, even in the face of increasing demand for service. It was unclear from previous answers what procedures were performed for the 19% of the patients not seen by the physician; it seems unlikely that the services would be only clerical in nature.

C. REGULATION AND CONTROL OF THE PROFESSIONAL FEES

There are two commonly suggested channels of regulating and controlling physician fees: Peer review and third party reimbursement. The former is clearly internal to the profession; the latter contemplates external regulation.

1. PEER REVIEW

While the federal mandate to the profession to form Professional Standards Review Organizations (PSROs) was handed down in the Social Security Amendments of 1972, there has been no meaningful experience under the Act from which any conclusions may be drawn. However, PSRO review is mandated only for Medicare and Medicaid patients, and may leave unreviewed those patients under private pay or non-government third party

reimbursement schemes. In effect, the problems inherent in different reimbursement rates for the same service may continue even with the advent of PSRO.

Minnesota, however, has had prior experience with the PSRO concept. The Foundation For Health Care Evaluation has been in operation in the metropolitan area since 1969. It has recently been designed by HEW as the recipient of a federal grant to perform PSRO functions within the metropolitan area. Foundation review extends to all patients in the covered area.

The Foundation claims 83% of metropolitan physicians have joined the organization and have agreed to abide by the rulings of the peer review panels in fee disputes and utilization review proceedings. The Foundation only reviews fees which exceed norms established by its twenty-one specialist panels in accordance with the usual and customary fees in the area. The review process is initiated by a complaint from a patient, a physician, or an insurance company. If the fee is found to be excessive, the doctor is notified of the reduction. The insurance carrier is also notified, and it in turn notifies the patient of any disallowance. It was revealed at the hearing on August 16, 1974, that for practical purposes the physician is not precluded from seeking recourse against the patient for the difference between the fee charged and the fee allowed (or payed by the third party reimburser). The Foundation may provide expert testimony in any litigation arising from a disallowed fee, and may inform credit agencies of the reason for the patient's failure to pay the physician's fee. To the

extent that the consumer may still be liable for a fee already judged excessive, this system of peer review may be meaningless.

However, in the long run there may well be some ripple effects within the profession. Fees which might ordinarily have been charged may be voluntarily reduced by the provider in the face of a possible complaint; or fees which may have been less than the established norms may be raised to those norms. In addition, the standard of care may rise generally if individual practitioners are subjected to scrutiny by other members of the profession. There is no concrete evidence available to substantiate any of these theories.

It is worth noting that the commercial insurance industry works closely with the Foundation. Sixty-seven percent of the administrative expenses of the Foundation were underwritten by the industry in 1973. The remaining 33% was underwritten by Blue Shield/Blue Cross of Minnesota. The funding pattern has recently been changed, according to Foundation officials. Sixty percent of the Foundation's expenses are covered by the PSRO grant; thirty percent are now met by a $1 to $2 charge added to each hospital patient's bill in the Metropolitan area, and ten percent is covered by fees charged for the filing of a complaint. The Foundation charges $15 for the filing of a complaint.

Of the 1,989 complaints received January to October 1973, 1,906 were from the insurance carriers, 50 from physicians, and 33 from patients aggrieved by fees. This would seem to suggest that the insurance carriers feel at ease in the peer review

system, and that they benefit in amounts which were sufficient in the past to justify the underwriting of significant portions of the Foundation's expenses. The low consumer complaint rate may suggest that third party reimbursers are assuming the role of complainant, or that consumers are unaware of the process, or do not feel at ease in the peer review system, or feel nothing will be gained by engaging in a fee dispute. The Foundation states that efforts are in progress to inform consumers of the fee review process.

In the end, however, it may be asking too much of the profession to effectively control professional fees. In a system in which several parties (the patient, the physician, the insurance carrier) may have conflicting interests in the setting of fees, the delegation of a watchdog function to a single interested group or a body under the control of a single interested group may not produce equitable regulation.

2. THIRD PARTY REIMBURSEMENT

The most common mechanism for physician reimbursement is the fee for service. Because so many patients are covered by third parties (the Blues, private insurance, government programs), the physician deals with a small number of representatives rather than a large number of patients. To the extent that the physician can negotiate different rates for different groups receiving the same services, he may increase his income. If a single agent represents all patients, the physician loses bargaining power and his income will be determined largely by the third party.

The state can attempt to control the negotiation and reimbursement system in three ways: (a) direct reimbursement for service; (b) concentrated regulation of the insurance industry; and (c) public information programs relating to insurance policies and physician fees.

In terms of direct reimbursement, unless the state is the responsible party for a majority of the consumers, the physician will still be free to negotiate different (and many times higher) rates with the private sector. As the state's direct responsibility declines, its influence on the health care market diminishes. If the state engages in concentrated regulation of the insurance industry, possibilities of uniform or near uniform rates increase. The bargaining position of the physician is lessened if he is forced to deal with an industry operating within certain constraints. Finally, the state can act as an information source for consumers purchasing insurance or health care. By channeling purchasing power to certain economic alternatives, the state may effect a more consumer-oriented market for health care.

D. MEDICAL MALPRACTICE

It is generally accepted that the threat of malpractice litigation prompts physicians to alter the services they provide in various ways, although the extent and qualitative impact of such altered modes of practice remain in dispute. The general term "defensive medicine" is used to describe all those medical practices and procedures which are induced by a threat of malpractice liability. While this sort of definition is

necessary to identify practices which constitute defensive medicine, it may lead to the erroneous conclusion that such procedures are all bad. However, what a physician does purely to avoid liability may be sound medical practice.

Two types of defensive medicine are identifiable: positive defensive medicine and negative defensive medicine.

"Positive Defensive Medicine" refers to tests or diagnostic or therapeutic procedures which would not be performed in the absence of a threat of liability. While some of these practices may be wise in terms of liability, the tests may be dangerous to the patient; they do increase the cost to the patient; and scarce medical resources might better be used elsewhere. Though the prevalence of positive defensive medicine has not been measured, some trends may be observed in a 1972 survey of members of the American Medical Association. Seventy percent of the 94,000 respondents indicated that fear of malpractice liability caused them to order extra procedures. Fifty-nine percent ordered extra consultations and forty-four percent ordered extra hospitalizations.[22]

Similar results were obtained by poll of the American College of Surgeons. Over half of the respondents acknowledged some use of defensive medicine techniques; 61 percent admitted ordering more x-rays; 53 percent more laboratory tests; 51 percent more consultations; 55 percent amplifying medical records.[23]

"Negative Defensive Medicine" refers to a refusal to perform certain procedures because of the threat of malpractice liability, even though they may be warranted by the patient's

condition. For the most part, empirical documentation of such practices is lacking. However, the Ribicoff Subcommittee on Executive Reorganization concluded in its study of malpractice that there is some tendency among physicians to avoid taking referrals or performing corrective surgery.[24] Also, the American College of Surgeons survey found that 21% of the surgeons polled admitted eliminating or restricting certain procedures.[25]

A special form of negative defensive medicine is the refusal to delegate tasks to allied health personnel. The physician remains liable for acts of delegates when they perform duties he assigns to them. Experience does not seem to support the theory that use of physicians' extenders leads to an increase in malpractice claims, but the fear of liability apparently prompts physicians to refrain from the use of such manpower. To the extent that the physician's refusal to delegate tasks curtails his own productivity, it may be seen as adding to the scarcity and cost of medical care.

In addition to peer review, two other proposals have been advanced to help eliminate the increased costs incurred through the practice of defensive medicine. The first, no fault medical malpractice insurance, would build on the concept now being implemented in the automobile industry. The patient would be compensated for injuries suffered if they fit into an established legal definition of "unexpected outcome" of the treatment. The second proposed solution is patient insurance, purchased before entering a hospital or submitting to treat-

ment. The patient's insurer would cover all injuries arising out of medical malpractice. Whether either of these two solutions would in fact eliminate or even decrease the defensive practice of medicine is speculative.

II. ALLIED HEALTH MANPOWER

A. NURSES

There are approximately 44,847 nurses in Minnesota.[26] The ratios of employed nurses to total population are 167.2 LPNs (licensed practical nurses) per 100,000; and 468.5 RNs (registered nurses) per 100,000.[27] National figures show that the Minnesota ratio of employed RNs per 100,000 population is higher than the national average of 361 per 100,000; while the Minnesota ratio of employed RNs per 100,000 population is lower than the national average of 206 per 100,000.[28] However, 37.1% of all LPNs and 43% of all RNs are employed only part-time; and thus the ratios do not reflect full time coverage of the population. Only 80.9% of the currently credentialed LPNs and 81.3% of the RNs are employed either part-time or full time.[29]

The relationship between nurses (and other allied health manpower) and health care costs lies in the salary levels and productivity of the industry as a whole.

1. WAGES

Salaries have risen steadily since the late 1960's. In addition to general wage and price inflation, there are several factors which have a direct effect on the salary levels in the health care industry: unionization of health care manpower;

the civil rights and women's liberation movements; minimum wage law trends; variations in wage rates for overtime, night or holiday work, or hazardous duty stations. The following charts indicate trends for nursing salaries within various occupational settings.

