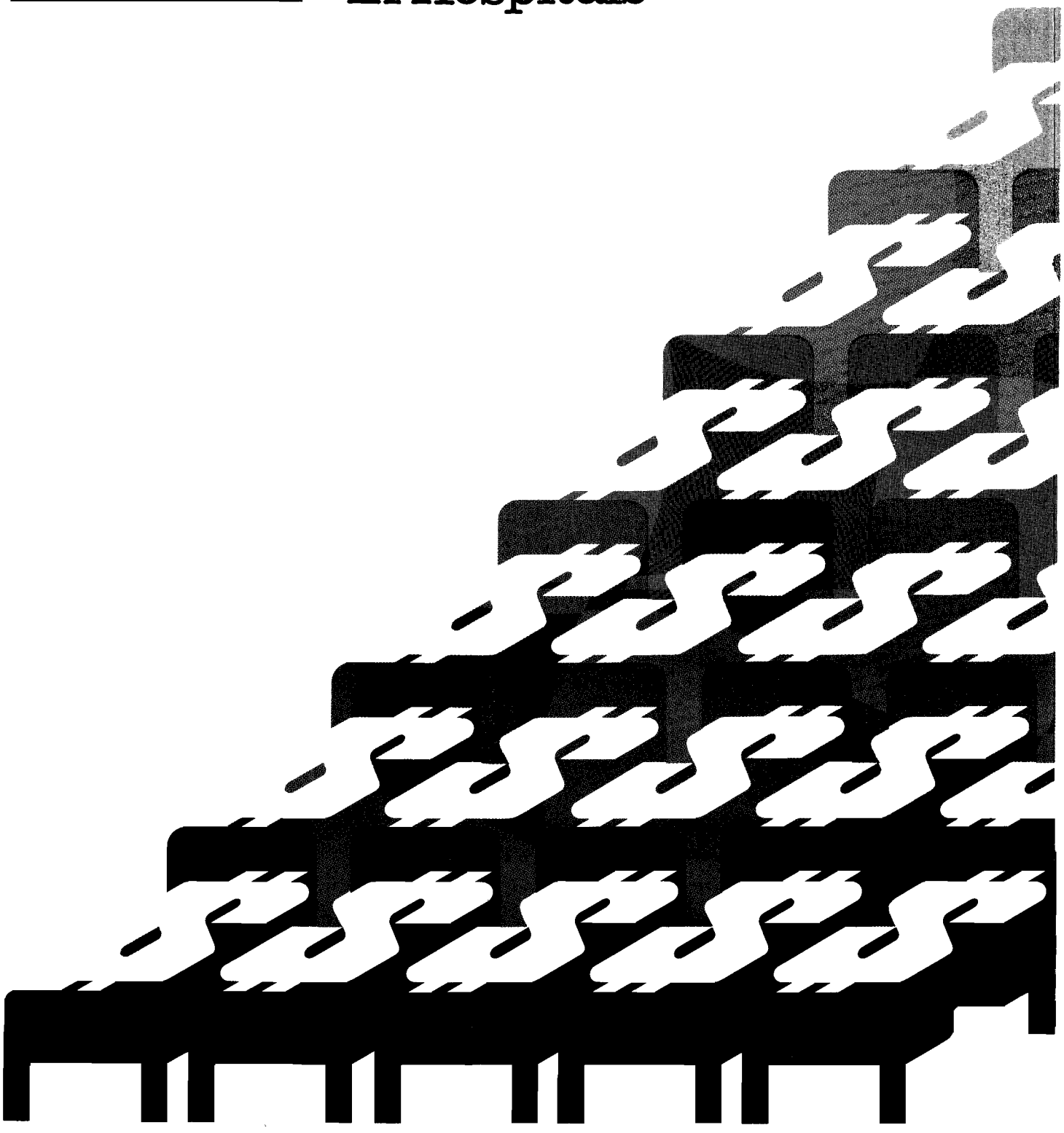
CITIZENS LEAGUE REPORT

More Care About the Cost in Hospitals



CITIZENS LEAGUE REPORT

MORE CARE ABOUT THE COST IN HOSPITALS

Prepared by
Citizens League Committee on
Hospitals in the Twin Cities
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Approved by
Citizens League Board of Directors
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Cover designed by Cyndee Fern, student, Minneapolis College of Art and Design

INTRODUCTION

We believe that this is an important report. It proposes a solution to a problem which has long troubled the Twin Cities, and it does so at a time when the community seems ready to take action.

The report's essential policy conclusion is not substantially different from what was visible in the Citizens League report, "Hospital Centers and a Health Care System," in 1970. The situation of 'over-bedding' in this community has been recognized and frankly discussed by persons in the hospital community for years, and repeatedly reported in the newspapers. And most of the issues as we find them today had substantially taken shape at the time of the last Citizens League report on hospitals seven years ago.

These issues are now coming out into the arena of public debate, and there is a real prospect of action being taken. This is due very largely to the impact of the (somewhat surprising) decision by the Carter administration to move not directly for national health insurance, but initially for a solution to the problem of cost containment in the health care system. Locally, this sense of impending action has been enhanced by the growing concern among hospital planners about the continued rebuilding of our bed capacity at a time when hospital utilization is no longer growing significantly.

This report proposes a solution to that particular issue before the Twin Cities area: What should now be done about hospital over-capacity; and, specifically, how?

It would be unfortunate, however, if the issue of 'beds' attracted a disproportionate attention. For this is, fundamentally, an issue of far less importance than the larger issue we also discuss: That of how medical/hospital care is to be organized, financed and delivered with due attention both to quality and to cost-restraint.

It is important also to keep in mind the issues which we could not address in this report. There is a problem remaining, we know, with the distribution of health care services. There is a problem remaining with the financing of care. There is a need to place a new emphasis on 'prevention' and on health maintenance. There is a need to expand the social service system to cover areas from which the medical/hospital system withdraws. Our focus, in this report, on issues about hospitals does not deal adequately with these other issues. The committee's time was limited and we could not give these questions proper attention.

MAJOR IDEAS . . . . . .

* The Twin Cities area, like the nation, is in the early stages of a major debate over how much it wants to spend on its health care system.

  The nation's health care system has been dramatically expanded over the past 30 years, mainly in the area of personal, rather than public, health. Services have grown, hospitals have been built, and major efforts have been made to help people pay for care. This has been good. But it has created a system now costing $140 billion a year, expanding at about 10% a year, and now representing almost 9% of the total national economy.

* The task of effectively managing this system is extraordinarily difficult. Medical science and technology is able to work wonders. Patients want these services. Doctors and hospitals are strongly motivated to provide them. The facilities and equipment are in place. And--most important--these services can now be paid for. A remarkable arrangement has developed, in fact, under which--increasingly--neither the doctor nor the patient pays, directly, for what he receives. Rather, through the public and private insurance programs, the costs are floated out almost invisibly through premium payments and taxes and the prices of products in the American economy, unrestrained either by public regulation or by force of competition in the market.

* All this problem is present in the Twin Cities area. We have a high level of good health, and an outstanding health care system. But it is quite a large system, especially in its hospital sector. Our hospitals are running at relatively low levels of occupancy, now. And the pressures especially for shortening the length of stay are likely to reduce still further the level of use of hospitals. As this happens, the costs--now about $185 a day and likely to rise in any event to about $350 a day over the next six years--could rise even more rapidly.

* These issues will come to focus in another 'round' of hospital planning started in September, 1977, by the Metropolitan Health Board and Metropolitan Council. A special task force is being charged to set guidelines for the size of the future hospital system by early 1978, with specific decisions about the future of particular hospitals to be made by early 1979.

* We have concluded that the expansion of the health care system does need to be brought within some reasonable 'goal' set by public policy: It can not any longer be permitted to expand unrestrained. The trends toward reducing utilization of hospitals--where care is most expensive, and where costs have been rising most rapidly--do need to be encouraged. This can happen, in this community, without sacrifice in our level of health or in the quality of care.

. . . . . IN OUR REPORT

* For this to happen, however, the discussion will have to move out beyond the relatively closed community of health professionals in which the issues have been debated, but not resolved, up to this point. It is a basic question about the allocation of resources--between health care and education and all the other major public functions. This means the general policy-making institutions will become involved. At the national level, Congress already is. Locally, it means the Minnesota Legislature and the Metropolitan Council. On the private side, and in the hospital community, there is a great need for the trustees--as the policy officials--to become much more involved in the issues at the community level.

* While a large responsibility for controlling utilization rests with physicians, since they control admission to and discharge from the hospital, a key focus for public action will have to be the hospital, and the hospital system. Overall, the size of the Twin Cities area's hospital plant should be reduced by from 1,500 to 3,500 beds. This would serve to raise occupancy levels. It would also serve to create some pressure to restrain, rather than to expand, utilization.

* This reduction should be carried out by the hospital community itself. The public sector must set some overall policy direction--about the size, shape and structure of the hospital system. But (unless the private sector fails to act) the government should not move to close beds, or hospitals, by public authority.

* Important as this is, it represents only a first step to deal with the problem. The Twin Cities area should also move aggressively to work a fundamental change in the way health care delivery is organized and financed . . . by encouraging the development of plans in which doctors and hospitals have a built-in incentive not only to give high-quality care but also to be careful about their costs. Our area has a remarkable opportunity to do this--as a result of the rapid growth in the number and enrollment of such prepaid health delivery plans here in the past few years. The key encouragement, however, will come not from government but from the private sector . . . and especially from labor and business, on whom the costs are now falling most heavily.

FINDINGS

Public debate over continuing expansion of the Twin Cities hospital system is now beginning.

The growth and development of hospitals in this metropolitan area was an inseparable part of the development of the skills and technology of personal health. Hospitals provided the setting in which infant mortality went down, in which lives were saved, in which kidneys were replaced and hearts repaired. Understandably, therefore, the growth of hospitals . . . the remodelings and expansions; the new wings and new floors; the new equipment; the construction of new hospitals in the suburbs, beginning in the 1960s . . . have been regarded almost universally as a vitally important part of the community's progress. In the "quality of life" indices, the index for health is, in part, the number of hospital beds per capita.

We are coming into a period when this underlying assumption about the desirability of more and larger hospitals is fundamentally changing. This is probably not yet apparent to the general public. It is to be found, today, mainly in the debates in Washington over the President's proposal to 'cap' the rate of increase in hospital revenues. There have been no comparable proposals, yet, on the state or local scene.

A changing attitude has been visible to us, however, in our study of hospitals in the Twin Cities area. We have found the people involved in the health care system to be a remarkably able and sophisticated group--deeply perceptive about their situation, acutely tuned to the trends and changes taking place, and articulate about the issues. Within this community of professionals, the expectation is widespread that a fundamental rearrangement of the system is impending.

This does not reflect a concern about the quality of health care. The pressure for change reflects no sense of failure by the system on that score. Rather, the driving force is the problem of the fundamental inability to control the cost of the system. This problem, which we will explain fully herein, has been quietly building over the last 20 years. It has not been effectively tended to. Partly because hospitals are largely private institutions, and partly because so small a part of the public money was local property tax dollars, the issues that emerged have not become fully matters of general public debate. Action has been deferred. So the pressure for change has continued to build. Now--as a result of the congressional debate and of local developments we describe in this report--the community, prepared or not, must begin to grapple with issues that should perhaps have been addressed a decade ago.

Growth of the medical hospital system has been largely unrestrained.

As a foundation for the discussion of the policy issues now emerging, it is absolutely essential to understand the way the system works, and the way the

changes of recent years have removed the restraints on what is 'possible'.

It is best thought of as a coming-together of four factors.

The first is *medical technology*. There has been a dramatic increase, in our lifetimes, of what can be done to repair the human body. Organs can be replaced. Hips can be repaired. 'Artificial' parts are becoming common. And the range of what is technically possible is continuing to expand.

The second is *the supply of medical/hospital resources*. Not so many years ago, medical care--even though technically developed--was not widely accessible. The specialized facilities, particularly, were provided only at one 'medical center' within the state. Transportation was slower. Even in emergency cases, it was often simply not possible to 'get there in time'. This, too, has radically changed. Partly, it has been the distribution of medical services and hospitals broadly throughout the state--the latter as a result of the Hill-Burton hospital construction program beginning in 1946. Partly, too, it has been an improvement in transportation. Ambulances speed along the freeways bringing patients into the metropolitan area, when the local facilities cannot handle the problem . . . or ill or injured patients are brought in by airplane.

The third is *'demand'*--the motivation to receive, and to provide, medical and hospital care. This is not visibly limited. Through books, magazine articles, newspaper columns and television series, the public is educated about the services now available. Doctors and hospitals, for their part, have strong professional, and also economic, motivations to deliver these services.

The fourth . . . which interlocks with all of the foregoing . . . is *the financing of health care*. The arrangements for paying for health care have been dramatically changed. Charges used to be paid by patients, directly, or--if they could not pay their bills--paid for them by private charity. Funds were limited. So, therefore, were hospital revenues. Money for buildings came from private giving, through fund-raising campaigns.

Then, beginning in the 1930s and moving rapidly through the 1950s and 1960s, a whole new arrangement emerged: prepayment and insurance. Today, most people pay for doctors and hospitals by paying insurance companies (or government, through taxes), which then pay doctors and hospitals. These 'third-party payers' have allowed hospitals to include, in every patient's bill, a charge for the cost of buildings and equipment. So, today, hospitals can--and do--go largely to the bond market for money when they expand or rebuild, and repay the borrowing with the steady and dependable stream of funds provided through reimbursement.

In a very real sense, the direct relationship between what is done and what is paid, has been lost. The doctor orders resources into use, but he does not pay. The hospital provides services and facilities, but it does not pay. Bills go to the insurer. And the insurer pays them with the premium payments from policy holders. If costs rise beyond premium revenues, he secures permission to raise premium rates, broadly across his insured population. So the impact of the cost of what is done flows out and is dispersed into the whole ocean of premium payments, in which the level rises steadily but very gradually. Finally, of course--as health insurance has come more and more to be a benefit provided by the employer--we have the situation where for many persons even the insurance premiums are no longer paid directly by the individual. They are paid by the employer, and flow out into the price of the goods and services moving in the whole economy of this country.

In its report in 1970 the Citizens League quoted a summary by Anne and Herman Somers from their book, "Medicare and the Hospitals", of the situation at which we have now arrived, uniquely in the health care system:

> "In no other realm of economic life is repayment guaranteed for costs that are neither controlled by competition nor regulated by public authority, and in which no motive for economy can be discerned."

The results, as this radically altered arrangement has worked over the past 15 years, are not surprising. The dramatic expansion of what is possible, combined with the normal desire of people to have their ills cured and their suffering relieved, has produced a very large increase in total spending on health services. Rising at the rate of about 10% a year, health care costs are now estimated at about $140 billion, and are now approaching 9% of the gross national product. Health care is now the largest industry in the nation--and in Minnesota, where it accounts for 7.3% of the work force. The buildings in which this industry is carried on are among the largest buildings being built--surpassing in many cases, now, the projects built either by corporate enterprise or by government.

It is in hospitals that expansion has been most rapid.

Over the last three years the hospital element of health care expenditures has been rising at about 14% per year--about half again the rate of increase in the cost of living generally.

Four principal explanations for this can be distinguished.

-There has carried forward, within the hospital as an institution, from its early days as a charitable (and frequently religious) organization, a deep and powerful commitment to "the best possible care".

-The relationship of hospitals to doctors makes the hospitals especially anxious to provide the facilities and equipment with which to deliver this care. Doctors are independent of hospitals. While a hospital is, in one sense, its organized medical staff, the doctors do not in a formal sense belong to the hospital. Doctors elect to practice in a particular hospital; and may change their affiliation. It is the doctors who bring patients to a hospital. It is the doctors who decide what services are to be delivered, and what procedures are to be performed. As hospital trustees have said to our committee: "Doctors are the marketing arm of the hospital." There are some exceptions to this picture--most importantly, the general public hospital and the prepaid group practice. But the general picture holds.

-The desire of the hospitals to provide the facilities and services is still further enhanced by the division of the 'community hospital'--in a metropolitan area like ours--into a number of separate, independent, and (to a significant degree) competitive institutions. Hospitals try to attract, and hold, doctors. Each, therefore, has an incentive to behave as if it were the only hospital in town--providing as full a range of services as possible. No effective mechanism exists at the community level to produce a *system* in which hospitals are specialized by function or by level of service--comparable, say, to the system of facilities for higher education which exists in the metropolitan area. This behavior by hospitals, further stimulated by the independence of doctors from hospitals, produces the over-supply of beds and the duplication of facilities about which there has been such a growing concern since the late 1950s.

-In many cases, the third-party payment of medical bills has been tied to

hospitalization. Insurance policies provide, that is, for reimbursement for care delivered in a hospital. This sets up a strong incentive for doctors to hospitalize patients, and to perform on an in-patient basis work that was formerly done, and might still be done, on an out-patient basis.

Hospital charges are likely to continue to rise in the future at rates significantly above the general rate of price increase. Projections are not common. But they have been published as a part of the financial analysis required for the offering of bonds issued to finance hospital reconstruction.

The prospectus for the offering by United Hospitals in St. Paul, for example, shows in-patient per diem charges rising at an average annual rate of over 10%, to $343 per day by 1983 (see Table 1).

United is probably not an exceptional case, even though its rates will obviously include a heavy charge for capital, from its rebuilding. What the consultant is really saying is that these rates will not be out of line with hospital charges generally in the Twin Cities area, over the next half-dozen years.

The Twin Cities has developed a large number of hospitals, and makes heavy use of them.

In the background section of this report we describe in some detail the hospitals in the region, and their evolution and expansion. It is important to provide again here, however, a few key numbers that are essential to have in mind during any policy discussion.

First, with respect to the *size* of the system.

-There are 35 hospitals (the Veterans Administration and the state hospitals normally being excluded from calculation). Broadly speaking, these fall into two groups. One is the set of small-town or 'rural' hospitals around the edges of the seven-county area: Forest Lake, Watertown, Waconia, New Prague, etc. The second is the set of hospitals that has grown up and expanded outward from the center of the region. In St. Paul, the hospitals remain largely concentrated near downtown. In the Minneapolis area, a 'round' of expansion into the suburban area has taken place, producing Fairview/Southdale,

Table 1

UNITED HOSPITALS, INC. - BOOZ, ALLEN & HAMILTON ESTIMATES

	1977	1978	1979	1980	1981	1982	1983
Per diem charges	$192.37	$218.42	$243.11	$274.41	$298.13	$319.18	$342.74
Increase over previous year	10.5%	13.5%	11.3%	12.9%	8.6%	7.1%	7.4%

Methodist, North Memorial, Golden Valley, Mercy and Unity hospitals.

-For all services, there are about 12,700 licensed beds in the area (see Table 2). Of these, in 1977, something like 11,600 are in operating use. It is best not to try to be too precise, because the numbers are in fact unclear. Definitions are fuzzy. And hospitals can make changes literally from day to day in 'beds-in-service'.

These totals, on a population of about 1.9 million, produce a ratio of about 6.6 licensed beds per 1,000 population for all services and about 5.8 beds per 1,000 population for acute services.

-The Twin Cities area has about 178 physicians per 100,000 population.

Then, with respect to the *use* of the system:

-Hospitals in the region deliver about 3.0 million patient days of care. About 15% of these days are used by patients who do not live in the metropolitan area. This is a combination of the number of persons admitted, and how long they stay. Currently, the admissions rate is about 200 per 1,000 population. And the length of stay is averaging about 7.7 days for all services.

-Expenditures are relevant, too. Currently, they run about $230 per capita, for hospital care. This is a combination of patient days, the number of services provided, and the charges for beds and services.

Table 2

TWIN CITIES SUPPLY OF HOSPITAL BEDS
(DECEMBER 31, 1976)

Service	Beds-in-Service*	Licensed Beds
All Services (i.e., med./surg., ob., ped., psych., al./chem. dep., extended care, intensive care, rehab., and nursery)	11,600	12,700
Acute Services (i.e., med.-surg., ped., ob., psych., al./chem. dep.	10,300	11,000
General Hospital Services (i.e., med.-surg., ped., ob.)	8,800	9,700

SOURCE: Metropolitan Health Board and Minnesota Department of Health.

*Beds-in-service is the number of staffed beds at the time the survey was taken. This number will fluctuate throughout the year (peaking usually in January and February). Licenses are renewed annually. There may be new licenses granted during the year, but the count does not vary as much as beds-in-service.

In our study we made a considerable effort to develop comparisons . . . trying to understand where the Twin Cities area stood relative to others. We found this extremely difficult. Cities are so different, in most cases, that comparisons are misleading. We spent some time looking at national averages--but found these, too, less than useful.

In the end, the most intriguing and challenging comparison was with the Seattle/Tacoma metropolitan area. As the table on page 49 shows, this is a metropolitan area quite congruent--on major socio-economic and demographic characteristics--with the Twin Cities area. Yet, its use of hospitals is strikingly lower than the Twin Cities area's (see Table 3). We spent a considerable amount of time exploring this contrast. One possible explanation is that the people in the Twin Cities area require more care--and, therefore, a larger hospital system. We could not, however, find significant evidence of this in the characteristics either of the population or of the environment here.

A second possible explanation is that the two communities are similar, but that people in Seattle/Tacoma simply are not getting as much health care as they need. Again, we could not establish that this was the case. We were driven, as a result, to the conclusion that the difference lies neither in the health problems nor in the level of health itself, but in the health care system . . . and specifically in the way it is organized and behaves. For this, there *is* evidence. The ratio of

Table 3

COMPARISON OF HOSPITAL UTILIZATION BY SERVICE
TWIN CITIES AND SEATTLE/TACOMA METROPOLITAN AREAS

Services Included	1975 Utilization Rates by Area Residents Only
Med./surg., ob., ped., psych., al./chem. dep., ext. care, int. care, rehab., and nursery	Twin Cities = About 1,300 patient days/1,000 population Seattle/Tacoma = About 760 patient days/1,000 population
Med./surg., ob., ped., psych.	Twin Cities = About 1,100 patient days/1,000 population Seattle/Tacoma = About 630 patient days/1,000 population
Med./surg., ob., ped.	Twin Cities = About 900 patient days/1,000 population Seattle/Tacoma = About 600 patient days/1,000 population

SOURCE: For the broadest range of services, data came from Hospital Statistics, 1976 edition, American Hospital Association, table 6; for the other two categories, data came from the Metropolitan Health Board, Twin Cities, and Health Systems Agency of Puget Sound.

beds to population is strikingly different . . . and lower. In 1975 (1976 data for Seattle/Tacoma were not available) Seattle/Tacoma operated a hospital plant of about 6,600 licensed beds (excluding nursery beds)[1], or about 3.5 beds/1,000 population, compared to the Twin Cities area/s 11,500 licensed beds, or about 6.1 beds/1,000 population[2]--and at roughly the same level of occupancy. This itself is likely to be partly a result, and partly a cause, of a noticeably lower length of stay, and therefore total patient days of care--reflected in Table 3.

Efforts to restrain rising hospital costs have not been particularly successful.

Initially, of course, the problem of costs was visible mainly in terms of the problem of costs to the individual patient: The family's ability to pay for medical and hospital care. This has been called the problem of cost *relief*. It was--and remains, for a substantial part of the American population--a real problem. It is a dramatic, and personal, problem. It has, therefore, attracted much attention, politically. It is this problem of cost relief that underlies the continuing effort since about 1948 for some form of 'national health insurance', and which stimulated the passage of Medicare and Medicaid in 1965.

The problem of cost *containment* has appeared only more recently. It involves the impact on the economy of the resources drawn into health care . . . and is reflected in the concern of recent national administrations about the implications of a system costing $140 billion a year, rising at the compounded rate of about 10% a year. It is, however, a problem that affects individuals only indirectly. It is complicated, and abstract, and in a real sense invisible to the general public. Finally, it is considerably less attractive an effort politically. Early efforts to contain investment in the hospital system did begin to appear, however, within 10 to 15 years after the initial spread of insurance and prepayment programs.

By the late 1950s, under the stimulus of the Public Health Service, 'voluntary' hospital planning councils were being formed in many of the major urban areas in an effort to deal with the growing problem of excess bed capacity. Such a council (originally the separate Planning Agency for Hospitals of Metropolitan Minneapolis, and the Hospital Planning Council of St. Paul) was formed in the Twin Cities area in the early 1960s.

About 1970, following the federal legislation of 1967, it was basically transformed. It had been essentially an extension of hospitals. It became essentially an extension of the community. As a Metropolitan Health Board, it received a majority of 'consumer' members, with 'providers' reduced to a minority. Its new governmental character was indicated also by the fact that the Board was an extension of the Metropolitan Council, which officially carried the designation as the region's comprehensive health planning agency.

In 1971, significantly greater powers were added into this system as a result of the state law requiring a 'certificate of need' for every capital improvement of (originally) $50,000 or more.

Most recently, Minnesota has provided for a hospital rate review, based in the Department of Health, whose recommendations will further strengthen the

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[1]Nursery beds are excluded because data on the number of nursery beds was not available from Seattle/Tacoma.

[2]The 1975 ratios for 'beds-in-service' are: Twin Cities, 5.7/1,000 population (10,900 beds, all services excluding nursery); Seattle/Tacoma, 3.1/1,000 population (5,900 beds, all services excluding nursery).

planning and decision-making role of the Health Board. A further federal law, in 1975, setting up a nation-wide structure of "health service agencies" did not significantly alter the Twin Cities area arrangements.

Declining utilization creates a different policy problem for the hospital planning agency.

There does appear to be a leveling-out of utilization. Since 1970, patient days in four major services (medical-surgical, obstetrics, pediatrics, and psychiatry) have declined from about 2.7 million to about 2.6 million, despite some growth in total population in the region. With the bed supply for these services rising during the period from about 9,600 to about 10,000, occupancy rates have therefore declined.

The forces tending to reduce utilization are well and rather fully described under the section titled "bondholder risks" in the various prospectuses issued in connection with the hospitals' borrowings for their capital expansion. (This section is reproduced in Appendix II of our report.) There are reasons to believe, as well, that these forces will work with particular effect in our region.

First, there is *demographics*. Steadily, since the early 1960s, the projected Year 2000 population estimate for the Twin Cities area has been written downward. Fifteen years ago it was expected to be 4 million. Today, estimates are that it will not reach past 2.4 million.

Second, there are the *public-policy efforts at expenditure control*. These are summarized above and discussed in more detail in the background section.

Third, there are the changing *professional standards*. For a variety of reasons--including both their own efforts and pressures from the outside--doctors have been able to reduce the length of time a patient remains in the acute care bed. Forty years ago, a woman was kept in the hospital--and sometimes literally in bed--for a week or ten days following childbirth. Today, the stay is likely to be four days or less. In the Twin Cities area, currently, there are programs in virtually all hospitals, under which doctors are working to review the length of stay, against 'norms' developed for the community by the Foundation for Health Care Evaluation.

Fourth, there are the growing *prepaid health care delivery systems*. These--especially strong on the west coast--combine doctors, hospitals and financing mechanisms in a different arrangement than the traditional fee-for-service indemnity programs we described earlier.

The essence of such a plan is a contract under which a defined group of persons are guaranteed full care for a fixed period of time (say, a year) in return for a stipulated sum of money paid (or fixed) in advance. This fundamentally alters the arrangement . . . giving the health care plan not only an incentive to deliver good care but also an incentive, now, to be careful about its costs.

Plans of this sort have begun to grow relatively rapidly in the Twin Cities area in recent years. The largest and best-known are Group Health Plan, Inc., in St. Paul, and MedCenter Health Plan, an extension of the St. Louis Park Medical Center. A variation--built around the independent practitioner rather than around a multi-specialty group--is Physicians Health Plan in Hennepin County. (These and others are more fully discussed in the background section.)

Encouragement for these has found its way into the 'development guide' on health of the Metropolitan Council, and into state law. An interest was stimulated in the business community through the Citizens League's report in 1970,

through the community's understanding of its (very different) public hospitals, through the work of InterStudy, and through the work of the Twin Cities Health Care Development Project conducted during the early 1970s by the Upper Midwest Council. The last has given way to a National Association of Employers on Health Maintenance Organizations (NAEHMO), a group now including something over 100 firms that either offer or are considering a prepaid health delivery plan as an option under their health coverage for employees.

As a result of all this, the Twin Cities area has become one of the principal centers in the country for the study and development of these alternative systems of care.

Fifth, and perhaps most basic, there are the *changing attitudes* now evident. Some of these, as indicated, are in the business community. With the trend toward third-party coverage, and the trend toward the employer paying the insurance premium . . . and the general trend in these benefit arrangements for guaranteeing a certain level of benefits rather than a fixed sum of dollars . . . the rising cost of medical and hospital care passes through into the firm's cost of doing business. More and more firms in the Twin Cities are, therefore, offering and encouraging a prepaid plan as an option. This changing attitude will have other effects, as well--given the close ties between the business community and hospitals, through service on boards and trustees.

There are *changing public attitudes*, as well. The growing interest in nutrition, weight control and physical fitness, along with other efforts--private and public--toward 'prevention', could have some impact on the use of medical clinics and hospitals. Finally, we see some indications of a changing attitude toward the 'heroic measures' exercised by doctors and hospitals in recent years for patients at the end of life. We discuss in the background section a Gallup Poll which reflects what professional survey researchers would regard as a dramatic shift in public opinion on this question. Doctors, too, have reflected to our committee an interest both in following the wishes of the patient and his family in this matter, and in a concept of 'appropriateness' that relates the expenditure involved to its potential for enhancing life. Given the high proportion of health care costs incurred at the end of life, such attitudes, if they become widespread, could have substantial impact.

Impact on the problem of hospital planning

Reports and statements of the Metropolitan Health Board have for some time indicated that our region is 'overbedded'. Occupancy rates are fairly low, by national standards, at around 66% of licensed capacity for most services in 1976; and about 71% of beds in service . . . and hospitals have been moving into what are, by some reports, the most sophisticated marketing efforts anywhere in the country. The assumption in the planning up to this point has been, however, that the reconstruction of the hospitals could proceed, with the agency careful mainly to see that it did not involve an increase in the supply of beds . . . since the growth of population and demand would fairly shortly 'catch up' with the supply. An ingenious concept was even worked out in the metropolitan planning--the 'bed rights' concept--that would permit the expansion of a hospital into a new and 'unserved' area, if that construction were offset by the closing of some beds elsewhere in the community. And most rebuildings have, in truth, involved some reduction in capacity--licensed, if not operating.

All this is basically changed, if the demand for bed-days begins to level out and to decline . . . or if (more important) the potential for reducing utilization is recognized, and becomes a community policy objective. Then, the bed

surplus which exists would need to be removed. If it were not, then a declining total of patient days, in a system of the existing size, would produce lower occupancy levels and an even more rapid rise in the average cost per patient day than is at this moment projected.

A new round of hospital planning is now beginning.

This effort results from the initiative and interest both of the Health Board and of the hospital community. The Health Board is required, by the most recent federal legislation, to come to some decisions about the appropriate location or locations for certain major, specialized services in the community. The hospitals, too, have an incentive to try for a broader agreement about the future hospital system. Absent such an agreement, each application for a certificate of need tends to raise, all over again, all the same issues about 'need' and 'demand' --without resolving them. They hope, apparently, that an agreed-on plan might permit certificate-of-need applications to move through the process in the future with a requirement for nothing more than a check to ensure that the project proposed was, in fact, consistent with the plan.

Whatever the exact thinking, a special Health Board Task Force on long-range planning did work through the early part of 1977 to design a new planning process to begin in the fall of the year (details of the time schedule are found in Appendix I).

The process calls for a letter of commitment from the hospitals by late September and the individual hospitals to submit their own plans by January 1978. The Health Board staff is then to take about nine months to review these, and to confer with the hospitals directly.

About October 1978 the hospitals are to make a final revised submission. These plans will be reviewed again by staff. In March 1979 a formal period of reviews and negotiations between subcommittees of the Health Board and the hospitals will begin.

The results of these reviews and negotiations will be presented to the Board's Planning Committee for assembling into a regional hospital plan. In mid-June 1979 a public forum will be held on the plan and final Health Board approval is expected around July 1, 1979. This plan will then be forwarded to the Metropolitan Council for formal approval and adoption as a part of the Council's development guide. Key, in this process, is a study organized during the summer that aims to define a "viable hospital": It is to address such issues as, "Is a hospital itself a deliverer of care?" "What is the relationship of a hospital to its medical staff?" "What is the appropriate size for the hospital system?" The study is scheduled to be finished early in 1978, but not before the hospitals submit their first-draft plans.

Meantime, the work in individual hospitals is under way. One measure of the seriousness of the whole effort is the rate at which hospitals are taking on planning staff. A number of these persons have been the closest observers of our committee's work, and have given us considerable help in our work.

The Twin Cities area is not, in all respects, well prepared for a community discussion of this complexity and importance. The understanding of the problem, we suspect, is fairly low. The emotional attachment to particular hospitals remains high. Issues still are relatively confined within a community of health professionals. Media coverage has in recent years tended to focus mainly on personal health, rather than on community issues. And, for public officials, the appeal remains strong to concentrate on the problem of the family's ability to pay.

Still, there will be some new elements in the discussion through 1977 and 1978. One will be the continuing evidence of the national government's concern with the cost-containment problem. Another will be the changing attitudes in the business community. A third will be the broadening range of groups involved in the discussion--which is characteristic of issues as they approach the point of action in the Twin Cities area: The legislative committees, the commission established by the Minnesota State Medical Association, the rate-review panels, and possibly the larger involvement of the Metropolitan Council.

CONCLUSIONS AND RECOMMENDATIONS

THE TWIN CITIES MUST RESTRAIN ITS HOSPITAL SPENDING

The Twin Cities area must begin now to respond to and stimulate trends toward more efficient use of resources in the health-care sector.

It seems clear to us that the present situation--in which the health care system has, in effect, an open-ended 'draw' on the resources of the society--cannot, and will not, be permitted to continue. What we are now, in fact, seeing . . . in the proposals by the national government to put a 'cap' on hospital spending . . . is a recognition of this same conclusion. With such huge amounts of resources involved, there simply must be some way to raise questions about relative costs and benefits, and to make choices based on the community's best judgment about the priorities for spending. The only alternative would be to take the position that every service which some person should want, and which some physicians and hospitals would be able and willing to provide, should be reimbursed almost automatically, as it is today. We believe this is not a tenable position. The concept of imposing some restraints on the growth of spending for health care seems accepted. The urgent need, then, is to begin addressing the practical questions: What, precisely, is the point of restraint (measured either in dollars or in some rate of increase); and, through what kind of decision-making process is this decision to be arrived at?

Why is restraint essential?

Resources are limited. Money pulled into the health sector by the existing, uncontrolled process, does draw resources away from other needs. And huge sums are involved, when 10% a year is compounded on a base expenditure of $140 billion. A single year's increase in health care spending, for example, represents about the sum that would need to be added to the welfare program to implement the reforms proposed in that area. And--with an average cost of about $185 a day and an average stay of almost eight days--each hospital stay, on the average, consumes roughly the resources that are required to maintain a child in public school in Minnesota for a year.

Clearly, now, too: The absence of effective restraint on the growth in expenditure in the health sector is holding the nation back from addressing the very real questions about equity that do remain. It is recognized--and we have recognized, in our discussions--that significant groups in the population remain without adequate financial protection against health care bills . . . or lack access to medical and hospital recources . . . or both. But the experience in the mid-'70s, when large amounts of additional money were put into the system through Medicare and Medicaid, without a system for cost containment, have made most people cautious about another, similar injection of additional financing. A cost-containment program is now imperative.

Will the quality of health suffer?

It need not. We hope and believe that this community is past the point where it equates the quality of health with the amount spent for medical and hospital care.

On the one side, it is no longer clear that the marginal dollars expended bring a commensurate benefit in the improvement of health or even in the prolongation of life. Researchers have approached this subject using various methodologies. While the results do not resolve the debate as to the "cost-benefit" relationship of certain medical procedures, they do challenge accepted thinking on the value of additional care. In very gross terms, the relationship between dollars spent and life expectancy in the United States is strikingly different from the relationship in many other countries of the world. Within the medical community--as indicated to us by doctors during our hearings--there is appearing the concept of 'appropriateness'--which tries to define the value of a service or procedure in terms of the enhancement of productive life that results. Patients, for their part, are beginning to indicate a negative reaction to the so-called 'heroic' measures which may prolong a life only very marginally.