OFFICE NURSES IN THE UNITED STATES

	1965	1967	1970	Percent Increase 1965-1970
Clerical Personnel				
Beginning		$3,432	$3,120-4,680	
Experienced	$3,952	4,368	4,524-6,396	
			Midpoint-5,460	38
Registered Nurse				
Beginning		4,264	3,848-5,876	
Experienced	4,576	5,512	5,772-7,488	
			Midpoint-6,630	45
Technician				
Beginning			3,900-6,396	
Experienced	4,784	5,460	5,200-8,216	
			Midpoint-6,708	40
U. S. Percentage Increases				
Percent increase in weekly earnings of nonsupervisory workers on total private nonagricultural payrolls: 1965 to 1970				26
Percent increase in weekly earnings of nonsupervisory workers on service (private nonagricultural) payrolls: 1965 to 1970				31

Source: Rising Medical Costs in Michigan, p. 206

TABLE 18

NON-OFFICE NURSES IN THE UNITED STATES

Occupation	1962	1963	1964	1965	1968
Nurses:					
Registered Nurse:					
General Duty Nurse a non-Federal Hospital	$3,900	$4,498			$6,420
Industrial Nurse	4,940-5,460		$5,486		6,630
(Range by area)	(3,900-6,162)				
Nurse Educators and Administrators		6,000			8,820
Government Employment:					
Veteran's Administration		5,035-5,820		$5,505-6,050	6,321-7,330
U.S. Public Health Service		4,828		5,093	6,507
Military Service		4,265		4,610	5,715
Other Federal Agencies		4,565		5,000	5,732
Public Health Nurse with Local Government Agency	4,902		5,313		7,225
Licensed Practical Nurse in:					
Hospitals		Average-3,354			
		2,808-3,796			4,630
Federal Government Agencies		3,820		4,005-6,485	4 600
Public Health Agencies		3,757			5,063
Nursing Homes		3,757			4,420

Source: Rising Medical Costs in Michigan, p.202

Wage trends for other health manpower have followed similar patterns. To the extent that some salaries within the industry may have been at artificially low levels in the early 1960's, the raises may be justifiable on the grounds of equity. However, continuing escalation of wages will only aggravate rising health care costs, as salaries constitute a major expense to both institutions and physicians. Some equitable solution should be worked out to balance the interests of industry workers and the public.

2. NURSING FUNCTIONS AND PRODUCTIVITY

Commentators disagree as to whether a shortage of allied health manpower has been clearly demonstrated,[30] but there is little disagreement that the health care industry is plagued by mal-distribution and mal-utilization of certain workers.

There is little evidence to suggest that increasing the number of nurses(and other allied health manpower) alone will be the solution to the problem of mal-distribution in certain areas. In fact, there is some support for the theory that allied health manpower may be subject to the same migratory patterns as physicians, and that incentives to settle and practice in urban areas exist on all levels of the industry. If this is the case, introduction of new incentives, such as employment in the public sector in underserved areas, must be considered by the state.

Even if mal-distribution and shortages cease to be characteristics of the health care industry, the problem of defining the scope of nursing practice remains. The Minnesota Nurses

Association takes the position that costs may be controlled (but probably not significantly lowered) by widespread use of public health nurses. By raising the general level of health in the population, fewer individuals should become seriously ill, and bills for acute care, when rendered, should be lower. The Association also suggests relieving nurses of all non-nursing functions they now are required to perform.

A recurring problem in the liberal use of nurses for at least preventive care in the private or public sector is the seeming reluctance of physicians to delegate duties in the face of potential legal liability. In addition, procedures which may be reimbursable by third parties if performed by a physician may not be reimbursable if performed by a nurse.

Re-examination of utilization of nurses may require a complete restructuring of the health care industry. At least one commentator has suggested a job and task analysis of all health care positions in order to arrive at a new functional integrated system of delivery.[32] Another commentator suggests such a restructuring will effect major social change and thus may be resisted by certain elements in the industry.[33] Whether more effective utilization of nurses will control ultimate cost to the consumer has not been empirically documented. The Nurses Association does point out that even if no significant cost reduction does result from the expansion of nursing practice, better patient treatment for the same price may be effected, and this too, is a valuable social goal.

B. PHYSICIAN EXTENDERS

The potential use of nurses to expand industry productivity and help contain costs has already been examined. Within the last few years a new category of health personnel, the physician extender, has emerged. Known also as a physician's assistant, a medex, or a nurse-practitioner, the individual is one who has been specially trained to perform certain functions usually performed by a physician.. The physician extender is trained to work in a setting with a fair degree of autonomy, but still performs under the general direction of a physician. The rationales for the use of physician extenders are the alleviation of problems caused by the physician shortage; reduction of the cost of medical education; increased access to primary and emergency care; expanded physicians productivity; more appropriate and economic use of highly skilled physicians; more individualized treatment for the patients; and possible reduction in cost to the patient.

Although there has not been sufficient experience with physician extenders from which to draw definitive conclusions, certain key issues have begun to emerge:

(a) Will the quality of care remain constant? Can the physician extender provide a quality of care equal to that provided by the physician? The answer appears to be yes, within the limited procedures performed by the extender.

(b) Does employment of a physician extender expand the productivity of the physician? How much time will be spent supervising the worker? Is the physician in fact freed to make better use of his or her own skills? Studies suggest that

physician productivity can be expanded by as much as 149%,[34] but experience seems to show that actual expansion is closer to 20-50%.[35] At the lower end of the range, it simply may not be economically feasible to employ an individual at a certain salary level to expand productivity only 20%. A second key to increased productivity is the assumption that the physician will maintain his own productivity level once he has engaged an extender. Some physicians appear to work fewer hours themselves, and thus maintain or only slightly increase the productivity of their practices.

(c) To what extent is the physician reluctance to employ extenders attributable to fear of potential legal liability for the actions of the extender? Some commentators have suggested the reluctance of the medical profession to make use of semi-autonomous personnel can be attributed to other motives, such as loss of control over the entire spectrum of patient care.[36]

(d) What is the extent of patient acceptance or rejection of extenders? Public education may be needed to induce widespread confidence in and use of non-physicians.

(e) What is the scope of extender practice? Should each individual extender be available for tasks delegated by the individual physician according to his or her needs, or should the scope of practice be strictly limited by law and licensure?

(f) Should the physician be allowed to profit from the services of an extender? Should reimbursement for the services of an extender be made at the same rate as for those of a physician, or should a cost reduction be passed on to the consumer?

In summary, present experience with extender personnel is inadequate. Many issues are unresolved, so that it is difficult to say with certainty that widespread use of physician extenders should be actively supported by the state.

FOOTNOTES

[1]Consumer Price Index, Bureau of Labor Statistics, United States Department of Labor.

[2]National Health Insurance Resource Book, House Committee on Ways and Means, April 1974, p.52.

[3]Rising Medical Costs in Michigan, Michigan Department of Social Services, July 1973, p.99.

[4]Foundation for Health Care Evaluation

[5]Ibid.

[6]Ibid.

[7]A Profile of Medical Practice in Minnesota, Northlands Regional Medical Program, Inc., June 1973, pp.114 and 146.

[8]Ibid., p. 129.

[9]Ibid., pp. 129 and 146.

[10]Rising Medical Costs in Michigan, op. cit., p. 79.

[11]National Health Insurance Resource Book, op. cit., p. 54.

[12]A Profile of Medical Practice in Minnesota, op. cit., p. 129.

[13]National Health Insurance Resource Book, op. cit., pp. 56-57; A Profile of Medical Practice in Minnesota, op. cit., p. 129

[14]National Health Insurance Resource Book, op. cit., pp. 54-55.

[15]A Profile of Medical Practice in Minnesota, op. cit., p. 18.

[16]Ibid., p. 20

[17]Ibid., pp. 22-25.

[18]Ibid., pp. 52-55.

[19]Rising Medical Costs in Michigan, op. cit., p. 74.

[20]A Profile of Medical Practice in Minnesota, pp. 54 and 142.

[21]Ibid., pp. 145-146.

[22]Survey described in Trial, March/April, 1973, p. 65.

[23]Ibid.

[24]Medical Malpractice: The Patient Versus the Physician, A study submitted by the Subcommittee on Executive Reorganization to the Senate Committee on Government Operations, November 20, 1969, pp.7-8.

[25]Trail, op. cit., p. 65.

[26]Minnesota State Board of Nursing.

[27]A Technical Report on Health Manpower, Minnesota State Planning Agency, April 1974, p.6.

[28]National Health Insurance Handbook, op. cit., pp. 178 and 182.

[29]A Technical Report on Health Manpower, op. cit., p. 6.

[30]Remarks by Archie S. Golden, M. D., M.P.H., at the American Public Health Association Annual Meeting, October 23, 1974.

[31]Testimony of Kirsten Kurtz, R.N., Minnesota Nurses Association, before Special Senate Subcommittee on Health Care Costs, August 16, 1974.

[32]Archie S. Golden, op. cit.

[33]Testimony of Aaron Lowin, Ph.D., Interstudy, before Special Senate Subcommittee on Health Care Costs, August 16, 1974.

[34]Rising Health Care Costs in Michigan, op. cit., p. 272.

[35]Aaron Lowin, Ph.D., op. cit.

[36]Ibid.

PART FIVE: CONSUMERS

The Subcommittee examined two aspects of the effects of health care costs on consumers. First, the Subcommittee considered the effects of catastrophic medical expenses upon individuals and families. Second, the Subcommittee briefly examined the question of whether or not health care consumers are receiving the full benefit for their health care dollars, and whether or not these dollars are spent in the most cost effective way.

Mrs. LaVonne Dickinson testified as to the many problems she has had with the health care delivery system as the mother of two children with cystic fibrosis. Her problems arose from dealings with many of the segments of the health care industry. Mr. and Mrs. Dickinson's daughter, Sandra, and their son, Michael, both have cystic fibrosis. Sandra's case has been more serious in recent times. She was hospitalized in November of 1973 and used up her major medical insurance coverage at that time. (The Dickinson's insurance company has paid about $20,000 for the treatment of Sandra Dickinson.) Sandra Dickinson was hospitalized again in January of 1974. She was ineligible for the major medical coverage under her parent's insurance policy since it required her to spend six months without hospitalization in order to re-establish her eligibility.

The Dickinsons attempted to obtain assistance from the Crippled Children's Services Division in the State Health Department. However, those funds ran out about the same time as the

Dickinsons' insurance coverage expired. They attempted to obtain Medical Assistance, but were told that they were required to have a $3,000 "spend-down" before they could obtain assistance. When they were finally notified of their eligibility for coverage, in May of 1974, the eligibility period had virtually expired. Eventually they obtained some coverage from Medical Assistance. The coverage was provided for all of their children, and not just Sandra for whom they had applied.