On the other side, there appear now to be re-emerging a number of things that can be done to improve the health of people at relatively low cost. Partly, these come under the heading of 'prevention': better nutrition, more sensible diet, the suppression of cigarette smoking, control of alcohol, weight reduction, proper exercise. Partly, they come under the heading of public health: the elimination of dangerous chemicals in the air, water and food, accident prevention, and so forth.

It would be a happy conclusion if we could believe that the efforts to shift to these low-cost measures to improve health would achieve the goal of reducing expenditures in the medical/hospital system. Unfortunately, everything we have learned suggests that these would be additional dollars, not replacement dollars. The experience has been that--as public health programs and other efforts at prevention have reduced or eliminated the problems of diseases that once filled the hospitals and doctors' offices--the system has moved on, to develop an ability to do and to finance other things that people would like to have done. We do not conclude from this that 'prevention' is undesirable: far from it. We are inclined to believe, in fact, that efforts at prevention would be quite helpful, in maintaining or improving the level of health. All we are saying is that they will not serve to reduce expenditures elsewhere in the system. It remains necessary to address the problem of cost containment in medical and hospital care directly.

GENERAL POLICY-MAKING INSTITUTIONS MUST BE INVOLVED

The mechanisms established so far have operated just within the health care sector: the State Department of Health; the Metropolitan Health Board; the professional groups. There has been some marginal involvement of consumers, and of such generalist agencies as the State Planning Agency or the Metropolitan Council. This has not been unproductive. Some real choices can be made, and economies achieved, within the framework of the health care system.

Choices have to be made between additional health care and other community needs.

The major issues, however, involve choices between health and other major areas of public policy. And, for these, institutions whose responsibility is limited to health are both inappropriate and ineffective.

Mechanisms of general scope are required, for the basic policy decisions. It will be essential to have the central questions of resource allocation dealt with by institutions that can ask, for example, what--concretely--is to be meant by "the best possible care". What, by contrast, is "the best possible education"? Or "the best possible housing"? Or "the best possible transportation"? Or "the best possible environmental protection"? In truth, we cannot and we do not provide "the best possible".

The question, really, is how far short of the "best" are we willing to fall, in each of these service areas, and how are these priorities to change, over time? These are questions to be resolved by institutions that are responsible across the broad range of public functions, and are responsive to the public in a democratic system. They are questions, in other words, for the State Legislature, as well as the State Department of Health; and--within the Twin Cities area--for the Metropolitan Council as well as the Metropolitan Health Board. This is a principle on which the community should insist. Any efforts, as, for example, by the federal Department of Health, Education and Welfare to return decision-making to health care specialists, should be vigorously resisted.

Can, or should, anything be done at the state and local level?

The primary policy initiative toward the containment of health care costs is now at the national level--by President Carter and Congress. We do not think this means, however, that initiatives in Minnesota or within the Twin Cities area are either unnecessary, inappropriate, or ineffective. In fact, quite the contrary.

First, there is the possibility that Congress may not act--or speedily, or adequately.

Second, there is the possibility that initiatives at the state and local levels may help along action at the national level.

Third, even if Congress does act, there will be room for significant local discretion in how the '9% increase' is to be implemented. Under the administration's proposals, it would be possible--in effect--for the community to develop a 'wholesaler' relationship. Rather than the federal government relating to each individual hospital, in other words, to implement the 9% a year 'cap', it would be satisfied to see the costs rise no more than 9% in the community (or health service area) as a whole. The community would then allocate the growth in expenditures within its own hospital system in ways that best serve its needs. It would be an advantage for the Twin Cities area to have this flexibility. Finally, of course, our region might want to limit the growth in expenditure by more than the amount provided for in the federal legislation.

WE RECOMMEND:

A goal should be set on the rate of increase in expenditures in hospitals.

The Minnesota Legislature should establish, by law, a goal on the rate of increase in expenditures in hospitals. This is essential not only to give the hospitals the guidance they need and deserve, but also to produce the needed public debate, and therefore public understanding, about the appropriate allocation of resources between and among various public purposes.

This is to be a goal, not a budget. That is, it is not a result to be arrived at through direct administrative action by the public sector. Rather (as explained herein) the public sector is to set incentives, and to set up procedures, out of which the

medical/hospital system itself will begin to take actions which will gradually bring expenditures into line with the levels targeted in the goals statement.

The goal should be stated in terms of dollars per capita per year for the resident population. It should cover spending by hospitals, initially, since those figures are available. (The present level is about $230 per capita.) The rate of increase here in recent years has been about 14% per year. As rapidly as possible, the reporting should be expanded to cover also the in-hospital charges by physicians, so that the total figure will represent spending *in* hospitals, not simply *by* hospitals. The idea is to make the allowable maximum rate of increase apply to the total, leaving the system free to work out the appropriate balance between hospital services and physician services.

The goal should be set on recommendation of the Metropolitan Council, which should bring a proposal to the Legislature in January, 1979.

The Legislature should assign to the Metropolitan Council the responsibility for monitoring progress toward the goal, and for reporting annually on performance and on problems. The Metropolitan Council should, in turn, delegate the operational responsibility to the Metropolitan Health Board. It would probably be most practical to estimate the physicians' charges on a sampling basis. Doctors should be requested by hospitals to cooperate in the survey. If this is unsuccessful, charges should be estimated from known procedures and rates. However, in the long run, estimates will not be necessary. This could be done by the Foundation for Health Care Evaluation as a part of its medical audit program. Or, a separate sampling procedure could be set up and physicians could, as a condition of medical staff membership, be required to cooperate in the sampling procedure.

Take a metropolitan approach in administering any federal cap on hospital expenditures.

If Congress does act to set a limit on the rate of increase in hospital expenditures, it should provide in the 'control system' for an alternative arrangement under which the so-called 'cap' could be applied not to the individual hospital but to the hospitals in the region as a whole.

When such an alternative is made available, the Twin Cities area through the Metropolitan Council/Metropolitan Health Board should make use of the option, to relate to the federal expenditure control on a 'wholesale' basis.

Keep the Metropolitan Council involved in certificate of need decisions.

The Minnesota Legislature, even if requested by the federal Department of Health, Education and Welfare to do so, should *not* amend the 1971 certificate-of-need law to exclude the Metropolitan Council from decision-making on issues relative to the size, shape and structure of the area's health and hospital system. The state should, if necessary, force a basic constitutional test of the authority and responsibility for the design and construction of local (regional) government structure; holding to the position that the appropriate test for the federal government to set is a test of results, and performance.

NEAR-TERM, HOSPITAL USE AND CAPACITY MUST BE REDUCED

We must be realistic about the effort to implement the goal set in state law. Making a restraint effective will be a slow and difficult job. The system we now have evolved over 40 years; it will not be changed quickly. Inevitably, we

Inevitably, we will have to start where we are, and work gradually, and incrementally--through with a clear sense of what the community objective is.

We must be realistic, also, about the process of major system change. There is no single action that, by itself, can produce the desired result. Nor, on the other hand, is it possible to do a comprehensive reform in a system as large and complex as this one. Rather, the approach should be to introduce some substantial new elements into the system--which will then force the other elements to react and to adjust. It is probably impossible and certainly undesirable, in other words, to try to 'manage' so large and complex a system through administrative regulation. Our proposal that the community move, in part, through the process of public planning should be understood in this context; that is, not a move into regulation.

The first responsibility rests with physicians, to control utilization.

As one of the doctors on our committee put it: "Physicians primarily control utilization, and have an obligation to increase their awareness of the need for cost control."

Or, as Anne and Herman Somers put it in a major article in Inquiry, the magazine of Blue Cross (June, 1977):

"Once an individual has chosen to see a physician--and even then, there may be no real choice--thereafter the physician makes all significant purchasing decisions: Whether the patient should return 'next Wednesday', whether X-rays are needed, whether drugs should be prescribed, whether hospitalization is required, and so forth. It is a rare and sophisticated patient who will challenge such professional decisions . . . This is particularly significant in relation to hospital care. Nobody can be admitted to a hospital on his own say-so. The physician must certify to the need; he will determine what procedures will be performed; and when the patient may be discharged . . . Little wonder, then, that in the eyes of the hospital it is the physician who is the real 'consumer' . . ."

Intensify reviews of both hospital admissions and length of stay.

• Physicians should--through their medical staff utilization committees--intensify their critical evaluations of admissions and length of stay. Quality of care reviews for appropriate diagnostic tests and treatments, where not already conducted, should be started. The need for certain routine admission screening procedures and tests should be updated. Early consultation for complex diagnostic problems should be encouraged. As a part of the effort to bring practice in line with the overall goal, medical staffs should make individual doctors aware of the charges they incur. And, finally, physicians (who make all purchasing decisions) must have better knowledge of the effect of their decisions on rising health care expenditures. Courses in health economics for both medical students and practicing physicians should be set up.

We are concerned to find that the "all-bed review" of length of stay--set up voluntarily by the medical community in the Twin Cities area, and operated through the Foundation for Health Care Evaluation--is now in jeopardy. If anything, it should be expanded, to include pre-admission screening. Under no circumstances should it be cut back--either to a review that occurs within the framework of the individual hospital (rather than against the 'norms' of the community as a whole), or to the review that is required on Medicare/Medicaid patients by federal law. We believe it is the hospitals, along with their medical staffs, that are responsible for

this threatened reduction in the program, and the answer probably lies in the changes we propose herein in the character of the hospital system in the community.

The problem of over-investment in the health care system is not strictly limited to hospitals. Physicians, through recent purchases of major pieces of equipment for use in their offices, could also be contributing to the problem. The recommendations herein, if adopted, should curtail over-investment by hospitals. However, as a result of this control, the problem of over-investment by physicians could become more significant.

We understand that broadening the certificate-of-need law to cover purchases for doctors' offices might be necessary in order for planning efforts to be effective. But, keeping the law as it is might help to encourage physicians to do more work away from the hospital and thereby reduce spending. Furthermore, when the scope of any regulation gets too broad, the experience in other policy areas has been that its effectiveness decreases.

Patients and insurers must also act to help control utilization.

• Patients also bear a responsibility for holding the utilization of hospitals within reasonable bounds. Patients ought not to make unreasonable demands on physicians for admission, or for extended stay. Doctors can help make them aware of the cost of increased utilization.

• So, too, of course, can insurance companies . . . whose role in stimulating excessive utilization has been substantial.

In an effort to keep some workable limits on coverage, insurance companies have found it useful to tie benefits to 'hospitalization'. This has perhaps, in one sense, limited expenditure. It has also meant, however, that procedures were frequently performed in a more expensive, rather than a less expensive, setting. The trend of recent years toward covering procedures done on an out-patient basis should be encouraged.

The social service system is a key element in reducing hospital utilization.

• Finally, the social service system becomes a key element of the effort to reduce hospital utilization.

In our deliberations we were reminded on many occasions that patients frequently are not able to return home, to their normal activity, at the point where--from a *medical* point of view--they no longer need to remain in the $185-a-day acute hospital bed. A program aimed at reducing length of stay therefore implies and requires a complementary program to provide alternative arrangements for care--either in a nursing home or 'intermediate care facility'; or at home, with food and housekeeping service brought in. These services may emerge as extensions of the hospital's program. Or they may continue to be provided by the welfare/social-service system. In any event, the interface between the two systems must be planned carefully, by both the public and private agencies involved.

There should also be a reduction in the size of the hospital plant.

As we found, the Twin Cities area continues to operate a relatively large hospital plant, running at relatively low levels of occupancy. This places administrators under considerable pressure to maintain and to increase the total patient days of care delivered, or--alternatively--the revenue per stay. The excess capacity this community is carrying in its hospital system, in other words, works at cross-purposes

with the community's effort to reduce utilization and expenditure.

The clear conclusion is that capacity in the system should be adjusted downward, so that it becomes an incentive not to increase but to reduce admissions and length of stay. As physicians have told us, it is when "the flag is up" . . . meaning, when the bed supply in their hospital is tight . . . that they have a special incentive to avoid hospitalization--or, alternatively, to reschedule non-emergency admissions away from peak periods, thereby making better use of existing hospital capacity.

1500 to 3500 beds should be eliminated.

The Twin Cities area should--and could, reasonably--come down, over the next several years, about halfway to the level achieved in the Seattle area. In other words, by from 1,500 to 3,500 beds; which would give this community a system of beds-in-service (excluding nursery beds) of from 6,900 to 8,900.[1]

Closing whole hospitals would result in maximum economies. Wherever possible, this should be given preference over the closing of rooms, floors, wings or other parts of hospitals. We are certain that in some cases whole hospitals can be closed. But, to achieve the necessary reduction without limiting access to hospitals, some hospitals will have to be reduced in size rather than closed.

Redistribution of facilities must wait until the bed reduction has been achieved.

We do not see how this can be accomplished if there is running, at the same time, a program of re-distributing hospital beds within the region that involves the construction of new hospitals at new locations. There is, we have found, an interest currently in locating new hospitals in such areas as northern Dakota County, central Hennepin County and northeastern Ramsey County. Under the 'bed rights' concept that came into metropolitan planning in the early 1970s, a hospital corporation would be able to build at one location if simultaneously it closed beds at another location. This would avoid an increase in beds, net, within the region . . . and was designed at a time when the prevailing assumption still was that the 'over-supply' of beds could be lived-with because demand was gradually 'catching up'. Now, however, the need is clearly for a *reduction* in beds, net. It will be difficult, at best, to identify hospitals that could be closed. The reduction program, therefore, must take priority over the redistribution program.

We might feel differently about this if the hospital were, in fact, a service institution directly to a local population. Hospitals do talk in these terms. But our understanding is that--with the important exceptions of the emergency room, some out-patient services, and health education programs--the hospital as a hospital does not directly serve the public. The hospital serves its doctors. The public is served directly by the *medical*, not the hospital, system. The concern about distribution therefore should focus on doctors' offices--and emergency facilities. This is what has begun to develop in northern Dakota County (along with counseling and other social, and religious, services). It does not necessarily follow that in-patient hospital facilities are also required.

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[1] These numbers were changed after the report's adoption. The change (from a bed reduction of 2,000 to 4,000) was due to a computational error and was necessary in order to comply with the League's conclusion that the local bed supply should be reduced about halfway to the level in the Seattle/Tacoma area.

We might feel differently even about this, if some parts of the metropolitan area were so remote from a hospital as to work a real hardship on people, as they drive to a hospital for an elective admission, or to see a relative or friend who has been admitted. This does not seem to be the case, however. Especially with the completion of the freeway system, and the Minnesota River bridges, no substantial area will be more than 30 minutes' driving time from a hospital--which is the standard in both the metropolitan and state hospital plans.

Work through the established metropolitan decision-making process.

What has been emerging in the Twin Cities area, for the planning and management of the major regional public systems, is an arrangement that builds heavily around the concept of central determination on issues truly of metropolitan significance, with decentralized responsibility for the details and specifics of planning, and for operations. This has been workable, and is appropriate, especially in systems (such as the hospital system) in which most if not all of the operating units are private rather than public.

It is a three-part procedure. The Metropolitan Council first sets forth what is sometimes called a 'policy plan'. The subordinate commission, then, working with the operating units, develops specific plans and capital programs. Finally, the Metropolitan Council reviews these and approves them if they are found consistent with the policy plan.

This decentralized procedure seems to us to be the one to use, in moving toward the objective of a smaller and more efficient hospital system. We considered alternatives, but rejected them. It does not seem feasible for the public initially to take over the ownership of the region's hosp tals, as it took over the ownership of the municipal sewerage plants after 1969, in order to carry out the reorganization that is required. Nor even--as an alternative--to take over, centrally and publicly, the responsibility for providing hospitals with the capital for investment. Such a coercive approach is unlikely to receive public support, and would maximize confrontation and conflict. It cannot be done by issuing orders. Rather, and properly, the Metropolitan Council will be obliged to sell its proposal--to the hospital community and to the public.

Correct deficiencies in the planning process.

We did have a concern whether this approach--even if desirable--would be feasible. On the one side, the experience of recent years makes us cautious about expecting too much of public planning. The experience with the certificate-of-need review, in particular, scarcely suggests an ability to come to grips effectively with the basic problems of the system. And, on the other side, we found it hard to base great confidence in the ability of the hospital/medical community to address these issues. 'Voluntary planning' has been tried, and did not work effectively on issues on which real interests conflict.

We did find, however, some fundamental deficiencies in the process of public planning . . . which, if corrected, probably could make the decision-making system work. First, the planning has been essentially reactive, to proposals initiated by the hospitals. And, second, it has dealt with hospitals one at a time. Given this framework, it was inevitable that the public planning would fail to deal effectively with major *system* issues.

Clear guidelines must be established regarding the future size, shape and structure of the region's hospital system.

What is needed is a clear set of guidelines from the Metropolitan Health Board and Metropolitan Council with respect to the issues in controversy . . . which will provide for the hospitals clear and early direction about what is wanted, and when, and where. Only with this does the certificate-of-need become effective. A veto alone is ineffective, just as guidelines alone are ineffective. What works is the two, in combination.

Perhaps the clearest demonstration was the successful experience in hospital planning in 1971, with respect to Hennepin County General Hospital and Metropolitan Medical Center. Both projects--then planned for neighboring sites in downtown Minneapolis--would have been subject to certificate-of-need review. But this by itself--after several years and hundreds of thousands of dollars of studies--could not have brought together two projects planned independently. What worked was the Health Board, moving ahead of the beginning of the planning, with simple, clear guidelines that called for a maximum total of 1,220 beds and for the developments to be 'co-located and contiguous'--backed up by the veto authority.

It is our conclusion that the guidelines we have suggested the Metropolitan Council now set out can, equally, be effective in leading to a restructuring of the hospital system of the region as a whole . . . particularly if combined with certain changes in the decision-making responsibility in the hospital sector, which we recommend herein.

WE RECOMMEND:

The Metropolitan Council/Metropolitan Health Board and the community's physicians should jointly take steps to reduce the level of acute hospital bed utilization.

All Twin Cities area hospitals should participate in the all-bed review conducted by the Foundation for Health Care Evaluation.

• Twin Cities area hospitals should, without exception, participate in the all-bed review conducted by the Foundation for Health Care Evaluation.

If this voluntary program fails, the Metropolitan Council should present to the Minnesota Legislature, in 1979, a proposed amendment which would set as a condition of approval of a certificate-of-need the participation by the hospital in the community-wide all-bed review, as it is at that time being conducted by the Foundation.

Physicians should complete a course in medical economics.

• As a requirement for licensing, the State Board of Medical Examiners should require that all physicians complete courses in health economics. To facilitate this kind of education, the Board should ask the University of Minnesota Medical School to begin offering courses in health economics as a regular part of its continuing education curriculum. In addition, the School of Medicine should add health economics to its core of required courses.

The Metropolitan Council/Health Board and the hospitals should together effect a reduction of from 1,500 to 3,500 beds.

This effort--essential, in our view, to reduce the pressure for excess utilization--requires three steps. First, there must be an effective, temporary 'hold' on those investments or reinvestments that would foreclose the community's opportunity to reduce the size of the hospital plant. Second, the Metropolitan Council must produce a decision about the overall size, shape and structure of the future hospital system. Third, decisions must be made--by the hospital community or by public authority--about the individual elements of that hospital system: Which are to remain; which are not to remain;

and which are to be changed in size.

Place a temporary hold on investment/reinvestment in the region's hospital system.

• Clearly, if there is to be any serious prospect of success with an effort to reduce the size of the hospital plant, further capital investment must be suspended while the decisions on specifics are being arrived at. We urge the Metropolitan Health Board, the Metropolitan Council, and the Minnesota Department of Health not to approve a certificate-of-need for any hospital in the region until the decision on the future size, shape and structure of the system has been agreed on--which, under the time-table we propose herein, would be about mid-1979.

We urge the hospitals of the area to cooperate, by withholding their applications. Should an application nevertheless be submitted, it should be considered under a special 'appeals' procedure that would provide for approval (a) when the Health Board and the Metropolitan Council have, by a three-fourths vote of their membership, found that (b) an absolutely compelling need exists for the improvement, and (c) that no reasonable question exists about the facility, or service, being a part of the future hospital system of the region.

This period of 'suspension' in the approval of applications should begin as of October 1977 and should be announced by resolution of the Health Board and the Council.

Adopt a plan for the future size, shape, and structure of the region's hospital system.

• By *September 1978* the Metropolitan Health Board and the Metropolitan Council should come to a decision about the size, shape and structure of the desired system, overall.

The schedule should continue to call for the hospitals to submit their individual long-range plans (admittedly, drawn up outside the framework of any agreed-on community-wide plan) by *January 1978*.

The foundation of that framework will come about *March 1978* from the Health Board's "viable hospitals" task force: It should press its work rapidly, and in the interests of time should focus first on the issues of total bed size, and distribution. This should then be moved to the Metropolitan Council, as the general-purpose policy body for the region, for approval or modification.

Beginning immediately, the major institutions of the health care sector should address themselves to the same issues, and should develop recommendations to be made to the Health Board and Council. We urge, specifically, that recommendations be developed by:

--Hospitals, individually. Hospitals should consider, among their alternatives, the possibility of closing, and select this course where appropriate. We should stress: We are talking about the closing of the hospital as a hospital. This might well involve the continued existence and activity of the hospital as an organization, in some new and different mission in the health or social service field.

--The Task Force on 'Supply' of the Commission on Health Care Costs established by the Minnesota State Medical Association should include in its report a specific recommendation as to the hospitals that should be withdrawn from service.

--The Physicians Metropolitan Health Force, which is a group of doctors serving as informal advisors to the Metropolitan Health Board and supported by the State Medical Association.

--The Minnesota Hospital Association. In the state, currently, the operation of the rate-review program is delegated to

the Minnesota Hospital Association. This review cannot function with full effectiveness unless it can deal with situations where charges are high as a result of excessive fixed costs. And it cannot make even recommendations about reducing such charges without some larger framework of planning or policy about the size and shape of the community's hospital system.

--A Twin Cities Hospital Trustees Council. Such a council should be formed by members of the boards of hospitals in the metropolitan area, acting as individuals. This should be organized in the fall of 1977. It should have a staff separate from the staffs of the individual hospitals; and should be financed independently. While we would not want this to be the only, or the most important--or in any sense an official--voice in the shaping of the future system, we do believe the organization of trustees will have a very special importance. Partly, this is because the trustees have had, as we have found, so surprisingly small a part in this community's debate about hospital and health care planning in recent years. Partly, too, it is because they represent such a considerable potential influence--lying, as they do, between the hospital administration, on the one hand, and the public, on the other; yet uncertain, we sense, whether their job today is to represent the hospital to the community, or the community to the hospital. Trustees are the principal interest not yet heard from, in this enlarging discussion about health care policy; and we think it is essential that they do become involved, in this independent capacity, as the issues now move toward decision 1977-79.

Our own recommendations are that the Metropolitan Council guidelines:

--Call for from 6,900 to 8,900 beds-in-service.

--Defer any redistribution of beds geographically within the region until after the bed-reduction program is completed.

--Set up a strong preference for proposals that involve a restructuring of the system.

Specifically, the guidelines on structure should give first priority to new arrangements for doctors and hospitals. Prepaid health delivery plans, set up in such a way that both doctors and hospitals share in the plans' financial risks, are one example. Second priority should be given to new arrangements among hospitals--especially groupings of previously independent hospitals for the purpose of planning and implementing consolidated capital improvement programs. In addition, grouping might also involve the formal merger of two or more hospital corporations; joint purchasing of equipment; or agreements by two or more hospitals to consolidate certain services at one location (e.g., chemical dependency or pediatrics). Arrangements could involve two or more "front line" hospitals; or one or more general hospitals and a referral hospital for specialized care.

Regardless of the form, restructuring should result in a decrease in the number of independent proposals for changes in medical services being submitted to the Health Board. For example, it might be desirable to work toward four groups of hospitals, each group representing about 2,000 beds.

If necessary, use appropriateness reviews and special legislation to close hospitals.

• By *July 1979* the Health Board should begin appropriateness reviews. As we understand it, these reviews will decide which particular hospitals are to be a part of the recommended overall system. First option to make this decision, on the recommended reduction of capacity,

should rest with the hospitals, individually and collectively. They should adjust their January 1978 proposals downward, singly or in combination. Their revised institutional plans should be submitted to the Health Board and the Council by March 1979. If these do not, in total, fit to the guidelines set our for the regional system, the decision on individual hospitals will then become one to be made by public authority.

In making decisions regarding the institutions which should be closed, the Health Board should not give special weight to the age of facilities. That is, whether or not a hospital has been recently rebuilt should not be a major consideration. We find that capital expenditures are relatively small by comparison with operating expenses. Even in the case of a new facility, the community saving that would accrue due to decreased operating expenses would, within a few years, more than equal the cost of construction and equipment.

The 1979 Legislature, with the assistance of the Metropolitan Council and the Minnesota Department of Health, should prepare steps to be taken toward the mandatory closing of hospitals, in the event that the recommended non-governmental and voluntary actions fail to make sufficient progress toward the goals established. A variety of alternative actions should be designed. Specifically to:

--Make participation in the all-bed utilization review a condition of reimbursement by insurers in the state.

--Require the rate-review authority to report annually to the Metropolitan Council which hospitals have abnormally high charges as a result of their *fixed* costs; and to permit the Minnesota Department of Health, with the approval of the Metropolitan Council, to set maximum allowable rates. As a part of this system, charges should be required to be based on the actual costs of each service. (This is subject to one major exception, discussed herein on page 24.)

--Add a 'non-conforming use' feature to the law on certificate-of-need. Facilities and services outside the approved plan could, in other words, continue in service. But it would be understood that, at the end of their useful life, they would not be approved for replacement.

--Provide for public financing of hospital capital expenditure. The responsibility for financing the expansion, modernization and replacement could be assumed by a central regional public authority. The responsibility for the repayment of debt--new and existing--would be assumed at the same time. All third-party reimbursement for hospital capital would be paid to this regional hospital-facilities authority. As an additional control, the borrowings of the new regional hospital facilities authority could be made subject to area-wide voter referendum.

Procedures should also be worked out for the handling of assets or liabilities outstanding at the time a hospital closes. In some cases, debt remaining to be retired could be serviced by assets, once liquidated. In some cases, a surplus of assets may remain after repayment of all debt. This could be transferred to the parent corporation; used to underwrite a new mission for the corporation, or distributed among other hospitals to reduce debt in the system generally and, at the same time, daily patient charges. In other cases, the assets will be insufficient when liquidated to retire the outstanding debt. The debt service charge should then be prorated among the remaining hospitals. An option exists for this to be picked up directly, publicly, and repaid through the tax system as a small addition to the seven-county property tax levy. But it seems to us more

appropriate, and feasible, for this to be handled in combination with the debt of other, remaining hospitals.

LONGER-TERM, INCENTIVES TO CONTROL UTILIZATION MUST BE CREATED

We believe the steps in the foregoing recommendations can have some real effect in reducing the size, and utilization, of the hospital plant in the Twin Cities area.

We recognize, however, that this effort to move through community planning and quasi-public decision-making requires for its effectiveness a broad--and fairly deep--community understanding of the way the health care system generates usage and costs; requires an unusual amount of courage on the part of the Metropolitan Health Board and the Metropolitan Council; and requires a considerable enlightenment on the part of hospitals and physicians about their responsibility for bringing institutional and professional behavior into conformance with broad community objectives.

Even in so unusual a community as the Twin Cities area, these conditions will not be easily met. It would be sound public strategy, therefore, to move also, and at the same time, with an effort that works by giving the physician and hospital a real and direct interest in restraining utilization. Essentially, this means some arrangement by which a physician group or hospital is provided in advance with a fixed sum of money for the care of a defined group of patients over a defined period. Whether called 'prepayment' or 'prospective reimbursement' or 'rate setting', this is the common element in almost every strategy for reform of the system now being discussed.

Market incentives are preferable to administrative regulation.

Most of these arrangements would work through the planning and regulatory system, however . . . and are, therefore, subject to the same qualifications we raise about the limitations of public action and enlightened self-interest. It would be better if the community could work instead to introduce these new incentives through non-governmental arrangements. The Twin Cities area has a remarkable opportunity to do this, now, as a result of the growth here in recent years of the prepaid group practice plans, which we described in our findings. These are growing to the point where their benefits are broad enough, and their utilization controls are good enough, that they can offer quality health care for the first time at a price below that of the conventional fee-for-service/indemnity plans. Since they use hospitals at a significantly lower rate, their own institutional interest in continued expansion coincides with the community interest in more efficient use of health care resources. Their development, therefore, should be encouraged by public and community policy.

A base for long-term control through market incentives already exists in the Twin Cities.

The base for such a strategy has been laid . . . in the growth of Group Health Plan, Inc., or MedCenter Health Plan and in the appearance of the smaller plans; and also by the continuance of Physicians Health Plan and its recent efforts to bring down the utilization rate of its independent-practice doctors.

The critical question, next . . . which will determine whether this alternative system becomes an effective influence in reducing utilization or not . . . is whether--in the literal sense of the

words--anybody cares what health care costs. If nobody responds to the economic incentives offered by the lower prices in these plans, they will not grow, and the pressure for lower utilization in the system will fade.

Ultimately, then, the decision about their growth lies with the buyers of health care--which are, increasingly, the business firms of the community as they now pay for the health benefits offered to their employees. For the alternative plans to grow, they need to be offered to the employee as an option, by the employer--preferably at a price which reflects the employer's actual cost experience--and encouraged. There is an important issue here, too, for the labor unions which represent the employees . . . since, from one point of view, these health benefits are bought with 'compensation' dollars which could otherwise have come to the worker in the form of wages. In plain words, a better price on health care can mean more spendable cash.

On this ground, too, an important opportunity exists in this community. Employers here--perhaps more than anywhere else in the country--have become sophisticated about issues of health care policy. This is heavily as a result of the existence here, some years ago, of the Twin Cities Health Care Development Project . . . which evolved into the Twin Cities based National Association of Employers for Health Maintenance Organizations (NAEHMO). Even more significant in educating this community to the problem and to non-regulatory solutions has been the presence here of InterStudy, a health-policy research institute with significant impact also on the national scene.

We have concluded that a substantial effort should be made here to encourage the development of these alternative health care plans. This will require an active effort by the private sector. The appropriate role for the public sector is: Not to impede, by legislation and/or regulation, the adjustments taking place in the market among the competing suppliers of health care services, and to encourage these when appropriate; and, as a major employer, to make a choice of health care programs available to its own employees.

WE RECOMMEND:

Employers and hospitals should act to encourage the growth of alternative health care delivery plans.

Employers in the Twin Cities area should offer one or more of these alternative plans as an option to their employees for their health care coverage. Where the employer pays for the cost of the plan for an employee and his dependents, the firm should pay for the least expensive of the available plans; with the employee having the opportunity of paying the extra cost for a different plan should he prefer it.

Business firms--as an extension of their responsible social role--should lend their encouragement and assistance to these emerging forms of health care delivery. This could include technical help in management, marketing or investment. It could also include 'moral' and political support. Labor should lend its political support.

Hospitals in the Twin Cities area should explore the possibility of establishing such arrangements for the care of the patient group served by their respective medical staffs.

The Metropolitan Council/Health Board should set-up a special process for reviewing certificate of need requests from alternative health delivery plans.

The Metropolitan Council and Metropolitan Health Board should set up two alternate

routes by which a health care institution could secure permission to make capital investments of $150,000 or more.

The first would require the institution to show that it was fully reflecting the costs of such investment in rates subject to competition; and was in fact, under these incentives, experiencing rates of hospital utilization significantly below the area's pattern. This would apply to an institution actually delivering care--as a prepaid health delivery system. Under this same alternative, a hospital would be required to show that 70% or more of its patient days were used by prepaid health delivery plans, under long-term contracts. For both, the certificate-of-need required by state law should still be applied for, so that the Metropolitan Health Board is fully informed about the changing pattern of investment and utilization in the region; but the certificate should be issued simply on the required showings.

The second would apply to institutions not operating as prepaid health delivery plans, or as hospitals principally serving such plans. These would require the institution to pass through the process of administrative review; as to the need for the added facilities and/or equipment, and as to the reasonableness of its rates.

The reason for the distinction is a simple one. The public purpose is to have investment subject to some form of restraint. Where the economic constraints are present, regulation need not be.

The issue implicit here may not become a real one, at any early date. The prepaid health delivery plans presently contract for beds and services in existing hospitals--as Group Health, for example, does with Fairview. And it is possible that, as they expand, these plans will continue to prefer to contract for hospital service, leaving the operation and development of facilities to others. But it is also possible that, like Kaiser on the west coast, a plan will at some point elect to build and own a hospital itself. The largest of them is not too far from the 150,000 enrollment which--at a rate of two beds per thousand enrolled--would justify the 300-bed hospital. This is a level well below the current rate in the Twin Cities area of more than five beds per thousand, and public policy should consciously induce the system to move to this type of delivery by granting permission for the capital these plans do find it economic to install.

Hospitals with aggressive utilization review programs ought to be given special consideration in both certificate of need and rate review.

A special problem exists in the case of a hospital in which tough controls on utilization are being run by the medical staff even under fee-for-service arrangements. Such a program results in a lowered occupancy for the hospital--and, therefore, if the hospital is to remain viable financially, higher-than-average costs and charges per patient day. This could become an issue for rate review.

In the handling both of certificate-of-need and of rate review, it will be important to distinguish this situation of high charges--which results from tight utilization review and is therefore in the community interest--from the situation of high charges which would result in a hospital spending heavily on capital investment and staff, without a strong utilization review program.

If it becomes necessary to move to rate-setting as a way of bringing down the size of the hospital plant, a similar exemption ought to be granted for a hospital whose excessively high charges result from aggressive effort by its medical staff to shorten length of stay and to reduce unnecessary admissions.

BACKGROUND

There are five major components of the Twin Cities health care system: Health maintenance and prevention activities, patients, doctors, hospitals, and the financial arrangements which provide the funds for both operating and capital expenses. The focus of our study is the hospital component and specifically the Twin Cities' 35 short-stay community hospitals (that is, those hospitals where stays do not exceed 30 days). Excluded from major consideration are the region's state hospitals, Veterans Hospital, and long-term care facilities.

Of major interest with respect to the region's community hospitals are the following subjects:

-The size, shape and structure of the region's hospital system. That is, how many hospitals? Where are they located? Who owns them?

-The kinds of services hospitals provide and the populations they serve.

-The extent to which their services are used and, in some cases, unused.

-The evolution of community-wide hospital planning in the Twin Cities.

-Trends in hospital expenditures and alternative strategies for controlling them.

Throughout this background section, many references are made to specific hospitals and hospital corporations. This was done to make the description more meaningful . . . to illustrate trends as they are occurring in the Twin Cities. The references are meant as examples and not as complete lists of local activity in a particular area.

HEALTH MAINTENANCE AND PREVENTION ACTIVITIES

The health care system is focused mainly on care for the sick . . . that is, people who are suffering because of disease, injury or body deterioration due to aging. The health maintenance and prevention component is relatively small and confined primarily to public health activities (see Table 4).