Mrs. Dickinson indicated that when there was a question of coverage for their daughter, they started examining their hospital bills more carefully than they had when their insurance coverage was in effect. They discovered the bill from the University of Minnesota Hospitals listed charges by the date of posting rather than by the date the service was provided. Mrs. Dickinson had provided therapy to her daughter in the hospital on several occasions when the hospital personnel were too busy to do so. She was unable to determine from the bills whether or not they had been charged for services which Mrs. Dickinson had provided herself.

Even though Sandra Dickinson is now out of the hospital, the Dickinsons' expenses for her home care and medication are extremely high. Their daughter requires a special diet. This diet is not usually stocked in pharmacies since it is available commercially through other sources. This means that it is not covered by medical assistance or insurance. The Dickinsons' expenses for home care services for their children are set forth below:

Cost Summary for Mr. and Mrs. James Dickinson

Home Medical Expenses for Daughter - Sandra

	Prescription	Per Day	Week
	Flexical	11.65	81.58
16 a day	Cotagym	4.16	29.12
1 a day	Vitamin A	.04	.28
16 a day	Cloxacillan	4.00	28.00
2 a day	Digoxin	.15	1.06
1 a day	Vitamin K	.09	.63
1 a day	Multi Vit	.03	.21
3 a day	Vitamin E	.27	1.89
4 a day	Ampicillan		
4 a day	Vitamin C		
	Mucomyst	.79	5.53
	Isuprel		
		Total Week	$148.30
		Per Year	$7,711.60

Home Medical Expenses for Son - Michael

@ 8¢	Cotagym	1.92	13.44
1 - 4x a day	Cloxacillan	1.00	7.00
1	Multi Vit	.03	.21
3	Vitamin E	.27	1.89
1	Vitamin C		
		Total Week	$22.82
		Per Year	$1,186.64

Income last year $12,300
Income this year $13,800 probably [1]

Dr. Warren Warwick of University Hospitals, who is Sandra's treating physician, discussed the effects that cystic fibrosis has on patients. He feels that existing medical and social programs seriously shortchange these people:

> I personally believe of all the adult patients I have cared for, of those who have died, half have died because they have been killed by the social inequities developed in our medical and social welfare system. Because these patients are denied opportunities to get insurance, they

> are denied employment. They are denied employment in that if they do get a job, they are not covered by insurance. They cannot get assistance from Medicare.... The Welfare tells them, "Well if you have a job, we cannot give you medical assistance." The patient says, "If I spend the money I earn for my medical care, I have nothing to live on. If I spend it to live, I have nothing for medical care."[2]

According to Dr. Warwick, many of these patients have chosen to use the money they earn from employment to live on. They do not spend it for necessary therapeutic medical care and, consequently, die. He reported that there have been many instances when employment agencies, including the state, have told cystic fibrosis patients that they will be unable to get a job because of their medical condition, and that they would be better off going on welfare. Dr. Warwick suggested that the state should assist these people in obtaining insurance coverage which includes prophylactic care. This prophylactic care is less expensive than treating cystic fibrosis patients once their condition has worsened. This approach would also enable these patients to become productive members of society. The state should help them in obtaining employment.

Senator John Keefe addressed the Subcommittee on some of the problems which he has personally observed in the relationship between health insurance and patients. He supported Mrs. Dickinson's complaint that it is very difficult for some people to understand the bills which they receive from hospitals and doctors. He also complained that many insurance companies do not inform a subscriber as to the reasons for the denial

of a claim. He also reported that in his experience, companies are frequently slow in paying claims and suggested that they be required to pay all claims within thirty days.

Ms. Carolyn MacDonald testified as to the conflict between the desire of many people to obtain employment and their need to retain Medical Assistance to cover health care expenses. Ms. MacDonald's son was born with multiple pneumonia and several congenital birth defects. He was required to undergo a great deal of surgery during the first few years of his life. These expenses amounted to between $40,000 and $50,000, and were paid by Medical Assistance. He still requires clinical visits and tests which amount to between $150 and $300 per month. In addition, he requires a new back brace every six months at a cost of $500. Ms. MacDonald, a recent college graduate, is faced with the same dilemma which was referred to by Dr. Warwick. If she obtains employment, she will be no longer eligible for Medical Assistance and will have to pay her son's heavy medical expenses out of her earnings. She was not sure whether she would have enough money to live on after paying these medical expenses.

Examples of the burdens placed upon individuals and families by high health care expenses are unfortunately very numerous. Dr. Walter McClure of Interstudy reported to the Subcommittee on some of his studies on the overall problem of catastrophic health care expenses. He concluded, based on his studies, that:

> The percentage of people experiencing catastrophic expense is small, but significant. Approximately 1.2% of all families annually have expenditures made by them or on their behalf which exceed $5,000. About 75% of these expenses are currently covered by insurance.... (For) the small number of families that experience these kinds of expenditures, the results are so serious that it seems to me that society has a legitimate concern in trying to protect such people.
>
> Consequences of simply expanding insurance, simply financing these people, can be extremely potentially damaging. The consequences are these: (1) catastrophic insurance could severely aggravate cost escalation in this country which means that while we would protect people against large bills, the kind of dollars that all of us would have to shell out on the average could seriously increase. (2) It could also distort the medical care system. In other words, we would not only make care more costly, we could potentially make it less effective. That is, we would concentrate our attention or concentrate our effort on medical care episodes which help very few at great, great expense to the detriment of medical care which could help many at a lesser expense. (3) Another serious consequence is that we could aggravate the maldistribution of physicians. That is, we could aggravate the trend of physicians to move out of primary care specialties, general practice, internal medicine, and pediatrics, and into highly specialized types of care, and we could aggravate the trend of physicians away from rural areas in the center cities to more affluent suburbs and areas that are attractive to professionals. (4) We would create still another open-end expense for government that could squeeze already pressed discretionary income which would create for us a growing commitment for medical care which we would be hardpressed to avoid.
>
> The difficulty of this problem does not mean we should postpone work on it. It is a serious problem. It seems to me that society should not try to limit its expenditures for medical care by bankrupting individuals, but I would urge you to proceed extremely deliberatelyin this area, if you are to avoid doing more harm than good. This is one area that may be more than a state can handle; it may require a national approach.... [3]

Dr. McClure reported that in 1963 the top 1% of families in terms of total health care expenditures made by them or on their behalf averaged $3,200 per episode. This constituted 9% of all health care expenditures in the country. In 1970,

this top 1% of families in terms of total medical expenses were charged an average of $12,200 per episode. This constituted 16% of the total health care expenditures in the country for that year. The average annual increase for the families in the top 1% of health care expenditures was 21%. The overall average increase in health care expenditures was only 8%.

Dr. McClure reported that in 1970, 12.4% of all households had medical bills between $1,000 and $1,999; 5.0% had medical bills between $2,000 and $4,999; and 1.1% had medical bills of $5,000 or over. Approximately 8.5% of households had out-of-pocket expenditures for health care (including insurance premiums) of $1,000 or more. Finally, 8.2% of households had out-of-pocket expenditures for health care constituting between 10% and 14.9% of their income; 6.4% had expenditures constituting between 15% and 24.9% of their income; and 3.8% had expenditures constituting 25% or more of their income. Those households with expenditures in excess of 15% of their income tended to be more poor, older, and more rural than the general population.[4] Another study has shown that insurance coverage is more prevalent among higher income households. In 1970, 95% of families with incomes in excess of $15,000 had insurance coverage. This figure was 38% for families with incomes less than $3,000.[5]

Several studies have been done on the effect of health care expenses on families' financial situations. These studies have usually involved small numbers of people. One of them was reported in the book Sickness and Society by Dr. Raymond S. Duff and Dr. August B. Hollingshead.[6] They found that

the economic effect of health care expenditures on certain randomly selected hospital patients was minor in 40% of the cases, moderate in 31%, severe in 20% and very severe in 9%.[7] A referee in federal bankruptcy court in the state of Ohio, John J. Dilenschneider, reported on a study of the 60 cases which he handled during one week involving individual bankruptcy:

> Of the 60 consumer bankruptcy cases, 16 were directly due to hospital, doctor and prescription bills. I've included only those cases where the bankrupts said that were it not for medical bills, they would not have been forced into bankruptcy and where the medical bills themselves totaled more than half of the bankrupt's unsecured debts. In each of these cases the medical bills result from no medical insurance or inadequate coverage.
>
> My experience over the past four years indicates that this is a typical week's cases. Moreover, the list does not include those cases where the bankrupt has gone to a finance company or a credit union to obtain an unsecured loan to get the hospitals off his back and later the collection tactics of the finance company cause bankruptcy, nor does it include cases where the bankrupt mortgages his car or furniture for a second loan to pay his medical bills and then cannot keep up the payments, nor does it include cases where the bankrupt's medical bills were the cause, but such bills are less than one-half of their unsecured debts, nor does it include cases where the collection practices of hospitals have forced the bankrupt to this court to save his job threatened by garnishment, nor does it include those cases where hospitalization was adequate but the family went into debt while the breadwinner was off work. All of these latter situations are frequent causes of bankruptcy, but cannot be as easily documented in the short time we have for hearings. In other words, this list is the top of the iceberg which as a whole would include those persons who have been forced into the ultimate extreme of bankruptcy because of inability to provide for unexpected medical bills.[8]

A similar situation was reported by Judge Roger Davis of the federal bankruptcy court in Phoenix, Arizona. A study of 75 bankruptcy cases filed with the United States District Court in St. Paul showed that medical bills constituted more than one-quarter of a bankrupt person's outstanding debts in

approximately 14% of the cases examined.

The testimony and studies cited above demonstrate that for many individuals or families, health care expenses do create a serious burden. In some cases, they result in bankruptcy. As Dr. McClure pointed out, any attempted solution to this very serious need on the part of many people must be designed so that it does not have major adverse affects on the overall health care delivery systems and costs of it.