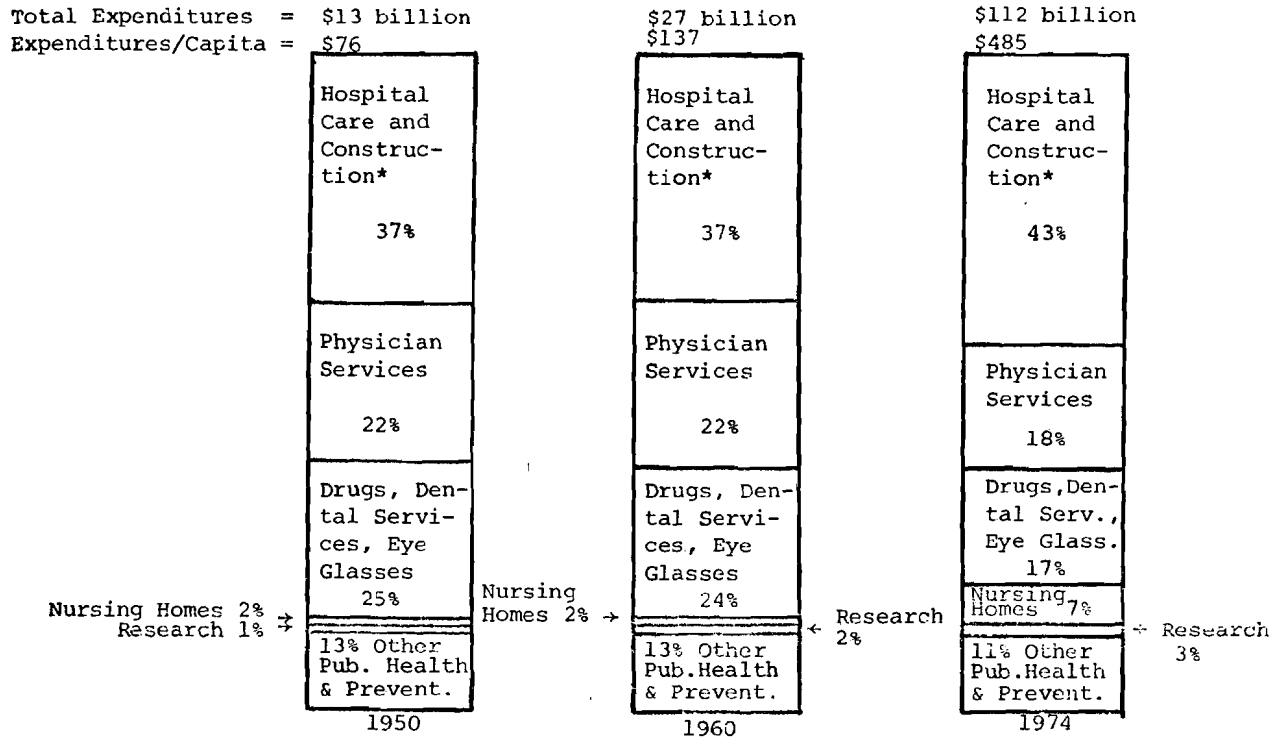
As is true of other services, the health care system has been fundamentally shaped by the incentives resulting from public policy (e.g., Medicare and Medicaid) and private actions. Heavier use of and reliance upon the sick care components of the health care system is the result of incentives which have been created since World War II. No similar incentives have been developed to encourage health maintenance. Consequently, maintenance and prevention programs have not grown substantially over the last 30 years.

Public health activities have had major, if not the greatest, impact on the overall health status of our population.

Sanitation and immunization programs have brought significant results. One after another, the major epidemics and contagious diseases have been reduced to

Table 4

NATIONAL HEALTH EXPENDITURES, 1950, 1960, 1974



SOURCE: Statistical Abstracts of the U.S. 1976, Table 106, U.S. Department of Commerce, Bureau of Census.

*Largely hospital, but includes other health-related construction.

negligible proportions or eliminated: Tuberculosis, smallpox, measles, typhoid and polio. Medical research has played a role in understanding the nature of these diseases, but the actual prevention programs have been carried out through the public health service and, in many cases, by nonmedical personnel.

In the future, public health will continue to play a major role in health maintenance. For example, cancer research suggests a direct relationship between the incidence of some forms of cancer and certain environmental conditions. Although the responsibility may not fall on the 'health department' per se, work will have to be done to monitor and change environmental conditions.

Health education and maintenance have been traditional concerns of public health departments. There is growing interest in and financial support for these programs.

Much of the current interest in health education and maintenance has its origins in the public health services. The health departments in both Minneapolis and St. Paul have sponsored health education and maintenance programs aimed for the most part at expectant mothers and small children.

The Community Health Services, Act, 1976, provides for state block grants to counties for use in developing public health programs. Consistent with

other recent legislative action, the act gives counties direct responsibility for public health planning and programming. Although counties will use some of these funds for inspection and sanitation programs, health maintenance and disease prevention education is a major component of the legislation.

According to the act, each county will develop its own plan for community health services. These plans will be reviewed by the regional planning council, the Metropolitan Health Board for the Twin Cities, and the state Department of Health. Once approved, the county will be eligible for a block grant, the amount of which is based primarily on population.

The Metropolitan Health Board has developed criteria for reviewing the plans submitted by individual counties. These criteria stress the following:

-Citizen and provider participation in planning.

-Inclusion of "programs which emphasize illness prevention and health education . . ."

-Development of health screening and early detection programs.

-Coordination and cooperation among providers.

During the last few years, hospitals have shown greater interest in providing some services which have traditionally been thought of as "public health services". Most notable are programs in home health care, general primary care and health education. For example, both North Memorial Medical Center and St. John's Hospital have their own home health care or visiting nurse programs.

Several hospitals provide supplies and financial support for community clinics, most of which are providers of primary care to low and middle income people.

Health education programs were initiated to teach in-patients with chronic problems to care for themselves after their release; however, in recent years the programs have in many cases broadened their scope so that they are now educating the general public. Metropolitan Medical Center's publication, Focus on Health, regularly includes a health education feature. North Memorial Medical Center provides health education programs for school districts in northern Hennepin County. All of these programs will be discussed in greater detail in another part of this section.

THE PATIENTS

Minnesotans and specifically Twin Cities residents are relatively healthy.

Life expectancy and the infant death rate are two of the most common measures used to measure health status. Only Hawaiians have a longer life expectancy than Minnesotans. In 1971, the average life expectancy for Minnesotans was 72.9 years, for Hawaiians it was 73.6 years, and for the nation as a whole it was 70.8 years. The infant mortality rate for the Twin Cities and the metropolitan United States is shown in Table 5:

Table 5

INFANT* DEATHS PER 1,000 LIVE BIRTHS, TWIN CITIES COMPARED WITH METROPOLITAN UNITED STATES

Year	Twin Cities	Metro U.S.
1970	17.8	19.5
1975	13.2	16.3 (1974)

SOURCE: Minnesota Center for Health Statistics.

*Birth to one year.

People require hospitalization largely for treatment of illnesses that result from personal life-style and from body deterioration due to aging.

A survey of a sample of Twin Cities hospitals showed that in 1975 the most common primary diagnoses for hospitalized persons were: Accidental injuries, heart attack, stroke, birth and cancer. This pattern of diagnosis is reflected in the leading causes of death for the metropolitan area for 1975: Heart disease (51%), cancer (21%), stroke (11%), accidental injury (5%). With the possible exception of cancer, all of the major causes of hospitalization can be traced to personal life-style and body deterioration due primarily to aging. That is to say that people end up in the hospital because of their own actions or because of the natural process of aging. In the past this was not the case. Hospital beds were filled by persons with bacteria or virus-related diseases (e.g., tuberculosis, polio, pneumonia).

Currently, there is no source of data for the metropolitan area on illness when it does not result in death. As the percentages above would indicate, we have good information on the causes of death, but, when it comes to the primary reasons for hospitalization, it is impossible for us to do more than report our rather informal observations. Hospitals do keep track of primary diagnosis of their patients, but this information has never been collected and systematically analyzed for the metropolitan area.

New medical technology has made it possible for the physician to do more for his patients. As a result, people now seek and receive care for a broader range of health problems. For example, the number of diagnostic procedures has grown as a result of new X-ray technology (most notably, the C.A.T. Scanner). Fifteen years ago the "intensive care unit" or the "coronary care unit" did not exist. In 1976, about 14% of the patients admitted at Hennepin County Medical Center received some form of "intensive care". About 11% of those admitted at the Miller Division of United Hospitals received this kind of care.

Becoming a *patient* is, in large part, a matter of personal choice.

Not all people seek professional medical help when they become ill or are injured. Often people decide that the problem is not severe enough to warrant a doctor's care. Instead they choose some kind of self care, seek help or first aid from a nonmedical person, or just ignore the problem. The point at which a person chooses to call a doctor will vary from person to person. Some people call with the most minor symptoms, while others wait until they are so sick that someone else has to call for them.

Patients are also free to stop receiving care whenever they choose; however, incentives in the system do not encourage this.

After trying various types of care without being cured, some patients decide that they will just "live with the problem". However, there are few incentives in the health care system encouraging patients to live with their problems.

Many patients are insulated from and, in some cases, oblivious to the cost of their hospital care. Their bills are paid through a "third party", a private insurance company, Blue Cross, Medicare or Medicaid. About 90% of Twin Cities residents who work full time have comprehensive medical insurance. The remaining full-time employees have coverage for at least catastrophic illnesses. Employers are required by Minnesota law to offer their workers at least catastrophic coverage. Most unemployed persons are also covered, many through a spouse's or relative's policy, Medicare, Medicaid or some other form of public assistance. Premiums for private insurance are in some cases paid in full by employers. When they are not, premium

charges are deducted from a patient's paycheck. Consequently, few people pay (that is, actually have to write a check or pay cash) for their hospital expenses.

Because the patient is so divorced from the cost, there is little incentive for him to be concerned about the cost of care. His insurance usually gives him access to the most modern medical technology, and the patient has come to expect his physician to use this technology even if it will bring only minimal results.

Although insurance coverage is a major force motivating patients to seek the most sophisticated forms of care, other factors also contribute. For example, all of the major local newspapers regularly report on the most recent developments in medical technology. These articles have increased the public's awareness of what medicine can do and undoubtedly encourage patients to ask their physician if, for example, a cardiac bypass operation would make their heart stronger or if the removal of a portion of their small intestine would help them lose weight.

Terminal cases may be a major exception. There are signs that more and more patients do not want their physicians to use extraordinary means to prolong life. The Kaiser Foundation is now developing a hospice program . . . that is, facilities for terminal patients where the goal is to keep the person comfortable rather than to try to prolong life. A recent Harris survey reports that 71% of the persons polled felt "a patient with a terminal disease ought to be able to tell his doctor to let him die rather than extend life . . ." In 1973, only 62% of those questioned felt the same way.[1]

THE DOCTORS

Patients cannot be admitted to the hospital, tests cannot be ordered, treatment cannot be given and drugs cannot be prescribed without the approval of a licensed physician. In recent years nurses and other medical professionals have been given greater responsibility for the care of patients, but the doctor still remains in charge. The work that other professionals do is done at his request.

The hospital has traditionally been the physician's *workshop*.

The hospital provides the physician with the equipment and personnel he needs to provide many types of care. Although the range of diagnostic and treatment procedures which can be done in the doctor's office has greatly increased, most physicians still make regular use of hospital facilities.

Almost all of the region's approximately 3,400 physicians are on the staff of at least one hospital and, in the case of specialists, several hospitals. The primary care physician (i.e., pediatrician, obstetrician, internist, general practitioner, family practitioner) will usually be on the staff of one and sometimes two general acute hospitals and, in the case of the pediatrician, possibly one of the local children's hospitals. These physicians are extremely important to the hospital because they account for approximately 80% of admissions. Specialists, who get most of their cases through referral, will usually be on staff at several hospitals. Although it varies with the specialty, the primary care physicians at any one hospital will

[1] "Increased Support of Euthanasia Noted", Minneapolis Star, March 24, 1977, p. 16C

usually not generate enough referrals to allow the specialist to break ties with other hospitals.

Physicians choose the hospital(s) at which they practice based on the location of the hospital and the kinds of equipment it has available. Most physicians want to work at a hospital which is relatively close to their office. This makes the process of seeing patients at the hospital more efficient. To make it convenient for physicians to use the hospital, many local institutions have built adjoining medical office buildings. The hospital's facilities are of concern to all physicians, but particularly to the specialists. An oncologist (i.e., cancer specialist) cannot join a hospital staff unless the institution has the necessary equipment, and preferably the most up-to-date variety.

Although it is his *workshop*, the physician has no financial or legal tie with the hospital.

The physician is not employed by the hospital, nor does he pay to use it. There are some exceptions. For example, some hospitals hire physicians to staff their emergency rooms. Hospital pathology and radiology services are usually contracted out to a group of physicians who agree to locate their office in the hospital; however, the hospital usually purchases all equipment and supplies. Residents, interns, or any other physicians in a training program may also be paid by the hospital.

The medical staff and its function has to be distinguished from the hospital and its administration. While the physician has no formal ties to the hospital itself, he is obligated to the medical staff, must abide by its rules, and must accept the responsibilities assigned to him by the staff. When a physician wants to practice at a hospital, he first applies to the medical staff for privileges. If the staff approves the application, it is then passed on to the administration and, in some cases, to the hospital's board for their approval.

Maintaining the support of its medical staff is of critical importance to the hospital. If staff members are not satisfied with the hospital's facilities or the way in which it is operated, they may take their patients elsewhere and in the process put the hospital out of business. Consequently, the hospital's administration is extremely sensitive to the desires of its physicians. At least one member of the medical staff will usually be on the board of trustees. All planning for changes in hospital procedure, purchase of equipment, addition of services or expansion or remodeling involve the medical staff and in many cases are instigated by members of the staff.

Hospital utilization by physicians is affected by their *style* of medical practice.

Within the metropolitan area there are some significant differences in the style of practice and therefore the use of the hospital. The rate of hospital utilization in the eastern portion of the metropolitan area is typically greater than that for the western portion, despite population and living conditions which are roughly similar. Table 6 shows the difference in hospital utilization for medical/surgical and pediatric services for the two portions of the seven-county metropolitan area.

Differences in style of practice is thought to be affected mostly by the nature of a physician's medical school training, whether or not he practices by himself or in a group, and the availability of hospital facilities in his community.

Many local physicians were trained at the University of Minnesota Medical School, and, while this might explain differences in style between the Twin Cities and other metropolitan areas, it does not account for intra-regional differences.

Table 6

HISTORIC USE RATES FOR MEDICAL/SURGICAL AND PEDIATRIC SERVICES IN THE METROPOLITAN AREA* (IN-PATIENT DAYS PER 1,000 POPULATION)

Year	West Metropolitan Counties (Hennepin, Anoka, Carver, Scott)	East Metropolitan Counties (Ramsey, Washington, Dakota)
1966	1,144	1,298
1967	1,126	1,269
1968	1,165	1,305
1969	1,138	1,252
1970	1,116	1,237
1971	1,079	1,116
1972	1,028	1,110
1973	969	1,029
1974	917	967
1975	917	967
1976	883	994

SOURCE: Metropolitan Health Board

*Adjusted to eliminate out-of-area hospital patient days.

Generally speaking, most local physicians now practicing were trained in a style of medicine involving regular use of the hospital. Much of their training took place in the hospital and their only experience in treating certain types of problems was in the hospital. Although it may now be possible to do a broader range of diagnostic and treatment procedures in a non-hospital setting or on an out-patient basis, physicians, because of their training, may not be quick to alter their style of practice.

Minnesota and particularly the western portion of the metropolitan area has an unusually large share of its physicians working in group practices (both single-specialty and multi-specialty). Table 7 compares Minnesota with the rest of the nation.

In 1976, within the metropolitan area, according to the Hennepin County and Ramsey County Medical Associations, there were about 140 groups (both single and multi-specialty) made up of three or more physicians. Over 90 of these groups were in the western portion of the metropolitan area; 25 of the region's approximately 27 multi-specialty groups were located in Hennepin, Anoka, Carver or Scott counties; 22 of the region's approximately 26 groups with six or more physicians were located in the western counties.

The larger number of group practices (particularly multi-specialty groups) in the western portion of the metropolitan area may be a major determinant of that area's lower rate of hospital utilization. The consultation system within a group, as well as its ability to purchase its own

Table 7

GROUP PRACTICE, 1975, UNITED STATES AND MINNESOTA

	Minnesota	United States
Percent of physicians in any group practice	43.7	17.6
Percent of physicians in single-specialty groups	13.4	6.2
Percent of physicians in family practice groups	5.1	1.0
Percent of physicians in multi-specialty groups	25.3	10.4

SOURCE: Alternatives for State Support of Health Research, Walter McClure et al, InterStudy, 1977, Table 11, p. 23.

diagnostic equipment, allows each physician to do more work at the clinic. The group setting may also decrease the incidence of unnecessary surgery. A group of general practitioners can be set up so that it feeds one or two surgeons. This provides the surgeon(s) with a relatively predictable flow of work and thus may reduce the possibility of unnecessary surgery.

If hospital beds are in short supply, physicians tend to become more selective about the patients they hospitalize as well as their length of stay. A physician who hospitalizes unnecessarily, or who keeps his patients longer than absolutely necessary, may be censured by his colleagues. For example, the Kaiser Foundation hospitals in southern California operate at occupancy levels of around 95%. Kaiser's planning director for southern California, John C. Dumas, reported to our committee that, as a result of this condition, Kaiser doctors do as much work as possible outside of the hospital, and when they do use it they know that any delay on their part could have serious consequences for the patients of fellow doctors.

In the Twin Cities, most hospitals have been operating with occupancy rates between 60% and 80% since at least 1970, depending on the service. For the most part, these rates by themselves are not sufficient incentive for doctors to minimize their in-patient use of the hospital.

A metropolitan-wide program to review the physician's decision to hospitalize, and the length of hospitalization, is just getting started.

Amendments to the Social Security Act in 1974 require that all Medicare/Medicaid hospital patients be reviewed at regular intervals during their hospital stay to make sure that hospitalization is necessary. The amendments called for the creation of Professional Standards Review Organizations (PSRO) and gave these organizations responsibility for supervising the review process. In the Twin Cities, utilization review is being supervised by the Foundation for Health Care Evaluation, a private nonprofit physician-based peer review organization. The Foundation was originally formed in 1971 by local physicians as a fee-review and quality-assurance organization. The PSRO activity is being conducted in addition to the Foundation's other work.

Responsibility for reviewing utilization has been delegated to the individual hospitals.

The Foundation has delegated the actual review work to the hospitals. Each

institution has developed (according to Foundation guidelines) and operates its own utilization review program. The Foundation's role in the process is to: Determine community standards for hospital admission and length of stay by diagnosis and to evaluate each hospital's program on a regular basis. Hospitals refusing to supply the Foundation with data on their Medicare/Medicaid patients or to conduct a satisfactory utilization review program may have the management of their programs taken over by the Foundation, and could lose their certification for Medicare/Medicaid reimbursement. To date, no hospital has been penalized in either way.

Most Twin Cities hospitals are voluntarily reviewing all of their patients and not just those covered by Medicare/Medicaid.