Rick J. Carlson, formerly of InterStudy and the Center for the Study of Democratic Institutions in Santa Barbara, addressed the Subcommittee on the question of the cost effectiveness of current health care expenditures. He suggested that medical care is not always as effective as many people think it is:

> If you look at the research that has been done, you will find that medical care is considerably less effective than is generally assumed. By that I mean that it has considerably less to do with status of the health of the population and with the status of the health of individuals than is generally assumed by people.... Medical care is indeed very uneven and, in many instances, rather poor. There have been three recent studies which suggest something of this sort. The first of those is that one out of eighteen patients hospitalized contracts an infection while hospitalized. A second study indicates that something on the order approaching 25% of all hospital admissions are due to injuries that people have as a result of having received medical care. Third, conservative estimates from the Secretary of H.E.W.'s Commission on Malpractice suggested that about 7% of all patient encounters... with the medical care system result in damages which could be the basis of a successful malpractice suit.[9]

In testimony before the House Ways and Means Committee, Ralph Nader also criticized the product delivered by some parts of the health care delivery system and waste in the system. He stated that 5% of the nation's doctors are

considered "incompetent". He also stated that one-half of the nation's expenditures on health care are wasted. He blamed high health care costs on 2,000,000 unnecessary surgeries per year (at an average cost of $5,000 each); $3,000,000,000 wasted on preventive drugs; $1,000,000,000 wasted on unnecessary drugs such as tranquilizers; $5,000,000,000 to $10,000,000,000 lost through profits to health insurance companies and other components; wasted dollars on hospital beds; wasteful duplication of medical equipment; and unnecessary hospitalization.[10] About 62% of the participants in the study by Duff and Hollingshead expressed complaints about the way they were treated. Only 62% were diagnosed correctly and 61% treated correctly (including physical and mental conditions).[11] It has also been reported that:

> In the United States, 22.1 out of all babies born alive will die before they are one year old. By contrast, in Sweden (which has the best record of medical care in the whole world) only 12.9 babies die. This means that some 35,000 American babies die needlessly each year. In at least twelve other nations, a newborn baby has a better chance of living than it does in the United States.... The average American man can expect to live five years less than his Swedish counterpart and 1.5 years less than an East German. He is twice as likely to die between the ages of 40 and 50 as a Swede.[12]

Mr. Carlson also suggested that the Subcommittee recommend further studies on the most cost effective way to spend health care dollars. He stated:

> What would be nice to know in cost effectiveness or cost benefit terms, (would be) whether an extra dollar spent on improving the quality of air or on education would produce more health than spending that same dollar on medical care.

> My point is only that: Yes, there are many things that influence health status other than medical care. Unfortunately, we don't know enough about them, but in the absence of that information we proceed to spend 99 cents out of our health dollar on medical care and only roughly 1 cent on anything else - even though the studies that have been done suggest that we might be more cost effective if we spent it in different ways.[13]

Mr. Carlson cited several studies which have shown that in some instances, education, nutrition, improved air quality, and so forth, have a better potential for producing more health per dollar spent than medical care.

FOOTNOTES

[1]Testimony of Mrs. LaVonne Dickinson, September 13, 1974, hearing.

[2]Testimony of Dr. Warren Warwick, University Hospitals, September 13, 1974, hearing.

[3]Testimony of Dr. Walter McClure, InterStudy, September 13, 1974, hearing.

[4]Information provided to staff by Dr. Walter McClure, InterStudy, November 26, 1974.

[5]"A Special Report ... Private Health Insurance", AMA Update, October 1974.

[6]Dr. Raymond S. Duff and Dr. August B. Hollingshead, Sickness and Society, Harper and Row, 1968.

[7]Ibid., p. 349

[8]Letter reprinted in the Congressional Record, June 15, 1971, p. 19839.

[9]Testimony of Rick J. Carlson, September 13, 1974, hearing.

[10]National Health Insurance Reports, July 15, 1974, p.4.

[11]Duff and Hollingshead, Supra, pp. 285, 165 and 176.

[12]Your Health Care in Crisis, Health Policy Advisory Center, 1972, pp. 1-2.

[13]Testimony of Rick J. Carlson, September 13, 1974, hearing.

PART SIX: HEALTH INSURANCE

I: THE HEARING

The Subcommittee held one hearing to specifically consider the effects upon health care costs caused by health insurance as it is presently structured. The Subcommittee heard from six witnesses: Dr. Paul Ellwood from InterStudy; Mr. Lou Orsini of the Health Insurance Association of America; Mr. Harry Atwood, President of the Northwestern National Life Insurance Company; Mr. John Tracy Anderson of Minnesota Blue Cross/Blue Shield; Mr. Bernard Brummer from Council 6 of the Minnesota State Employees Union; and Mr. Andy Schneider of the Health Law Project at the University of Pennsylvania.

DR. PAUL ELLWOOD

Dr. Ellwood addressed the Subcommittee on the topic "Truth in Health Insurance". He indicated that the question of consumer confusion and misunderstanding with regard to health insurance arises most significantly in the area of individual health insurance, which is roughly 20% of the market. Group health insurance is roughly 80% of the market. Nonetheless, he stated that the percentage of persons with individual coverage is not of minor significance and that attendant problems should not be dismissed.

Dr. Ellwood stated that the very existence of health insurance has a powerful, though unintentional, inflationary effect on health care costs. Although third party payors (insurors) pay bills for services which are basically ordered

by providers, they (the third party payors) have little influence on how much is paid or how many services are provided. He further stated that, if the insuror should refuse to pay the full price charged, on the ground that it exceeds reasonable and customary charges, the additional cost can be passed on to the consumer by the provider. Further, while there is substantial competition among health insurors, this competition is not guided by efforts of the insurors to control health care costs.

Dr. Ellwood remarked that structural reforms of the health delivery system should accompany changes in its financing apparatus (insurance), and that Minnesota's act enabling the establishment and maintenance of HMO's was a good first step toward cost control. He went on further to urge that the legislature promote mandatory multiple choice provisions in all employee group health plans, giving the employee the option of remaining covered by health insurance or enrolling in an HMO. This would help create competition in the health care industry.

The proposals for "Truth in Health Insurance" offered for the Subcommittee's consideration by Dr. Ellwood were generally aimed, he said, at helping consumers to become more knowledgeable buyers by making it easier for them to understand and interpret health insurance policies. Prior to outlining these proposals for the Subcommittee, Dr. Ellwood indicated the problems in the existing health system which prompted his concern: first, the inordinate complexity and variety of benefits and coverage information that is presently available

to the consumer; second, the liability of consumers for provider charges which exceed policy limitations; third, the exclusion of infrequently occurring but expensive diseases such as diabetes; fourth, the offering of single-illness dread diseases coverage by less reputable companies; fifth, the inability of individuals to convert their group insurance into non-group coverage with comparable benefits beyond a specified date after they leave the group; and, sixth, the cancellation or non-renewal of individuals with bad claims experience.

After delineating these concerns for the Subcommittee, Dr. Ellwood set forth his proposals for ameliorating the current situation. They included: first, a proposal to "grade" health insurance policies with reference to the benefits they provide and the comprehensiveness of provided coverage; second, a dual proposal to mandate that insurors disclose the information to consumers that insurors are already required to report to the state, and to compel insurors to disclose certain essential information on the cover of the policy (this later information could include the "grade" of the policy, its benefit-to-premium ratio, and a "protection index"); and, third, a proposal to make uniform the standards governing eligibility for health insurance coverage, as well as the standards for permissable termination of coverage.

LOU ORSINI

The second witness, Lou Orsini, testified on behalf of the Health Insurance Association of America. His remarks to the

Subcommittee addressed themselves to several major issues, with emphasis on control of provider charges. Mr. Orsini indicated that, in order to discover whether an oversupply of acute care beds resulted in unjustifiable inflation, a number of factors must be examined. Among these factors were the length of patient stay, the utilization rate (patient days per 1000 population), bed availability (hospital beds per 1000 population) and the occupancy level. Mr. Orsini predicted that if present health care cost levels were inflationary, the implementation of PSROs would, at least temporarily, decrease costs. However, he further noted that, if PSROs cause lower bed utilization, costs may ultimately rise because of the consequent non-use of beds.

With regard to whether there were unjustified increases in the unit cost of care by physicians and hospitals, Mr. Orsini testified that the insuror's problem was the task of determining exactly what was a "usual and customary" fee. He pointed out to Subcommittee that this problem was somewhat alleviated in Minnesota by the establishment of the Foundation for Health Care Evaluation. He estimated that, since the Foundation came into existence, the escalation in doctors' fees in Minnesota was only 50 percent of the national increase.

Mr. Orsini endorsed the use of certificate of need and planning legislation in order to eliminate duplication of facilities and unjustified expansion of services. He urged the Subcommittee to consider the coordination of these programs with a PSRO program in order to achieve an optimum level of cost control.

Effective planning to convert surplus facilities to meet other community needs presented a difficult problem, according to Mr. Orsini. He indicated that a useful tool in this process might be prospective rate review.

In response to Subcommittee questioning, Mr. Orsini pointed out that in Minnesota overall in 1969, the average hospital cost per diem was $61.33 as opposed to the national average of $69.93. By 1972, he stated those figures had increased to $88.66 and $105.08, respectively.

HARRY ATWOOD

Mr. Harry Atwood testified on behalf of the Northwestern National Life Insurance (NWNL) Company, stating that his testimony would emphasize his personal experiences and those of NWNL, but should be considered to be representative of health insurance industry activities in general.

Mr. Atwood pointed out to the Subcommittee that commercial health insurance carriers have been instrumental in the development of alternative health care delivery systems. According to him, the insurors sponsored early development of both peer review mechanisms and HMOs. He stated that 44 percent of the HMOs presently in operation have commercial carriers as their primary sponsors. NWNL and other insurors in Minnesota have been directly involved in financial support of the Foundation for Health Care Evaluation and the Twin Cities Health Care Development Project, which is promoting the development of HMOs in the State.