In addition to the review program for federal patients, Twin Cities hospitals and medical staffs have agreed to extend the utilization review program to all patients (i.e., not just those whose bills are paid by Medicare/Medicaid) and to report the results of the additional review to the Foundation. Only one hospital, North Memorial, has refused to participate in this voluntary program. North Memorial has an all-bed review program; however, it does not share the results of these reviews with the Foundation.

As a part of the all-bed review program, the hospitals contracted with the Foundation to establish a data base for non-federal patients and to do analysis of utilization by these patients. Both the data base and the subsequent analysis are important to the program because they will be used to determine community-wide norms for admission and length of stay by non-federal patients. Without this information, hospitals would have no outside standard against which to measure their own utilization.

It is not certain that hospitals will continue to provide financial support for analysis by the Foundation of the results of their all-bed review programs.

On June 30, 1977, the hospitals' contract with the Foundation for handling data generated by all-bed review expired. As of September 1, 1977, this contract has not been renewed by the hospitals. Several reasons have been given for the lapse of the contract:

-Hospitals feel that the insurers will realize the greatest benefit from the program and therefore want them to pay the cost of analysis (about 55¢ per patient).

-Some hospitals feel that the savings are not great enough to justify review of all patients while they are hospitalized . . . that is, a concurrent review program. At the very most, concurrent reviews should be done and data collected and analyzed for only specific types of cases: Those where there is evidence of inappropriate utilization. All other hospital use could be reviewed retrospectively. Hospitals and the Foundation are currently in the process of trying to get a research grant to study the cost/savings from a concurrent all-bed review program.

-Some hospitals feel that it is not necessary to have a centralized data base and analysis program in order to continue all-bed review programs. The program, they say, can be effective using only their own data.

-The quality of the review programs was not being properly policed. Some hospitals have run tighter programs than others, and as a result their utilization has been affected more significantly. These hospitals are concerned that the Foundation has not been effective in insuring uniformity among the various programs.

-The hospitals had anticipated an approximately 5% increase in medical/surgical utilization during 1977. Utilization to May 1977 suggests that instead it will be down by about 5%, going from 810,000 for the first five months of 1976 to 770,000 for the first five months of 1977. While all-bed review is not the total cause of the decrease, it is probably a factor.

Utilization review activity is focused on the appropriateness of hospital admissions and a patient's length of stay in the hospital.

Utilization review begins on admission to the hospital. After the patient is admitted, a technician will look at the reason for admitting to see if it is appropriate. Appropriateness is defined through a set of criteria established by the Foundation and based on established medical practices in the metropolitan area. If the technician finds no evidence as to the appropriateness of the admission, then further information is sought and the case may be reviewed by the hospital's utilization review committee. This committee is made up of doctors from the hospital's medical staff. Between 2% and 3% of admissions are referred to the review committee. In total, less than 1% of total admissions are actually rejected.

Once the admission is approved, the technician sets a date for the next review. That date is set at the 50th percentile of the patient's expected stay. The expected stay is defined according to criteria established by the local medical community. For example, suppose a person was admitted for appendicitis. The book of criterua that the technician uses might say that 99% of the people admitted with that diagnosis are discharged after, say, six days. The 50th percentile would be three days, and therefore that would be the next time for review. At the time of second review, there must be documentation that acute care is still needed before the patient is approved to the 75th percentile.

If at any review point the technician feels that additional hospitalization is not necessary, then the case is referred to the hospital's utilization review committee. If this committee rules that hospitalization is no longer necessary, Medicare/Medicaid reimbursement for the patient will stop after 72 hours. The procedure for non-federal patients varies from hospital to hospital. Some medical staffs have made compliance with the committee's ruling a part of their bylaws. A physician who did not comply might lose his privileges. Medical staffs which do not have compliance as a part of their bylaws must depend on voluntary cooperation.

The addition of preadmission screening to the review program is likely to cause further reductions in hospital utilization.

Changes in the Social Security Act in 1975 required that PSROs add preadmission screening to their utilization review programs. Preadmission screening would require physicians to report to the PSRO before they hospitalize a nonemergency patient. The PSRO would then either approve or disapprove of the admission. The preadmission screening has not been implemented because it is being challenged in the courts by the American Medical Association.

One local hospital, Bethesda Lutheran, has voluntarily begun its own program of preadmission screening. This hospital has a record of taking early initiative with all phases of the utilization review program. It was the first hospital in the metropolitan area to review patients by length of stay and to begin establishing a quality-assurance program. As a result of its initiative, the hospital's utilization rate has dropped from about 128,000 patient days in 1975 to about 125,000 patient days in 1976. The hospital's overall occupancy rate has decreased from about 74% (1975) to 63% (1976).

The review process does not consider the appropriateness of the treatment a patient is receiving.

The utilization review process is focused on the reasons for admission and on the patient's length of stay. There is no concurrent review or analysis of the diagnostic procedures and treatments which a patient may be given. As a result, no limits are placed on what may be done for either terminal or chronic cases despite the fact that treatment will not result in any cure nor necessarily relieve the symptoms.

Like the patient, most incentives on the doctor have encouraged greater utilization of the hospital. The PSRO program is the only major exception.

The third-party payment system frees the doctor to offer his patients the *best possible care*. In working with a hospitalized patient, the physician knows that all expenses are likely to be covered by insurance. This situation, coupled with a medical education grounded in use of the hospital, has eliminated most restraints on the physician's use of the hospital.

Other factors have also contributed to the physician's use of the hospital. Most recently, the increase in the number of medical malpractice suits has been a factor. Doctors report that they are now practicing 'defensive medicine'. This may mean hospitalizing more often, being more agreeable to requests by patients or family, and doing additional tests.

Current incentives also work against restraints by physicians in their requests for new hospital equipment. Specialists practicing at several hospitals expect each to have the most sophisticated equipment. The hospital has always been able to cover the cost of these requests by increasing its rates. Consequently, hospital administrators have been reluctant to oppose requests by physicians.

HOSPITALS AND HOSPITAL CORPORATIONS

There are 35 community hospitals in the seven-county metropolitan area operated by 29 independent nonprofit corporations.

As of December 1976 the region's 35 hospitals had about 11,500 beds-in-service. Another 1,200 beds are licensed but not in service. Approximately 89% of the beds-in-service are being used for acute services (i.e., medical/surgical, pediatrics, obstetrics, psychiatric and alcohol/chemical dependency). The remaining 11% of the beds are being used for rehabilitation programs, extended care, and new-born nursery.

In addition to its short-term community hospitals, the region is also served by three State Hospitals and a Veterans Hospital. The Hastings State Hospital will be closed within the next year. The Gillette State Hospital specializes in pediatrics, and the Anoka State Hospital cares primarily for psychiatric patients.

Since 1950, the number of hospitals in the region has been decreasing. The decrease has been the result of hospital mergers and, to a lesser extent, to closings (i.e., going out of business).

In 1969, St. Barnabas and Swedish Hospitals merged to form Metropolitan Medical Center (MMC). Abbott and Northwestern Hospitals merged in 1972 to create Abbott-Northwestern Hospital. Miller and St. Luke's Hospitals joined in 1972 to form United Hospitals. Mt. Sinai and Eitel Hospitals once discussed the possibility of a merger, but it never materialized. More recently, some informal discussions have occurred between Mt. Sinai and Abbott-Northwestern Hospitals. Other mergers are currently being discussed. For example, there have been some discussions between Bethesda and St. John's Hospitals.

No major hospitals have simply closed or gone out of business. This, however, has been the fate of some smaller and usually single-purpose institutions. Sheltering Arms Hospital was designed primarily as a rehabilitation center for children with polio. When the polio epidemics stopped in the early 1950s, the hospital closed. Maternity Hospital cared for unwed mothers, and when other hospitals began accepting these women in their maternity wards, Maternity Hospital closed. Parkview and Vocational Hospitals both cared for patients with chronic ailments. Both were not well maintained, and lost patients to newer facilities. St. Andrew's Hospital, one of the only general hospitals to close, was purchased by St. Barnabas Hospital in the early 1950s, operated as a satellite for a few years, and then closed.

As a result of the mergers and closings, the region's remaining hospitals are relatively large: 15 have more than 400 beds; 16 have between 100 and 400 beds; and 4 have fewer than 100 beds. The average size is about 300 beds.

Corporate control of the region's hospitals is concentrated in 29 corporations. Fairview Community Hospitals, Inc., owns three local hospitals: Fairview, Lutheran Deaconess, and Fairview Southdale. Health Central, Inc., also owns three local hospitals: Golden Valley, Unity, and Mercy.[1] The Baptist Hospital Fund, Inc., owns both Midway and Mounds Park Hospitals. The Sisters of St. Joseph of Carondelet own both St. Joseph's and St. Mary's Hospitals; however, they are run through separate corporations.

The Fairview and Health Central corporations own hospitals outside the metropolitan area. Fairview owns a hospital in Princeton, Minnesota. Health Central owns hospitals in Buffalo and Winsted, Minnesota, and in Aberdeen, South Dakota.

Consolidation of the Twin Cities hospital system also has occurred through shared facilities and services.

While the sharing arrangements have not yet resulted in hospital mergers or closures, they have reduced the region's stock of certain ancillary services. Hennepin County Medical Center and Metropolitan Medical Center share, among other things, food service, laundry, pediatric and obstetric facilities. St. Mary's and Fairview are partners in the West Bank Radiation Center, which provides radiation therapy for cancer patients. Children's Hospital of St. Paul is co-locating with United Hospitals and will be sharing many ancillary services with United. Mt. Sinai's new C.A.T. Scanner will be shared with Eitel Hospital.

Of the region's hospital beds, 71% are located in either Minneapolis or St. Paul, 17% in suburban Hennepin County, and the remaining 12% in Carver, Anoka, Scott and Washington Counties. (See map on page 39.)

Growth in the region's suburban population has not yet been followed by the relocation of urban hospital facilities. Methodist Hospital in St. Louis Park, formerly Asbury Methodist in Minneapolis, is the only major relocation to date. Other moves are being considered. The Fairview corporation is considering building a hospital in Burnsville and closing Lutheran Deaconess in Minneapolis. St. John's and Bethesda Hospitals are both interested in relocating to the White Bear Lake area.

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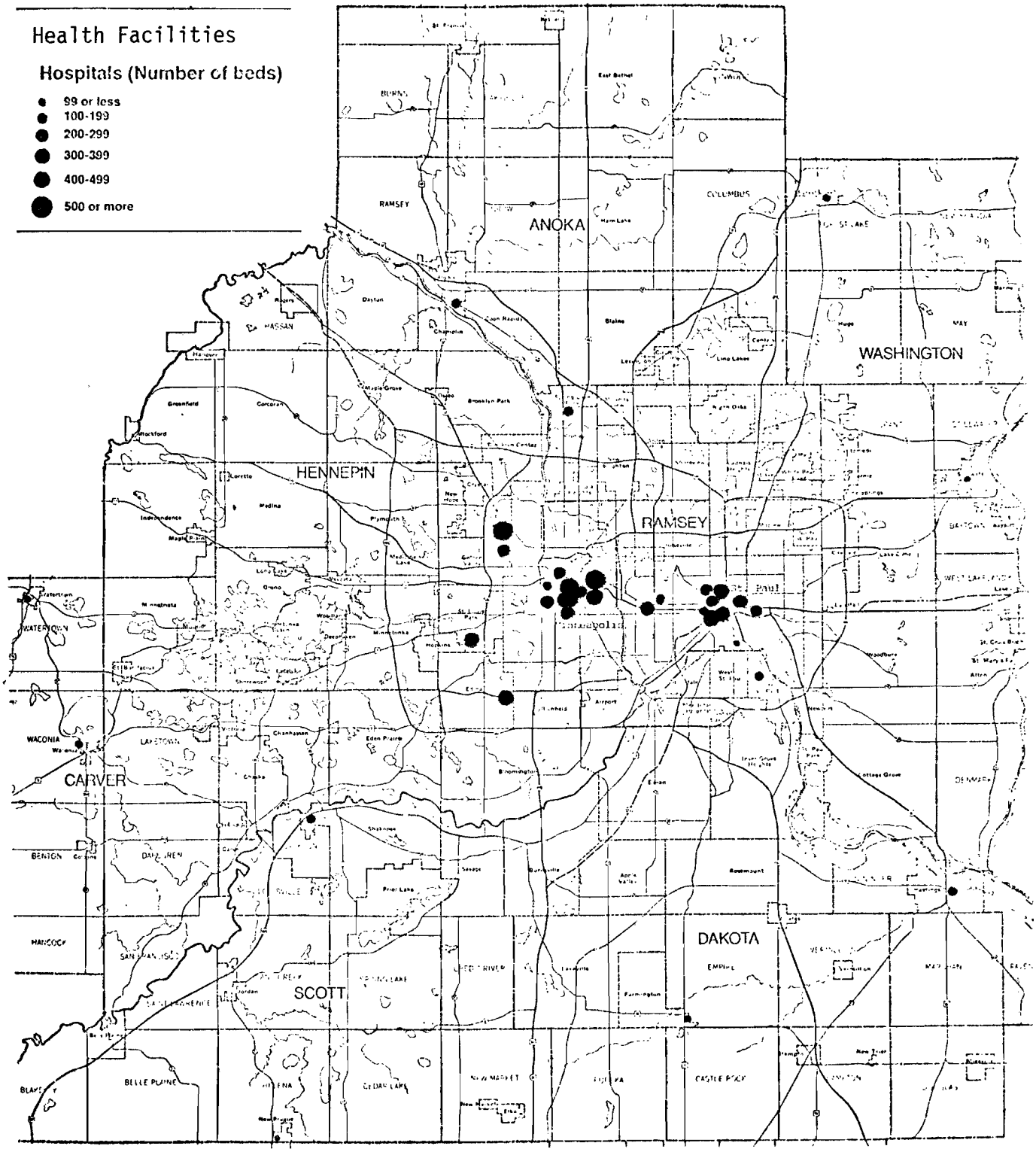
[1]Health Central, Inc., is purchasing both Unity and Mercy Hospitals through lease-purchase agreements with the nonprofit corporation which financed their original construction.



SOURCE: Metropolitan Council, September 1974

Burnsville, White Bear Lake and western Hennepin County are generally agreed upon as possible locations for new hospital facilities. The Burnsville and White Bear sites appear to be spoken for. Abbott-Northwestern Hospital was interested in the western Hennepin County location, but is now rebuilding at its Minneapolis site and is thought to be no longer actively considering the suburban location.

SCOPE OF HOSPITAL SERVICES

Most hospitals in the Twin Cities are set up and equipped to diagnose and treat the relatively common ailments. Extremely complex or unusual cases must be treated at hospitals having the appropriate specialized equipment.

Local hospitals have typically developed highly specialized capabilities in at least one department or service. Mt. Sinai has a highly sophisticated opthamology department, while the hospital's other departments are not as elaborately equipped. Fairview specializes in the treatment of scoliosis. St. John's and St. Mary's are treatment centers for alcoholism and chemical dependency. Hennepin County has special facilities for treating gangrene. St. Paul-Ramsey has the region's major burn unit. In some hospitals, specialization is more widespread. Abbott-Northwestern, University, United and the Children's Hospitals in both Minneapolis and St. Paul all serve as major referral centers for Twin Cities and Upper Midwest general hospitals.

New technology has broadened the scope of the hospital's diagnostic and treatment capabilities.

The growth in diagnostic capabilities is apparent by looking at the changes in hospital record-keeping. In 1971, diagnostic tests were reported to the Professional Activities Service using 45 major categories. In 1976, two new major categories had been added.

Some local hospitals are currently in the process of updating their laboratory facilities. Included in the plans are machines capable of performing as many as 20 different blood chemistries automatically. Ten years ago, most of those blood tests were unheard of and there was no need for the machine.

Treatment capabilities have also grown dramatically. Cancer can now be treated through radiation and chemical therapy in addition to surgery. Radiation therapy has, in a relatively short period of time, advanced from cobalt therapy to linear accelerators. A decade ago, most treatments for repair of a deteriorated organ or joint were experimental. Today, hip and knee joints are being replaced regularly. Vocal cords can be strengthened to restore the voice of an aging person. A person whose kidneys have failed can be kept alive through dialysis, and in some cases transplants can restore the person to a relatively normal life. Sight can be restored to a person with cataracts by removing the eye's lens.

Illnesses not previously treated at community hospitals are now being treated there.

To treat these illnesses, hospitals have diverted resources from services where use is decreasing. For example, both St. Mary's and St. John's built extended-care facilities in the late 1960s. When these hospitals and others found they could not always get reimbursed for care given in these facilities, their utilization dropped. And, when demand for alcohol/chemical dependency beds increased, extended-care beds were converted to this use.

Current social conditions have increased the range of treatment available at Twin Cities general hospitals. Most notably,

several hospitals now have extensive programs (both in-patient and out-patient) for the treatment of alcoholism/chemical dependency and mental illness. Since the 1960s, drug abuse has become a major problem. Alcoholism has been recognized as an illness and is now treated openly rather than as "ulcers" or "acute indigestion". And, people feel more comfortable about seeking help with their emotional problems. Employers and more recently the State of Minnesota have begun to encourage people with alcohol/chemical dependency and mental problems to seek help in a hospital setting. Employers began by expanding health insurance programs to cover treatment of these illnesses. In 1973 the Legislature passed a law requiring that health benefit packages include alcohol/chemical dependency coverage.

In response to the new demand for alcohol/chemical dependency treatment, the number of hospitals with licensed alcohol/chemical dependency beds has increased from three to eight since 1972. The number of licensed beds has grown from 98 to 358 (see Table 8). And, according to the Metropolitan Health Board, three additional hospitals have programs but they are not licensed separately (see note in Table 8). Expansion of in-patient alcohol/chemical dependency service may now be slowing. There are signs, for example, that the State of Minnesota will in the future encourage greater use of nonresidential programs for treatment of alcohol/chemical dependency.

Table 8

TWIN CITIES HOSPITAL-BASED CHEMICAL DEPENDENCY SERVICES
1972 and 1976

	1972*	1976
Number of hospitals with licensed alcohol/chemical dependency beds	3**	8***
Number of licensed beds	98	358
Patient days	56,000	134,000
Occupancy	- -	103% (91%; licensed and unlicensed)
Length of stay	- -	22.5 days

SOURCE: Metropolitan Health Board and Minnesota Department of Health.