Referring to speed of health insurance claim payment, Mr. Atwood indicated that auditing experience had shown that NWNL paid 80 percent of their claims within 2 days, and 98.6 percent of their claims within 15 days.

With regard to Northwestern National's experience, Mr. Atwood stated that in the group health insurance end of the business, his company had been "in the red" for 7 out of the last 10 years. In response to Subcommittee questioning, Mr. Atwood stated that insurors writing health insurance often do so to maintain a competitive group life and health insurance marketing package, in spite of the fact that the health insurance end of the business is frequently a losing proposition.

Mr. Atwood made several suggestions to Subcommittee members. He urged further encouragement for the establishment of PSROs. With regard to HMOs, he advocated the opening up of opportunity to "for profit" HMOs, and the altering of existing legislation to make it less restrictive for HMOs to "start up" and operate. Ultimately, he urged the Subcommittee to avoid adding an expensive layer of regulation to the current scheme.

JOHN TRACY ANDERSON

Blue Cross/Blue Shield of Minnesota was represented by Mr. John Tracy Anderson. Mr. Anderson stated that Blue Cross has a nine member utilization review board which has cost-containment responsibility. The review board gears its efforts toward the education of the provider, and does not take generally "punitive" steps against them.

Mr. Anderson indicated that Blue Cross would cooperate with PSROs and with other such efforts. Blue Cross is studying prospective reimbursement as a method of cost containment. Furthermore, he alleged that Blue Cross recognizes its accountability to consumers. He suggested that education of consumers was a significant means with which to reduce costs. According to Mr. Anderson, Blue Cross is "vigilant in utilizing every possible economy and control in offering the consumer effective, viable health care programs at the lowest cost possible".[1]

With regard to expansion of the scope of benefits, Mr. Anderson stated that Blue Cross/Blue Shield does provide some ambulatory and preventive coverage, but that the cost is relatively high. Mr. Anderson further stated that he was unable to find any study which would support the theory that the provision of more preventive care would reduce the overall cost of health care. He suggested that the single most important factor in reducing hospital costs was the full and appropriate utilization of hospital beds.

In response to questioning by the Subcommittee, Mr. Adnerson explained that absorption of the financially troubled Blue Shield by Blue Cross in 1972 was the reason why Blue Cross and Blue Shield of Minnesota had the lowest payback or return on the premium dollar of all Blue Cross plans in the United States - 77.8 percent in Minnesota vs 91.8 percent nationally. This was so, he testified, even though Blue Cross's administrative cost in 1972 was around $.15 on the premium dollar - well below the national average.[2]

Subcommittee questioning elicited the fact that Blue Cross/Blue Shield writes approximately 25 percent of the total available business in Minnesota. Mr. Anderson, in response to questions concerning the speed of payment of claims by Blue Cross/Blue Shield, stated that Blue Cross hospitalization claims were paid quickly and that any delay therein was occasioned by the slowness of providers in sending in the appropriate forms. Lastly, he told the Subcommittee that 80 percent of Blue Shield or doctor-related claims were paid within a week of filing.

BERNARD BRUMMER

Bernard Brummer appeared on behalf of Council 6 of the Minnesota State Employees Union. He stated that his organization represents 15,000 state employees who were generally covered by Blue Cross/Blue Shield. He delineated a number of difficulties he personally encountered with regard to late Blue Cross/Blue Shield claim payment. He also sketched similar experiences of a number of employees whom he was representing. Mr. Brummer indicated that, in addition to the often late payment of claims by Blue Cross/Blue Shield, he had other concerns. He pointed out that subscribers are not often notified, in his experience, of Blue Cross/Blue Shield receipt of the claim filed by the provider. Hence, he stated, the consumer/subscriber is often in the dark about whether a claim has been filed at all. Finally, he indicated that Blue Shield claim forms were misleading in that, in attempting to coordinate benefits with other applicable insurance, the forms

neglected to state that this coordination should have been applicable only to other "group" insurance, not all other insurance. Hence, he stated, employees with other "individual" insurance were discouraged from submitting claims which might have been, in fact, payable.

ANDY SCHNEIDER

The final witness before the Subcommittee was Mr. Andy Schneider, Counsel for the Health Law Project at the University of Pennsylvania Law School. Mr. Schneider testified about his experiences in researching and preparing a Model Consumer Blue Cross Statute. He indicated that interlocking memberships among hospital boards of directors and Blue Cross/Blue Shield boards of directors existed nationwide, creating at the very least, appearances of conflicts of interests. Blue Cross/Blue Shield, according to Mr. Schneider, has no accountability to its subscribers for the cost and quality of the medical care which it helps finance. Mr. Schneider urged the Subcommittee to examine statutory possibilities for granting the insurance commissioner the authority to intervene not only in the Blue Cross/Blue Shield rating structure, but also in the contractual negotiations between the providers and Blue Cross/Blue Shield. Furthermore, he asserted that consumers interests would be best served by requiring stronger consumer representation on the boards of Blue Cross/Blue Shield, with representatives being elected by the subscribers.

Finally, in response to Subcommittee questioning, Mr. Schneider stated that he thought that present statutory re-

serve corridors of 25-50 percent of annual premiums plus administrative expenses were too high. He suggested that, since Blue Cross/Blue Shield claims experience is fairly predictable, a lower reserve requirement should suffice, with some minor and modifications for periods of open enrollment.

II: HEALTH INSURANCE COVERAGE IN MINNESOTA

A. PERSONS COVERED

In 1971, Minnesota had a population of 3,396,000 persons under the age of 65. Based on data prepared by the Health Insurance Institute, 2,983,000 or 87.8 percent had hospital insurance; 2,439,000 or 71.8 percent had major medical insurance in Minnesota in 1971. Blue Cross was the largest with about one-quarter of the population. Five commercial carriers each had in excess of 100,000 subscribers.[3]

At the end of 1972, the most recent year for which data are available, the following numbers of persons in Minnesota were covered under major medical expense policies:

MAJOR MEDICAL INSURANCE COVERAGE IN MINNESOTA

Individual Policies		215,000
Group Policies		
Supplemental	998,000	
Comprehensive	352,000	1,350,000
		1,565,000

(Source: Information submitted by the Health Insurance Association of America, letter of January 25, 1974.)

The above does not include the number of persons with extend-

ed protection under Blue Cross, Blue Shield and other type plans. The 1,565,000 figure alone represents over 45 percent of the Minnesota population under age 65 with major medical coverage as of the end of the year 1972. See Table 18 for national figures on insurance coverage.

B. APPROXIMATE COST OF HEALTH INSURANCE COVERAGE IN MINNESOTA

Despite the wide variety of policy packages, there are several methods available to estimate the cost of health insurance coverage. The most accurate would be to accumulate premium and claim data for the annual statements of the insurers authorized to do business in the State of Minnesota.

As an approximation, in 1972, there were $314,000,000 in health insurance benefit payments in Minnesota. It can be assured that, if payments were roughly $314,000,000 and if the population covered were roughly 3,000,000, then the health insurance benefits paid out amounted to about $105 per person covered. The benefit to premium ratio breakdown for Minnesota in 1972 is as follows:

BENEFIT TO PREMIUM RATIOS IN MINNESOTA

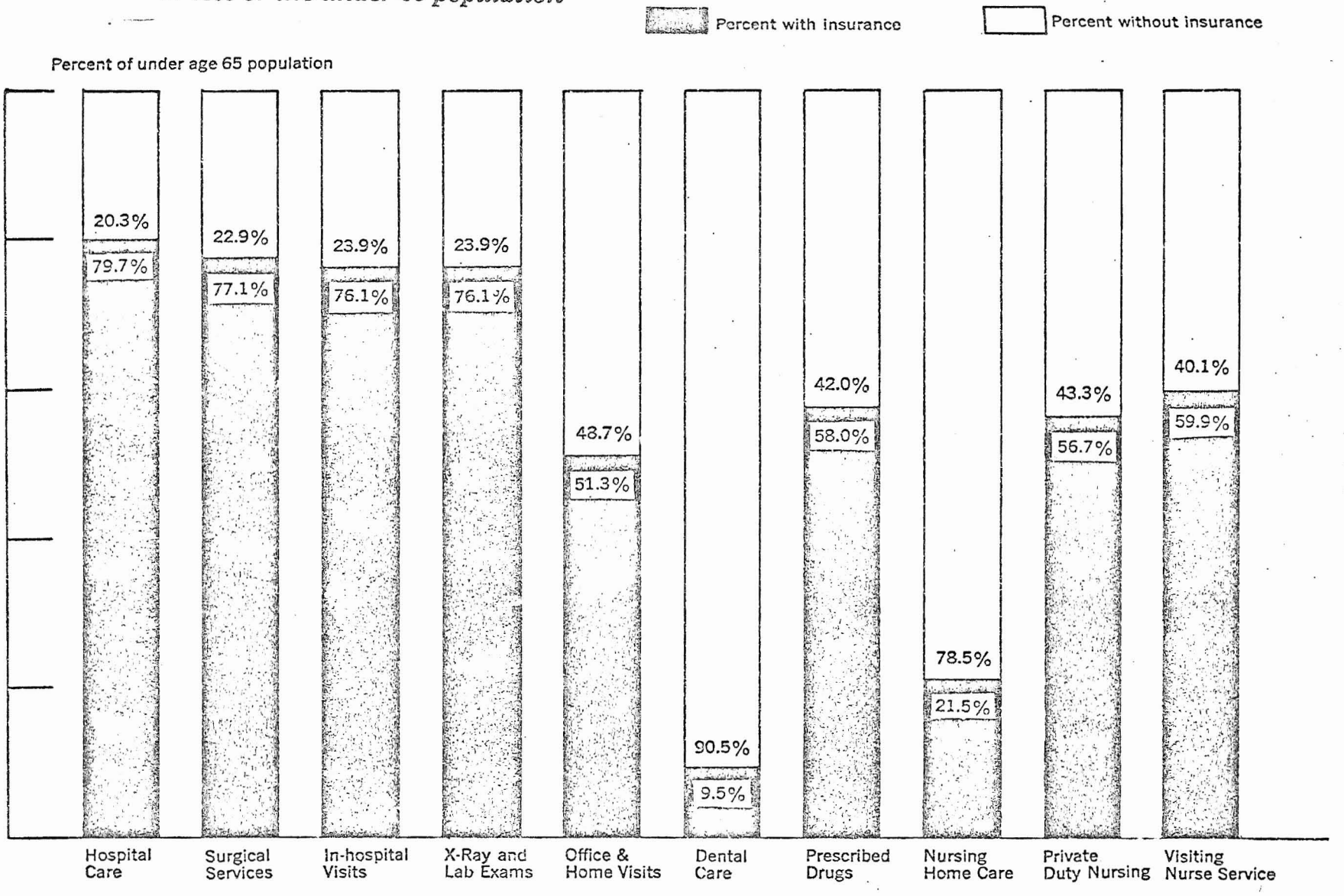
	Benefits	Premiums	Benefit/ Premium Ratio
Insurance Companies			
Group Plans	$166,600,000	$208,400,000	79.9
Individual Plans	40,600,000	80,500,000	50.4
	$207,200,000	$288,900,000	71.7
Blue Cross/ Blue Shield	94,800,000	122,000,000	77.7
Other Plans	12,000,000	13,500,000	88.9
TOTAL	$314,000,000	$424,400,000	74.0

(Source: Information submitted by the Health Insurance Association of America, January 5, 1974.)