*Alcohol/chemical dependency beds were not licensed prior to 1972. Licensed beds do not reflect the total activity in this area. Hospitals can treat alcohol/chemical dependency in general hospital beds; for example, Health Board data show there were about 400 (358 licensed) beds being used for this treatment in 1976.

**Hennepin County Medical Center, Abbott-Northwestern, St. Mary's.

***Hennepin County, Abbott-Northwestern, St. Mary's, St. John's, Golden Valley Medical Center, Metropolitan Medical Center, Mounds Park, St. Joseph's.

Major expansion in psychiatric facilities occurred between 1970 and 1972. Psychiatric beds alone accounted for almost half of the region's growth in licensed acute hospital beds between 1970 and 1976. The number of hospitals with psychiatric units grew from 8 to 13 between 1970 and 1972. The region's licensed bed capacity for this service increased from 355 beds to 839 (136%). Since alcohol/chemical dependency beds did not have a separate license until 1972, some of this expansion might have been used for treating the chemically dependent. Table 8 shows the increase in utilization for both psychiatric and alcohol/chemical dependency treatment. As can be seen, these are the only acute services where the trend is toward increased utilization.

The combination of new medical technology and social change has changed the public image of the hospital. The hospital is no longer thought of as a place where people go to die. Instead, it is a place of hope. Hospitals have become places to go for 'repairs' (both physical and mental) that usually lengthen life. And, more recently, the hospital has begun to emerge as a 'health maintenance and prevention' place. That is, in addition to their repair function, they are also becoming more active in programs to maintain health. All of these programs benefit the community. They also help to build the hospital's current business and, to a certain extent, insure a long-term role for it in the community.

Several local hospitals fund and, in some cases, operate health screening and primary care (e.g., checkups, prenatal care) programs. Support for primary care directly benefits the neighborhood residents while also building the population base from which the hospital might draw patients. The programs are usually designed to serve a specific segment of the population (e.g., teenagers, the elderly) or a specific geographic area (e.g., north Minneapolis, the west side of St. Paul).

Health screening and primary care programs are operated through a variety of means. For example: Abbott-Northwestern helps to support a clinic for senior citizens at the Minneapolis Age and Opportunity Center, and it also provides the Southside Community Clinic with supplies and laboratory services; Metropolitan Medical Center has two nurse practitioners who visit senior citizen high-rise buildings; Children's Health Center in Minneapolis operates a teenage health clinic as a part of its out-patient services; St. Joseph's allows seniors from the neighborhood to use its cafeteria and thus has an informal nutrition program; St. John's Hospital provides support services for the Helping Hand Health and Counseling Service, and some of the hospital's family practice residents have volunteered on their own to see patients at the clinic.

As a part of their health maintenance work, some hospitals have begun health education programs. Some of the courses are offered on a fee-for-service basis; others are free. Many originated as services to in-patients, but are now available to the general public. North Memorial Medical Center publishes a directory of its health education programs . . . subjects range from marriage education to stop-smoking and cardio-pulmonary resuscitation courses. North Memorial also provides health education courses to local school districts on a contractual basis. Several hospitals offer programs for expectant parents, on weight loss, on inter-personal relations, and on controlling chronic conditions (e.g., diabetic education).

In addition to serving patients, doctors and the general public, hospitals are also providing support services to other hospitals and health care institutions.

Several of the region's larger hospital corporations provide smaller hospitals and community clinics with management services on a contractual basis. The management services being sold include:

Data processing, joint purchasing, collections, payroll, laboratory services, insurance, and general administration and planning. Through its subsidiary, Minneapolis Medical Center, Inc., Abbott-Northwestern provides data processing, purchasing and payroll services to approximately 40 hospitals in Minnesota and Wisconsin. United Hospitals has a similar program. Health Central sells management services to about 80 hospitals. In addition to selling services to several hospitals primarily to the south of the Twin Cities, the Fairview corporation manages nine outstate hospitals and one in Wisconsin. Fairview also provides management services to the Ebenezer Society, a Minneapolis-based organization providing care for the aged.

HOSPITALS, POPULATIONS SERVED

Hospital service areas can be defined in both geographic and non-geographic terms.

Most institutions trace their roots to a particular religious or ethnic group. This identity is, in many cases, still strong today. For example, Abbott Hospital was founded and operated by Westminster Presbyterian Church. The Sisters of St. Joseph of Carondelet own and operate both St. Mary's and St. Joseph's Hospitals. Mt. Sinai Hospital was built through funds raised primarily in the Jewish community. Although ownership in many cases has reverted to a lay board of directors, religious identity remains. Each hospital calls on these supporters for financial contributions as well as for volunteer activity. People often contribute, not because they have been a patient at the hospital, but because they feel it is important for the Twin Cities to have a Jewish, Catholic or Lutheran hospital.

Strong institutional identity also comes from the members of the hospital's board of directors. One board member who has also served on the boards of other types of nonprofit institutions reported that he had ". . . never seen members as dedicated as those who serve on hospital boards." Much of this dedication may have its roots in the members' work as fund raisers for the hospitals. Although this function may now be of less importance, the board members' support for their hospital does not seem to have waned.

Although it does vary, physicians are also a source of support for the hospital. After a few years of practice at a particular hospital they may develop a strong sense of identity. This is especially true of general practitioners who tend to be on the staff of only one or two hospitals. By providing their physicians with office space adjacent to the hospital or possibly even connected through a skyway or tunnel, the hospital can encourage loyalty by making it convenient for the physician to use the hospital.

Doctor hospital loyalty has also been built by hospitals helping doctors finance the start-up or expansion of their practice. Hospitals have done this by building medical buildings at distant locations and then renting the space to physicians on their staff.

Closer relationships are developing between hospitals and the community in which they are located. Until the 1960s, most local hospitals did not have any special commitment to serving the community in which they were located. Today, several institutions support family practice clinics, located at the hospital or in a nearby building. The clinics are staffed by physicians who contract with the hospital to use its facilities. North Memorial Medical Center, Metropolitan Medical Center, Children's Hospital (Minneapolis), and St. John's Hospital are among the hospitals which sponsor family practice clinics in their own neighborhoods. Bethesda Hospital has received a grant from the Robert Wood Johnson Foundation to develop a family practice clinic away

from the hospital.

Other clinics are owned and operated by community groups with hospitals supplying laboratory services and medical supplies. For example: Metropolitan Medical Center supplies both the Fremont and Beltrami Clinics in north Minneapolis. University Hospital provides both supplies and joint purchasing for, among others, Fremont Clinic and Cedar-Riverside Clinic. United Hospitals, with a grant from the Northwest Area Foundation, is providing physician services for the Helping Hand Clinic in St. Paul. United and Helping Hand are also in the process of negotiating a sliding fee scale for clinic members who are hospitalized at United. St. Paul-Ramsey Hospital provides in-kind service for the Martin Luther King Clinic, the Westside Clinic and the Family Tree.

Some hospitals are actively engaged in efforts to expand their service areas to include parts of the metropolitan area some distance away.

While a hospital's efforts to expand its service area usually provide a community with a needed service, they also help to establish the hospital as the community's source of in-patient care, even though the hospital itself may be some distance away. Many local hospitals have focused their outreach work on newly developing parts of the metropolitan area. The Fairview corporation's combination medical building and emergency center at the Ridges in Burnsville is one example. A medical building recently opened by Methodist Hospital in Eden Prairie is another. Or, United Hospitals has helped finance construction of a medical building in Eagan. Divine Redeemer is now competing with other ambulance services for a Dakota County contract to serve the southern part of that county.

About 15% of the use of the region's hospital facilities (measured in patient days) comes from non-metropolitan area residents.

For the region's major referral hospitals, use by nonresidents is relatively high. About 50% of the patient days at University Hospital and 25% at Abbott-Northwestern and United Hospitals can be traced to non-Twin Cities residents. As a major medical school and research center, the University has well-established ties with physicians throughout the Upper Midwest. Many of them received their medical training there. Both Abbott-Northwestern and United have made conscious efforts to build referral patterns with hospitals in outstate Minnesota and Wisconsin. Their contracts with smaller hospitals to provide various administrative services have helped, in a way, to build the referral patterns. In addition, by maintaining a high level of sophistication in their facilities, they are also able to build and maintain their image as a referral center.

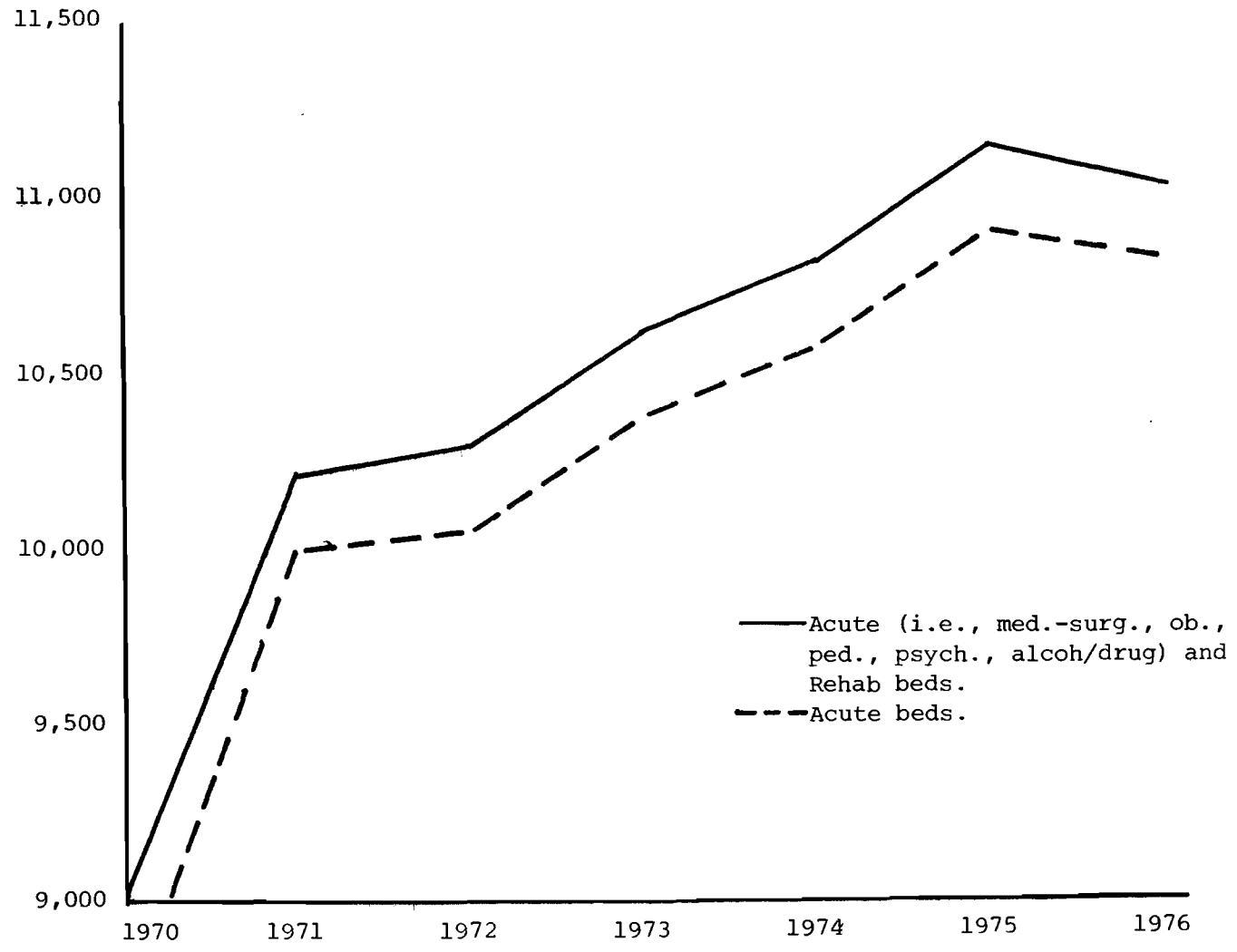
DEVELOPMENT OF HOSPITAL FACILITIES

Since 1972, when the state's certificate-of-need law went into effect, the rate of bed expansion in the region has decreased (see Figure 1). Eight hospitals have been granted certificates-of-need which have included expansion of their bed capacity. The region's supply of acute hospital beds (i.e., medical/surgical, pediatrics, obstetrics, alcohol/chemical dependency) increased by about 1,400 licensed beds (about 15%) between 1970 and 1972. Between 1972 and 1976, the bed supply grew by about 743 beds, or 7%.

Much of the need for remodeling has been the result of the development of new methods of diagnosis and medical treatment. Major projects have typically included upgrading of the hospital's intensive care and coronary care units and the expansion of radiology, rehabilitation and surgery services. In each of these areas there have been major technological advances. Monitoring equipment being used today in our

Figure 1

LICENSED BED CAPACITY FOR SHORT-TERM COMMUNITY HOSPITALS:
TWIN CITIES METROPOLITAN AREA



SOURCE: Minnesota Department of Health

intensive/coronary care units is considered to be obsolete by comparison with what is now available.

The development of the body and head computerized axial tomographic (C.A.T.) scanners has opened up a whole new

approach to diagnosis. Eight hospitals already have scanners. Seven others have indicated they plan to seek certificates-of-need to purchase four additional units. (They are Mt. Sinai and Eitel, St. Joseph's, St. Mary's and Fairview, and Unity and Mercy.) This technology is developing so quickly that some hospitals (e.g., University, North Memorial) are already replacing their original equipment with new and more sophisticated machines.

Radiation therapy is another example. Two types of linear accelerators are now in use in the Twin Cities. A new model, more powerful than the other two types, is now available. Abbott-Northwestern has requested a certificate-of-need to purchase the new machine.

In the last few years the method of financing hospital capital expenditures has been shifting away from private philanthropy and federal grants and toward heavier use of long-term debt repaid with patient revenues.

In the 1950s, Minneapolis remodeled or replaced most of its hospital system with funds raised through a coordinated private drive. The United Hospital Fund Drive raised about $17 million between 1955 and 1958. Although there was no community-wide effort in St. Paul, the rebuilding carried out in the 1950s and early 1960s was paid for largely with private contributions.

During the mid and late 1960s, hospitals all over the metropolitan area received federal funds through the Hill-Burton program, which was active from 1946 through 1974. Construction of Fairview-Southdale was partially financed with a $2 million Hill-Burton grant. Some other hospitals receiving funds under this program were Eitel, Samaritan, Mt. Sinai and Metropolitan Medical Center, each of which received grants for modernization. St. Mary's, St. Joseph's and Miller (now a part of United) received grants to add psychiatric beds. In total, Twin Cities hospitals received about $24 million in loans and grants and about $23 million in loan guarantees through the Hill-Burton program. Hill-Burton loans and grants represented about 9% of Twin Cities total hospital investment between 1948 and 1974.

All of the major capital progams now under way are being financed almost entirely with long-term debt. To repay the debt, hospitals have increased their patient charges. In many cases, hospitals are selling bonds through local units of government in order to obtain lower interest rates. The tax exempt status of publicly issued revenue bonds makes a lower interest rate possible. Table 10 shows the method of long-term financing for many of the Twin Cities major construction projects since 1974. Based on this sample, the trend in long-term financing is toward greater reliance on government-issued revenue bonds. These bonds do not usually carry the issuing public body's full faith and credit. However, out of concern for its bond rating, communities might choose to levy a tax to pay off a hospital's debt if the hospital could not, for any reason, make its payments.

Table 9

SOURCES OF FINANCING FOR HOSPITAL CONSTRUCTION AND MODERNIZATION IN THE UNITED STATES

	1969	1970
Government Grants	16.6%	8.3%
Philanthropy	17.8%	11.8%
Operational funds	26.0%	17.6%
Borrowing	39.6%	62.3%

SOURCE: "Trends in the Financing of Hospital Construction" by David E. Manne and John A. Henderson, in Hospitals JAHA, July 1, 1974.

Table 10

EXAMPLES OF RECENT LONG-TERM BORROWING BY TWIN CITIES HOSPITALS

Hospital	Amount of Bond Issue	Sold by:	Year
Methodist	$ 15m	St. Louis Park*	-
Abbott-Northwestern	38m	Minneapolis	1977
St. Joseph's	12.5m	St. Paul Port Authority	1977
Eitel	3.5m	the hospital	1976
United	67m	St. Paul Port Authority	1976
Center Hospital, a joint venture of Metropolitan Medical Center and Hennepin County Medical Center	19.5m	Hennepin County	1974
Fairview	7.5m	the hospital	1974
Metropolitan Medical Center	3m	the hospital	1974
Abbott-Northwestern	4m	the hospital	1974

SOURCE: Bond Prospectus for each offering.

*Methodist has not yet finalized its financing plans.

VOLUME OF HOSPITAL USE

The utilization of acute services (e.g., medical/surgical, pediatrics, obstetrics, psychiatric, and alcohol/chemical dependency) described in Figure 2 represents approximately 89% of all in-patient hospital utilization. The 11% remaining is divided between the extended care, rehabilitation and nursery utilization. Since 1975 (the earliest year for which there are metropolitan data on these services), utilization of both extended care and rehabilitation services has decreased by 11% and 16% respectively. By contrast use of the nursery service is up by about 7%, or about 8,000 patient days.