TABLE 19

HEALTH INSURANCE COVERAGE

—About four-fifths of the under-age-65 population has hospital and surgical insurance, but for many other health services insurance covers half or less of the under-65 population



Source: Mueller, Marjorie Smith. "Private Health Insurance in 1972: Health Care Services, Enrollment, and Finances." *Social Security Bulletin*, February 1974, U.S. Department of Health, Education, and Welfare.

C. SOURCE OF PREMIUM PAYMENT

Almost two-thirds of the persons in Minnesota insured for health insurance by insurance companies are protected under group insurance plans. Nationwide, employers pay about 80 percent of the total premium cost for such employed persons. About 50 percent of the employed people with group coverage have the full premium cost paid by employers; about 25 percent have 75 percent of the premium cost paid; about 16 percent cent have 50 percent of the premium cost paid; and about 6 percent have 25 percent of the premium cost paid. Less than 1 percent of employees have to pay the entire cost of such group plans. Employed persons normally pay a larger percentage of the premium for any dependents who receive coverage through the group.[4]

D. STANDARD EXCLUSIONS AND EXCLUDED INDIVIDUALS

For group insurance, an individual must be a member of a group in order to qualify for health insurance coverage. If a person is a bona fide member of the group, he or she will be covered by any health insurance for which the group is eligible. Coverage for dependents of the insured is usually optional according to the wishes of the insured.

For individual insurance there is a general underwriting requirement that the applicant provide evidence of good health. Occasionally insurors, including Blue Cross and Blue Shield, have open enrollment periods during which indiviuduals can enroll without evidence of insurability; however, these periods of open enrollment often exclude from coverage claims which stem from a pre-existing conditon. It is estimated

that about 5 percent of the population would not be offered some form of health insurance on an individual basis if they applied for such coverage.[5]

E. CATASTROPHIC EXPENSE

The incidence of catastrophic illness or accident induced expense is, of course, dependent upon the dollar amount beyond which an expense becomes catastrophic. Estimates, therefore, vary as to the individuals incidence of catastrophic illness. If the expense level beyond which an illness is catastrophic is placed at $5,000 in 1973, one estimate states that about 4/10 percent of all persons may be expected to incur a single catastrophic incident in a 12 month period.[6]

An older study, based on 1969 data places the incidence much lower at .0013 percent.[7] The average cost of a catastrophic expense is estimated to be $4,000 in excess of the $5,000 threshold level, or $9,000.[8] (See also Part Five: Consumers.)

FOOTNOTES

[1]Testimony of Mr. John Tracy Anderson, Minnesota Blue Cross/ Blue Shield, October 11, 1974 hearing.

[2]According to information submitted by Minnesota Blue Cross/ Blue Shield on December 2, 1974, the actual 1972 figures were 16.6% for Blue Shield, 6.6% for Blue Cross, and 10% for the two combined.

[3]Information submitted by Northwestern National Life Insurance, January 24, 1974.

[4]Information submitted by the Health Insurance Association of America, January 25, 1974.

[5]Information submitted by Northwestern National Life Insurance, January 24, 1974.

[6]Ibid.

[7]Information submitted by the Health Insurance Association of America, January 25, 1974.

[8]Information submitted by Northwestern National Life Insurance, January 24, 1974.

PART SEVEN: GOVERNMENT PROGRAMS

There are three main programs by which the government finances health care for citizens: Medicaid, Medicare, and tax subsidies. The first two programs are directed at lower income beneficiaries and senior citizens, while benefits under the third program accrue mainly to middle and upper income individuals. The following table shows the distribution of federal benefits by program and beneficiary income level in 1970.

DISTRIBUTION OF BENEFITS BY INCOME AND PROGRAM

		By Program		
	Total Federal Benefits	Medicare Payments	Federal Medicaid Payments	Federal Tax Subsidies
Total amounts (in millions)	$14,224	$7,494	$2,930	$3,800
Percentage distribution- Family income	100	100	100	100
Under $5,000	45	54	67	13
$5,000 to $9,999 . .	28	26	24	31
$10,000 to $14,999 .	16	14	5	26
$15,000 and above. .	11	7	4	30

Source: Testimony of Ms. Karen Davis, The Brookings Institution, before the Subcommittee on Consumer Economics of the Joint Economic Committee, May 15, 1973.

I. TAX SUBSIDIES

Federal tax regulations allow a deduction of all medical expenses, including health insurance premiums, over three percent of the taxpayer's gross income. In addition, health insurance premiums paid by the taxpayer's employer are not considered part of the employee's taxable income. In Minnesota, state law permits deduction of all medical expenses. Since fewer low income families itemize deductions on tax returns, these provisions are most often used by middle and upper income taxpayers. In addition, the tax benefit is greater in higher tax brackets. For example, if a family of four with an annual income of $10,000 incurred medical expenses of $4,000, its federal taxes would be reduced by $703. On the other hand, a family of four with an annual income of $40,000 and medical expenses of $4,000 would have a tax reduction of $1,176.[1] Even though the three percent threshold is higher for the upper income family, the higher marginal tax rate payed by the family makes the ultimate tax savings greater. In other words, the government pays a larger amount of the higher income family's health bill through the income tax mechanism.

Thus, the present tax subsidy form of public health financing may be aiding most those who can most afford to absorb medical costs; those who cannot absorb the loss do not take advantage of the subsidy program, or do not benefit in amounts equal to upper income taxpayers.

II. MEDICAID (MEDICAL ASSISTANCE)

The Medicaid program (Title XIX of the Social Security Act) is designed to provide medical services to the medically indigent and the categorically indigent. The medically indigent are those individuals or families who are in need of medical care, but cannot afford the costs of needed services. In addition to certain "spend down" requirements, applicants must meet prescribed state income eligibility limits. In Minnesota, a family of two may have an annual income of up to $3,250, plus $625 for each legal dependent. Eligibility standards for the medically indigent are required by federal law to be at least as liberal as the most liberal eligibility standards for any state income maintenance program in which the federal government participates. The categorically indigent are those individuals or families who are eligible for or receiving supplemental security income or aid to families with dependent children. There are no co-payments or deductibles in the Medicaid program.

Since the inception of Medicaid in the mid-1960's, costs for the program have continued to rise sharply. In the Social Security Amendments of 1972, Congress attempted to contain the costs of the program by mandating certain cost saving devices. Specifically, federal participation in capital expenditures not approved by planning agencies was limited; optional and mandatory patient cost-sharing procedures were introduced; federal matching grants were made available to states designing and implementing centralized management systems; and

Professional Standards Review Organizations (PSROs) were mandated to study utilization of facilities and services by Medicaid and Medicare patients. There has been little significant experience under the new provisions; it is too early to tell whether the new efforts will be effective in controlling the cost of the Medicaid program.[2]

In Minnesota, Medicaid is known as medical assistance. The program is administered on the state level by the Department of Public Welfare (DPW), and was formerly administered on the local level by the eighty-seven county welfare boards. The state is now in the process of implementing a statewide central payment disbursement system. All medical assistance administration will be on the state level after complete implementation of the system.

Under the medical assistance program, doctors and dentists are reimbursed on a fee for service basis, subject to limitations of the 75th percentile of usual and customary fees and not to exceed Medicare rates. Nursing homes are reimbursed under DPW Rule 49, which sets forth a procedure for determining the cost of care in each home, subject to regional limitations. Hospitals are reimbursed on a charge basis, which may not exceed Medicare charges.

In Minnesota, medical assistance expenditures have risen from $121,106,134 in 1972 to $227,389,859 in 1974. However, $85,500,000 of the increase is solely attributable to the inclusion of Intermediate Care Facilities (ICFs) as medical vendors under medical assistance. In 1972, reimbursement for

ICF care was made under income maintenance programs.[3] The chart details medical assistance expenditures during the period of 1972-1974:

MINNESOTA MEDICAL ASSISTANCE
BY CATEGORY OF SERVICE
FISCAL YEARS 1972 - 1974

	Fiscal Year 1972 - Total	Fiscal Year 1973 - Total	Fiscal Year 1974 - Total
Physicians Services	$ 14,830,122	$ 16,570,559	$ 17,167,074
Surgical Services	2,273,166	2,718,459	2,826,833
Other Practitioners	1,236,606	1,288,645	1,378,290
Prescribed Drugs	12,662,241	13,196,189	13,181,191
Medical Supplies	241,657	264,271	235,710
Dental Care	5,273,935	5,547,634	5,698,861
Dentures	939,630	938,343	828,139
Inpatient Hospital Care	35,261,053	39,345,482	41,719,081
Intermediate Care Facility (ICF)	Not included	59,048,506	85,573,152
Skilled Nursing Facility (SNF)	34,467,736	36,322,374	42,261,459
Extended Nursing Home	1,822,577	254,822	146,000
Visiting Nurse	428,334	429,548	539,304
Eye Glasses	1,307,230	1,362,712	1,338,908
Prosthetic Appliances	722,068	828,916	743,781
Health Insurance	1,357,432	1,280,247	1,309,441
Ambulance Service	465,841	462,580	448,510
Transportation	409,812	555,413	719,408
Outpatient Hospital Care	3,712,872	4,481,447	4,619,672
Lab & X-Ray	664,355	749,059	781,328
Home Health	166,072	165,717	156,018
State Hosp. Inpatient	1,938,853	2,047,020	4,290,307
TB Sanatorium	229,019	90,457	40,543
Other	695,522	963,623	1,386,844
Total	$121,106,134*	$188,912,024*	$227,389,859*
Federal Share:	$ 68,812,805	$108,378,828	$130,453,562

Source: Minnesota Department of Public Welfare

* May not add due to rounding

The state and county shares are determined by subtracting the federal share from the total expenditures and dividing the resulting figure in half. The Federal Government pays for more than half of the total cost.

The number of persons on medical assistance in the state has increased considerably. With the exception of 1971 and 1972, the average payment per recipient has risen, and can be expected to rise over the next several years. The estimated average payment per recipient in 1977 will be over two times as much as the average payment per recipient in 1967. The following chart sets forth these trends. Figures were not available to show what percentage of the rise in expenditures was due solely to inflation, and what percentage was due to the increased number of services delivered.

MINNESOTA
MEDICAL ASSISTANCE
Caseload, Average Grant, and Gross Cost Trends
Fiscal Years 1966 thru 1977

Fiscal Yr. Ending June 30th		Average Eligible Monthly Persons	Average Monthly Recipients (Persons)	Average Payment Monthly	Average Payment Per Recipient	Total Payments
1966*		124,645	56,825	$ 5,675,809	$ 99.88	$ 34,054,849
1967		143,335	63,210	5,754,061	91.03	69,048,737
1968		157,833	66,506	6,380.360	95.94	76,563,124
1969		161,791	74,249	7,723,431	104.02	92,681,171
1970		172,766	77,822	9,222,374	118.51	110,668,483
1971		201,685	84,425	9,272,455	109.83	111,269,453
1972		221,352	94,936	10,092,173	106.31	121,106,079
1973		223,301	103,194	15,742,668	152.55	188,912,017
1974**	E	212,000	110,566	18,936,393	171.27	227,236,707
1975	E	222,600	116,100	21,766,000	187.48	261,196,000
1976	E	229,300	119,600	25,317,000	211.68	303,801,000
1977	E	231,600	120,800	28,015,000	231.91	336,178,000

* January, 1966 - June, 1966. ** Based on 11 months
E - Estimate
Source: Minnesota Department of Public Welfare.

The Minnesota experience of escalating costs is similar to the national trend. In an effort to control the cost of the medical assistance program, the Department of Public Welfare currently uses the following devices:

(a) Prior authorization of medical services. (As a control device, prior authorization has limited application in the field of medical services. It is used mostly in cases of dental appliances and cosmetic surgery.)

(b) Rate setting, especially for long term care facilities.

(c) Surveillance to detect patient or vendor abuse.

(d) Utilization review of all patients admitted to health facilities.

(e) Post-payment investigation and recovery of wrongful payments.

(f) Recovery of benefits from responsible third parties (commercial insurance, Workmen's Compensation, etc.).[4]

However, it was admitted by the Department that post-service cost controls are far less effective than prospective controls.[5] Unless some provision is made for expanded prospective controls, the costs of the medical assistance program may not be significantly reduced. In addition to procedures now used, the Department proposes the following mechanisms as means of containing the costs of the program:

(a) Implementation of the centralized disbursement system. Once fully operational, the system should enable state officials to detect abuse and overpayment, and to compile meaningful data on the cost effectiveness of the entire program.

(b) Legislative requests for rights of subrogation and assignment in cases in which third party reimbursement is available.

(c) Enrollment in Health Maintenance Organizations. While Minnesota experience has been limited to HMOs operating in the Iron Range and Two Harbors, it has shown cost savings of $5.00 per month per beneficiary. Experience in California tends to indicate that significant annual savings ($20,000,000) may be possible. However, the Department is not currently receiving contract offers to cover the Medicaid population.[6]

It was the ultimate opinion of the Department that truly effective cost control may only be effected by either reducing the number of voluntary services offered in the program, or by setting a ceiling on the total state expenditures and thus forcing a reduction in the number of services covered.

III. MEDICARE

The Medicare program (Title XVIII of the Social Security Act) is designed to aid individuals over age 65 to pay medical bills. The program consists of two parts. Part A, Hospital Insurance, covers up to 90 days of hospitalization per benefit period, up to 100 days of post-hospitalization care at a skilled nursing facility, and up to 100 post-hospitalization home health care visits. Part A is financed primarily by social security payroll contributions. There is an $84 deductible per benefit period, which will be raised to $92 in 1975. There is a $21 co-payment per day for the 61-90th days of hospitalization per benefit period; the co-payment will be raised to

$23 in 1975. There is a $10.50 co-payment per day for the 21-100th days of post-hospitalization care in a skilled nursing facility; this co-payment will be raised to $11.50 in 1975. In addition to the benefits detailed above, there is a single lifetime reserve of 60 hospital days, with a co-payment of $36 per day.

Part B, Supplemental Medical Insurance, covers physicians' services, certain diagnostic laboratory and x-ray procedures, some home health visits not preceded by hospitalization, and some outpatient speech and physical therapy. Part B is funded primarily by premiums payed by beneficiaries ($6.70 per month) and federal contributions. There is an annual $60 deductible and a 20% co-payment on most covered services.

The program is administered by HEW, which contracts with fiscal intermediaries to administer the program in the various states. The major national contractor is Blue Cross-Blue Shield, which in turn subcontracts with 72 state plans. Payment of benefits is on a reasonable cost basis for institutional providers, and a reasonable charge basis for non-institutional providers. The fiscal intermediary determines reasonable cost on the basis of actual costs, subject to ceilings mandated by the Social Security Amendments of 1972. Reasonable charges are determined by the fiscal intermediary on the basis of customary and prevailing charges within the geographical area.

Of the estimated 21.7 million individuals over 65 in the nation, 21.1 million, or 98% are enrolled in Part A.

Approximately 20.8 million or 96% are enrolled in Part B.[7]

Critics of the Medicare program point out that out-of-pocket expenses may present a substantial burden for the majority of elderly beneficiaries. In 1972, the average per capita personal expenditure in the Medicare population was $404.[8] In addition, after 150 days of hospitalization, the individual must pay all expenses. The 20% co-payment under Part B must always be met, even if the physician's bill runs into thousands of dollars. Even the protection of a "reasonable charge" may be lost. If the physician agrees to accept assignment of the beneficiary's claim for reimbursement, the physician agrees to be bound by the reasonable fee, and the patient is billed for only 20% of that fee. If the physician refuses to accept assignment (and it is optional), the patient submits the claim to Medicare, and is reimbursed only for 80% of the reasonable fee. If the physician's bill is higher, the patient must pay the 20% co-payment and the remaining amount. Thus, in certain cases, the Medicare program does not offer adequate protection against catastrophic illness or excessively high bills.

The primary fiscal intermediary for Medicare in the state is Blue Cross-Blue Shield of Minnesota. Commercial insurance companies and the Department of Public Welfare perform limited roles as fiscal intermediaries. The state has 417,095 enrollees in Part A and 408,385 enrollees in Part B.[10] The Minnesota hospital admission rate in the Medicare population (369.5 per 1,000 beneficiaries) is higher than the national rate (305.2 per 1,000 beneficiaries). However, the state

nursing facility admission rate per 1,000 beneficiaries is lower (19.0) than the national rate (20.4). Minnesota also has 2.6 more home health care case starts per 1,000 beneficiaries than did the nation (14.6 as opposed to 12.0).[11] Further comparisons indicate that Minnesota has 5 more hospital beds per 1,000 beneficiaries than the nation as a whole, but 5 fewer extended care beds per 1,000 beneficiaries.[12] In reimbursement dollars, Minnesota paid less per enrollee in Part B ($97) than the national average ($103); but more ($298) than the national average for payments under Part A ($268) during 1971.[13]

The number of claims in Minnesota has increased steadily since the inception of the program; the amount paid out under Part A has doubled since 1966. The chart below indicates these trends.

BLUE CROSS-BLUE SHIELD OF MINNESOTA
CLAIMS ACTIVITY FOR PART A OF MEDICARE

FISCAL YEAR	NUMBER OF CLAIMS PAID	TOTAL AMOUNT OF INPATIENT CLAIMS PAID	TOTAL AMOUNT OF OUTPATIENT CLAIMS PAID	TOTAL AMT. OF CLAIMS PAID
1966	210,000	$ 79,000,000	$ 900,000	$ 79,900,000
1967	246,000	83,450,000	1,016,000	84,466,000
1968	276,000	96,203,000	1,652,000	97,855,000
1969	260,000	101,557,000	3,445,000	105,002,000
1970	267,000	115,665,000	5,151,000	120,816,000
1971	283,000	127,250,000	5,387,000	132,637,000
1972	312,000	137,000,000	5,346,000	143,346,000
1973	323,000	151,000,000	9,369,000	160,369,000

Source: Blue Cross - Blue Shield of Minnesota

Cost containment in the Medicare program presents a disturbing dilemma. The most effective method of controlling costs is to increase the deductibles, co-payments, and premiums. However, the elderly population which the program is designed to aid cannot afford significantly higher costs, as many of them are living on fixed incomes in an era of rapid inflation. The setting of flat "reasonable rates" is an empty prospect if the physician may still refuse to accept assignment of the claim.

Blue Cross-Blue Shield of Minnesota testified that the measures enacted in the Social Security Amendments of 1972 (PSROs), limited federal participation in capital expenditures, etc.) will aid in controlling the costs of the program. In addition, an increase in the social security payroll contribution and an increase in the tax base may have some effect in financing rising costs.

FOOTNOTES

[1]Testimony of Ms. Karen Davis, The Brookings Institution, before the Subcommittee on Consumer Economics of the Joint Economic Committee, May 15, 1973.

[2]P.L. 92-603.

[3]Minnesota Department of Public Welfare.

[4]Testimony of David Van Wyck, Minnesota Department of Public Welfare, November 15, 1974.

[5]Ibid.

[6]Ibid.

[7]National Health Insurance Resource Book, House Committee on Ways and Means, April 1974, p. 431.

[8]Davis, Supra.

[9]Ibid.

[10]Blue Cross-Blue Shield of Minnesota.

[11]Ibid.

[12]National Health Insurance Resource Book, Supra., pp.434 and 458.

[13]Ibid., pp. 434 and 458.

PART EIGHT: RECOMMENDATIONS AND COMMENTS

I. RECOMMENDATIONS

NATIONAL HEALTH INSURANCE

1. Endorse the concept of national health insurance as a plan that would remove financial barriers for Americans in need of medical care and encourage quality health care for all.

HOSPITALS

1. Declare a two year moratorium on the construction of new hospital beds and authorize a one year study of the effect of the moratorium and the certificate of need process. This study should commence at the end of the 1975 Legislative Session and be reported to the 1976 Legislative Session.

2. Amendments to the Certificate of Need Law:

   a) Prohibit automatic renewal of a Certificate of Need if the present certification expires prior to the commencement of construction.

   b) Include doctors' clinics and physician group practices with over five members under Certificate of Need Law.

   c) Repeal the Appeal Board section of the Certificate of Need Law and leave the appeal process to the courts.

   d) Require all health care facilities to share the use of expensive technical equipment and services. Any request for special units and equipment should be reviewed in light of existing services in that area or community and not just on whether they are available at the particular facility. Comprehensive Health Planning should study the distribution of existing special services and, on basis of population and geographic distances, set guidelines for needs. A study should also be conducted of the existing services including recommendations for closing of certain units where duplication exists. Prior to approval for acquistion of special service equip-

ment a health care facility must show a three year analysis of the anticipated effect on rates. A similar analysis should be made for debt financing programs.

e) Mandate the establishment of bed banks when facilities fall below a minimum for hospitals in cities of the first class. Facilities will be permitted to maintain the bed level of the existing occupancy rate plus a 10% allowance for flexibility and emergencies. Once beds have been banked, facilities must show a need before re-opening beds beyond the 10% level.

f) Allow state agencies to decertify the need for existing facilities as well as certify the need for new facilities.

4. That rate regulation of health care facilities and all types of health insurance be conducted by appropriate existing agencies.

5. That the alternatives to retrospective reimbursement of health care facilities be explored.

6. Require uniform accounting and financial reporting by health care facilities on a state level and attempt to work out an arrangement with Federal agencies to coordinate with their accounting and reporting requirements.

7. Coordinate all regulation and inspection of health care facilities in one state agency.

HOSPITAL BASED SPECIALISTS

1. Require all tax exempt hospitals to employ all pathologists, radiologists and anesthesiologists on a salaried basis. Pathologists, radiologists and anesthesiologists should be prohibited from billing patients directly for service performed for patients while in hospitals on an in-patient or out-patient basis.

2. Require public disclosure of all personnel salaries by hospitals claiming tax exempt status.

The above recommendations are made in an attempt to reduce costs through the least restrictive regulation. By mandating disclosure, it is hoped that a more competitive market for the services of specialists will develop and that hospital administrators will have an effective means of controlling the purchase of unnecessary equipment and services.

MANPOWER

1. That immediate attention and priority be given to the expansion and orderly development of the allied health manpower training system, and particularly those programs designed to train allied health personnel in short supply. Special education programs, including refresher courses, should be developed in rural areas.
2. That the Board of Health and appropriate licensing boards shall define the scope of practice for nurses and paraprofessionals and shall delineate those procedures which may be performed independently of a physician and those procedures which may be performed only under the direction of a physician. Special emphasis shall be placed on the delegation of functions to the next lowest grade professional; e.g., the delegation of well-baby care to a pediatric nurse associate. In addition, the legislature should clearly define the legal liability of the supervising physician in instances in which a nurse or paraprofessional is performing duties independently

or under the direction of the physician.

3. Require third party reimbursors to pay for services performed by physicians, assistants and nurses. As additional types of paraprofessionals are credentialed, reimbursement coverage should be extended for services performed by each new paraprofessional classification.
4. Encourage general practitioners and specialists trained in Minnesota to remain in the State and to locate and practice in medically underserved areas.

CONSUMERS

1. That public health education programs be expanded. Particular emphasis should be placed on the development of programs:
   a) On all levels of the public school system, including health consumer education courses on the secondary level;
   b) Integrating educational components in the delivery of health care services.
   c) Emphasizing the availability and use of screening programs.
2. That the legislature enact legislation permitting the substitution of generic drugs for name brand drugs.
3. That public information brochures on rates and services of physicians and hospitals and other health care facilities be made available in all communities.
4. That the appointment of consumers to hospital boards, and planning and licensing boards be encouraged. In addition, the consumers appointed should reflect the various interests within the community and their effective participation in board activities should be ensured through

orientation and continuing education programs.

5. That the legislature enact legislation prohibiting collection agencies from pursuing consumers in matters of health care payments until the issue of liability, between the consumer and any third party reimburser, is settled.

HEALTH INSURANCE

1. It is recognized that competitive pressures will cause the existing health care system, based on retrospective reimbursement, to behave in a more cost effective fashion. The major form of competition which can have this result is a system based on pre-payment, or the concept embodied in the Health Maintenance Organization. Mandatory dual choice for employers with 150 or more employees will help HMOs compete more effectively with the present system and should be adopted.

2. Encourage further work and study in mandating minimum benefits provided under health insurance policies sold in the State, including minimum benefits for catastrophic coverage, and development of a plan of health insurance providing catastrophic coverage to the handicapped, uninsurable and others not having health insurance available. Both of these acts should provide coverage for ambulatory services. Minimum benefits in group health insurance plans should cover services including but not limited to periodic screening, immunization and non-communicable disease control (coronary disease, hypertension, etc.).

3. Require uniformity among all health insurance claim forms, be they of the type submitted by the individual, or of the type submitted by a provider (and attempt to make them uniform with Federal forms).
4. Require payment of insurance claims within a specified period or an explanation for the delay; failure to comply would result in a penalty to the insuror which would accrue to the insured.
5. Consider enactment of laws similar to the 1974 California law which requires an understandable disclosure of benefits under health insurance policies.
6. Prohibit the sale of health and accident insurance which is so limited as to be of no substantial economic benefit to the insured (dread disease policies).
7. Require insurors to provide subscribers with a written reason, including citation to policy language, for denial of a claim.
8. Require effective consumer representation on Blue Cross Board of Directors by having them appointed by some public agency from among the subscribers of Blue Cross.
9. Require health insurance and health service contracts to have coordination of benefits provisions.
10. The insurance division, the Minnesota State Medical Association and the Minnesota Hospital Association should jointly study and recommend steps to be taken to reduce the escalation of the costs of medical malpractice insurance and to encourage full disclosure of experiences and expenses incurred by insurors writing such coverage.

11. Clarify the statutory authority of the Insurance Commissioner to explicitly state that he or she shall disallow the sale, offering, etc., of health insurance policies, including Blue Cross, where the anticipated relationship of benefits to premiums is unreasonable.

12. Blue Cross/Blue Shield and other health insurance plans, other than HMOs, should be treated the same as commercial health insurance with respect to the premium tax.

GOVERNMENT PROGRAMS

1. That the Health Department evaluate the effectiveness of, and the department of Public Welfare provide Medicaid coverage for, home care models having the following charasteristics:

   a) the use of instutional facilities on a part-time basis for day care, hospital day care, and intermittent institutionalization:

   b) the provision of services on an as-needed basis to people in their own homes, with home health care agencies coordinating additional needs, such as housekeeping and transportation;

   c) the provision of crisis intervention and management programs to aid families in the care of their aged members;

   d) the development of opportunities for independent and assisted living for the aged.

2. That the state take advantage of funding for alternatives to institutional care projects currently available through payment for services under existing federal benefits programs, as well as federal grant monies available for implementing demonstration programs in this area.

3. That the Legislative Audit Commission, in conjunction

with the appropriate legislative committees, provide appropriate output measures for periodic review and evaluation of the cost containment efforts of all major state health related agencies including the Departments of Health, Public Welfare, Insurance, Comprehensive Health Planning, Workmen's Compensation, and their constituent units.

4. That the Minnesota Department of Public Welfare take steps to improve the effectiveness of the Medicaid cost control program which would

   a) encourage more Medicaid receipients to enroll in HMOs;

   b) engage in cost control experiments such as pre-admission screening;

   c) develop alternatives to institutional care;

   d) participate in peer review mechanisms.

II. COMMENTS BY SUBCOMMITTEE MEMBERS

It has been both a privilege and a valuable educational experience to have served as a Public Member of the Subcommittee. The Report speaks well for the sincerity with which both the Legislative and Public Members dispatched their responsibilities. There are many Recommendations in the Report which, if adopted, will have a substantial impact on health care costs in the State of Minnesota. However, in the case of some Recommendations, I would have preferred that the Subcommittee allow provider organizations the opportunity to assess the actions of members rather than call upon the State's regulatory powers. In the final analysis, it is the responsibility of providers themselves and third party payors to ensure that the health care system works in the most efficient and effective manner.

Finally, special recognition should be reserved for the Subcommittee Staff, who worked long hours with great diligence and skill in bringing the Report to its final form.

John G. Turner