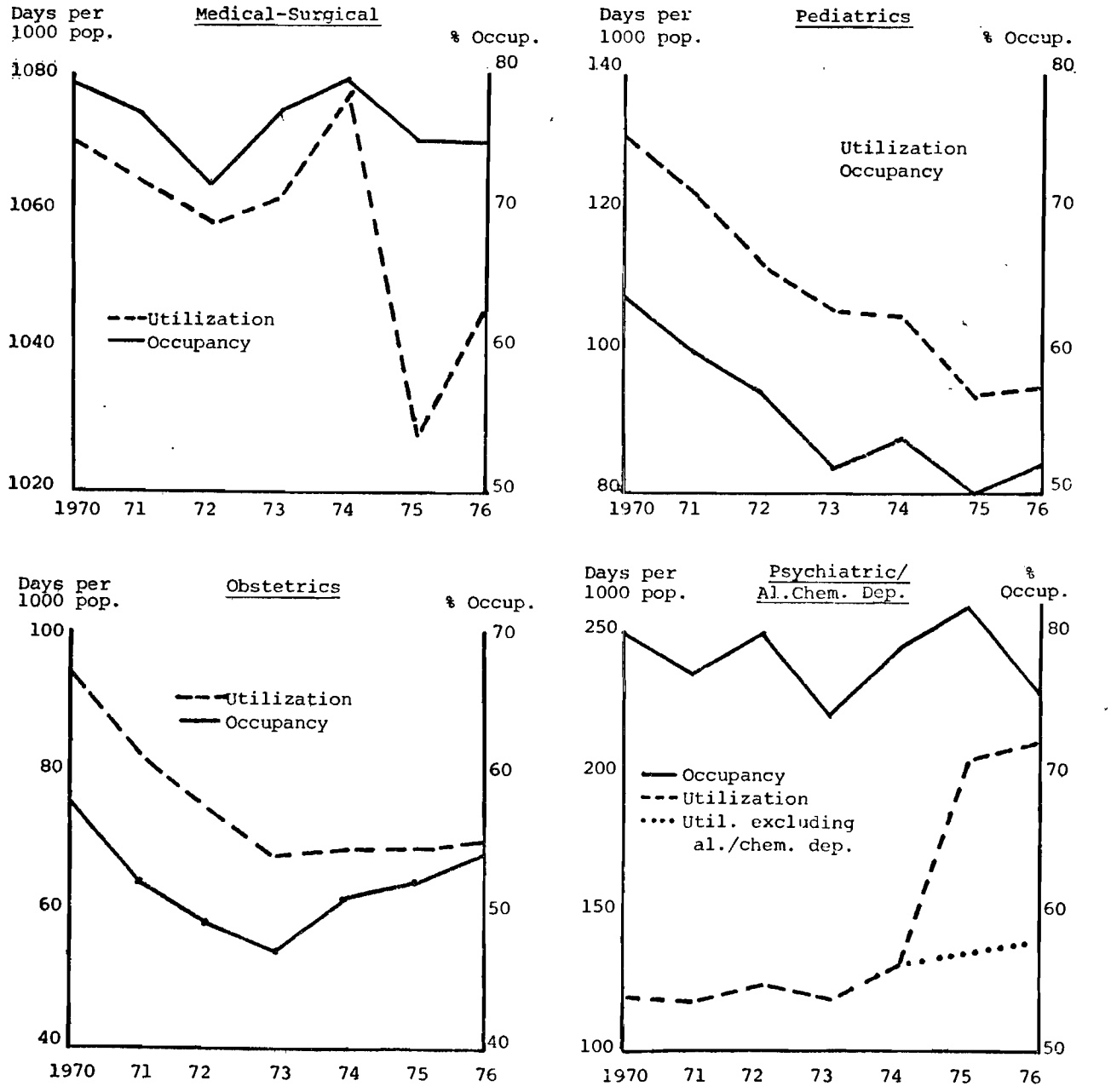
Psychiatric and alcohol/chemical dependency are the only acute services where utilization appears to be on the increase. And, the increase has been occurring only since 1974 . . . the first year that a state law requiring health insurance coverage for alcohol/chemical dependency went into effect.

For all other acute services, utilization appears to be stabilizing or declining. In 1973-74 there was a period of growth, but now the trend seems to be toward declining use rates. Current events would suggest that this might be the case. The birth rate has been declining since 1959; programs to review hospital utilization are likely to be extended to cover preadmission screening in addition to length of stay; memberships in prepaid medical groups which make relatively lower use of the hospital are growing faster than ever; new technology now allows procedures previously done in the hospital to be carried out in the physician's office, and Minnesota's large number of multi-specialty group practices may also be helping to lower utilization.

The declining birth rate accounts, to a large extent, for the decline in pediatric and obstetric utilization. In addition, the average age for the region's population is now about 25.5 years . . . a point in the life cycle

Figure 2

OCCUPANCY* AND UTILIZATION** OF TWIN CITIES
SHORT-STAY COMMUNITY HOSPITALS, 1970-1976

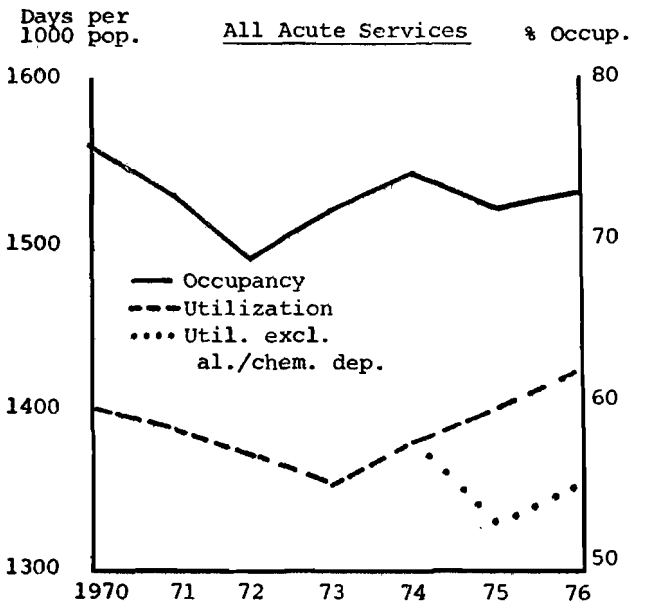


SOURCE: Metropolitan Health Board

*Occupancy as a percent of each year's average beds in service.

**Population data used to compute utilization is found in Appendix III.

Figure 2 (continued)



where hospital utilization is most likely to be minimal. While the average age is expected to increase over the next decade it is unlikely that it will move out of the range of minimal hospital needs.

In 1972 the Twin Cities had only one prepaid multi-specialty group practice serving a defined group of people, i.e., a Health Maintenance Organization (HMO). This HMO, Group Health Plan, Inc., had an enrollment of about 46,000 people. As of July 1976, the region had seven HMOs operating with total enrollment of about 134,000. Local HMOs were using acute hospital services at rates between 400 and 700 patient days per 1,000 members during 1975. If their membership continues to expand (and this appears likely) the Twin Cities' demand for in-patient services will continue to decrease.

With new technology and utilization review have come shorter hospital stays and an increase in one-day surgery. Most local hospitals now have facilities for one-day surgery. The patient comes to the hospital in the morning and is released in the afternoon. Some communities have free-standing surgical centers. None have been built in the Twin Cities; however, a group of doctors from St. Cloud are planning to build this kind of facility in the Twin Cities, probably in the St. Paul Midway area and at Southdale. Mt. Sinai Hospital is also considering construction of a surgical center adjacent to the hospital in south Minneapolis.

With no additional decline in utilization, the region will have a surplus of approximately 2,000 medical/surgical, pediatric, obstetric and psychiatric beds in 1980.

As a part of its Health Systems Plan, the Metropolitan Health Board has estimated the bed demand based on current rates of utilization and occupancy at 85% for medical/surgical, 70% for pediatric, 80% for obstetric, and 90% for psychiatric beds, as shown in Table 11.

If utilization continues to decline, the surplus will grow above the estimates listed above. The Health Board feels it is reasonable to assume that, for every 50-patient-day decline in the use rate of medical/surgical and pediatric beds, the surplus in all acute beds increases by 300 beds, or one medium-sized hospital.

Even with the current declines in utilization, the Twin Cities uses hospital services at a greater rate than communities with similar populations.

While we realize that the two communities are not identical, we found that the Twin Cities and Seattle/Tacoma metropolitan areas shared many of the same demographic and socio-economic characteristics (see Table 12). And, there is no evidence that people in the Twin Cities use more hospital services because they are less healthy. However, the Twin Cities uses hospital facilities to a much greater extent than Seattle/Tacoma (see Table 3 on page 6).

While population characteristics would be a major factor determining the use of hospital services, the organization

Table 11

PROJECTED SURPLUS ACUTE HOSPITAL BEDS,
TWIN CITIES METROPOLITAN AREA

	Total	M/S (at 85% Occupancy)	Ped (70%)	Ob (80%)	Psych (90%)
Projected bed demand (1980)	8,500	6,500	700	500	800
Licensed bed supply (1976)	10,500	7,800	1,000	700	1,000
1976 licensed supply in excess of 1980 demand	2,000	1,300	300	200	200

SOURCE: Metropolitan Health Board

and make-up of the health care system in each community is also a major determinant. When Seattle/Tacoma is compared with the Twin Cities on this basis, the following differences seem to explain the higher utilization in the Twin Cities:

-The Twin Cities had about 6.1 licensed beds/1,000 population in 1975, and Seattle/Tacoma had about 3.5 licensed beds/1,000 population. (Using the beds-in-service statistic shows the following: Twin Cities, 5.7/1,000; and Seattle/Tacoma, 3.1/1,000.)[1]

-Average length of stay in the Twin Cities is significantly longer than in Seattle/Tacoma. This reflects differences in the *style* of medical practice (see Table 13).

-Seattle/Tacoma has a larger number of public property tax supported hospitals than the Twin Cities. The Seattle/Tacoma metropolitan area has about 15 district hospitals. These are operated by three-person elected boards. They have the authority to levy special assessments on property and sell general obligation bonds to finance major construction projects. All bond sales must be approved by the voters in the district. Bonds are repaid through special assessments.

The Twin Cities has three community hospitals which are publicly owned and operated: University, Hennepin County, and St. Paul-Ramsey. Unity Hospital was built with funds raised through the sale of general obligation bonds by the North Suburban Hospital District. However, the hospital is operated by Health Central (a private nonprofit corporation) on a lease purchase agreement. Its rental payments are being used to retire the bonds, and when they are paid in full, Health Central will assume formal ownership.

Other major factors affect the rate of hospital utilization. In some cases, the two communities are quite similar. For example:

[1]Total licensed beds (1975): Twin Cities 11,500 and Seattle/Tacoma 6,600. Estimated 1975 population for each area: Twin Cities 1.9 million and Seattle/Tacoma 1.9 million. The count on 1975 licensed beds excludes bassinets and tuberculosis beds. This adjustment was necessary to make the Twin Cities data comparable with Seattle/Tacoma. For 1976, the Twin Cities licensed capacity, excluding bassinets and tuberculosis beds, was 11,800.

Table 12

SOCIO-ECONOMIC AND DEMOGRAPHIC COMPARISONS OF THE TWIN CITIES AND SEATTLE/TACOMA METROPOLITAN AREAS

	Twin Cities*	Seattle/Tacoma**
Total population	1.9 million	1.9 million
Population rank	15th	17th
Population density (city portion)	6,900 pop./sq. mi.	6,350
Median age	26	28
Age 64+	9%	9%
Minneapolis	15%	13%
St. Paul	13%	
Sex ratio (F/M)	1.07	1.04
Black (central city)	4% (30,000)	7.1% (38,000)
SMSA	1.8%	2.9%
Hispanic	0.9%	1.7%
Household size	3.2	2.9
Female heads	9%	9%
Blue collar	13%	11%
Executive	25%	26%
Service	33%	35%
Clerical	29%	28%
Income per person	$3,650	$3,850
Households without phones	4.2%	8.3%
Population change 1960-1970 (index)	1.22	1.29
20 year olds in school	41%	45%
Immature births		7.7%
Minneapolis	8.3%	
St. Paul	7.0%	
Women's labor force	49%	44%
Unemployed males	3.1%	7.9%
Below poverty levels	6.7%	7.5%
Income from public payments	3.5%	3.3%
Income deficits per capita	$40	$46
Housing units vacant one year + (city)	.3%	.4%
Housing single unit detached	62.5%	69.5%
Average value owner-occupied housing	$24,000	$24,500
Change in infant death rate 1960-1970 (state data)	21.6/1,000 live births to 17.3	22.7/1,000 live births to 18.1

SOURCE: U. S. Census, 1970.

*Twin Cities standard metropolitan statistical area (SMSA) consists of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties.

**The Census Bureau defines Seattle and Tacoma as two standard metropolitan statistical areas . . . Seattle including King and Snohomish Counties, and Tacoma being Pierce County. The two are contiguous, and conversations with people in the community indicate that residents of one make regular use of services (including health) in the other.

Table 13

AVERAGE LENGTH OF STAY, 1975

	Twin Cities	Seattle	Tacoma
Medical/Surgical	7.4 days	6 days	5.4 days
Pediatric	4.2 to 17.1*	3.5	2.4
Obstetric	4.1	2.9	2.4
Psychiatric	16.7 to 40.7**	14.9	8.5

SOURCE: Twin Cities: Metropolitan Health Board. Seattle/Tacoma: Health Systems Agency of Puget Sound.

*The range represents regular pediatric care and pediatric intensive care. The average would be closer to 4.2 than 17.1.

**The range represents adult and child psychiatric services.

-178 physicians/100,000 population in the Twin Cities in 1974 and 185/100,000 population in Seattle/Tacoma.

-48% of the Twin Cities and 51% of Seattle/Tacoma's office-based physicians were in family/general practice, pediatrics, internal medicine or obstetrics/gynecology.

-Prepaid group practices serve about 7% of the Twin Cities population and about 8% in Seattle/Tacoma. Prepaid group practice got started in the Twin Cities in 1957 and in Seattle/Tacoma in 1947; however, major growth did not occur in Seattle until the mid to late 1960s and in the Twin Cities until the 1970s.

-In 1975 there were about 85 surgical operations per 1,000 population in the Twin Cities and in Seattle/Tacoma there were about 77/1,000.

-The Twin Cities has 35 hospitals and Seattle/Tacoma has 37.

-Although Minnesota has a rate review program and Washington has a budget setting program, both are too new to have had any substantial effect on utilization. They are each in their second year of actual operation.

-15% of the Twin Cities patient days in 1975 can be traced to non-metropolitan area residents. In Seattle/Tacoma, non-residents accounted for 17% of total patient days in 1973.

-In both cities, most of the hospitals are general hospitals. Each also has a university hospital, two children's hospitals, and at least one major private referral hospital.

The Twin Cities does have a larger number of single-specialty and multi-specialty group practices. And, the local utilization review program has been in operation for two years, while the one in Seattle/Tacoma is just now being organized. Both of these conditions can help to decrease utilization, but to date their impact has not been significant enough to counteract the effect of the local bed supply and the style of medical practice as reflected in the Twin Cities' significantly longer average length of stay.

PUBLIC AND PRIVATE HOSPITAL PLANNING

The voluntary hospital planning program of the 1950s and 1960s was most effective in 'fine tuning' the direction in which the region's hospitals were developing.

One of the earliest private planning efforts took place in 1949 when a group of Minneapolis businessmen formed the Minneapolis Hospital Research Council. This group organized in anticipation of a major effort to expand and rebuild the city's hospital facilities. Their concern was that the coming community-wide building project be initiated without appropriate long-range planning. The Research Council hired the consulting firm of James A. Hamilton & Associates to study the present and future hospital requirements of the community. The Hamilton report, "A Hospital Plan for Hennepin County", was completed in June 1950.

The report made two major recommendations: First, that a formal "hospital council" with its own staff and budget be organized and, second, that in the course of expanding the community's hospital system there should emerge four major hospital centers or groups. Hamilton suggested that the hospital council might eventually serve as a central service organization for hospitals, providing them with joint purchasing, payroll, accounting and printing services. However, at the start, the council was to serve only as an advisory body. The four hospital groups were to be developed at the sites of the following hospitals: Minneapolis General, University, Mt. Sinai, and Swedish/St. Barnabas.

The grouping at the Swedish/St. Barnabas site was to be known as Hennepin Hospital Center, Inc. The group was to be made up of twelve hospitals, six of which would be located at the central site on the east side of downtown Minneapolis. Three existing hospitals were to be affiliated, but not co-located. And, the three remaining were to be new hospitals: One in St. Louis Park, one in Richfield and one in north Minneapolis. A principal feature of the Hennepin Hospital Center proposal was that certain hospital services were to be centralized in a single corporation for use by the member hospitals. Fourteen services were to be included, from accounting and printing to radiology and nursing education.

Five hospitals were to be affiliated with the Mt. Sinai Hospital Center; however, their relationship was to be more informal. There was no proposal that hospitals be co-located or that a separate corporation be created to provide specific services to members. The other two centers, Minneapolis General and the University, were to perform roles similar to their past activity.

Some initial steps were taken to implement the Hamilton recommendations. A Hennepin Hospital Center Corporation was created in late 1950 with eight member hospitals. However, beyond this, there were no major efforts to implement the report's recommendations.

The community's need for additional hospital facilities continued, and in 1955 the United Hospital Fund Drive was organized to raise about $17 million for 15 Hennepin County hospitals. With these funds, Hennepin County hospitals were able to rebuild; however, there was no concurrent effort to reshape or restructure the system. Each hospital pursued its own development program independent of the others.

In the late 1950s the growing concern with rising hospital costs and with the over-utilization of hospital beds, which in turn led to additional pressures for construction, stimulated interest in efforts to bring the bed supply under some kind of control. The United States Public Health Service, among others, initiated a program to

support activities aimed at organizing voluntary hospital planning councils in major metropolitan areas. The Minnesota Department of Health participated in this program. One outcome was the creation of the St. Paul Hospital Planning Council in 1962.

In the Minneapolis area, development of a planning council was sparked principally by the announcement in 1963 that $2 million in federal funds from the Hill-Burton program were going to be made available to Fairview Hospital for the construction of a satellite hospital in Edina. Discussions regarding the need for a council began soon after this announcement, and in mid-1964 the Planning Agency for Hospitals of Metropolitan Minneapolis (PAHMM) was organized.

The two local planning councils proceeded independently until 1966, when their staffs were merged so that one staff was serving the two organizations. In 1969 the separate boards were abandoned and replaced with a single governing board representing the entire metropolitan area. The new agency was known as the Metropolitan Hospital Planning Agency (MHPA).

The major objectives of the MHPA were to promote the coordination of existing hospital services and influence the future growth and development of their services and facilities. MHPA functioned through two major programs: First, an information system which collected and reported data on the use of hospital beds and characteristics of patients; second, review and evaluation of proposals from member hospitals for construction or reconstruction of facilities and the addition of major services.

Given the voluntary nature of the MHPA, its success depended on the desire of the participating hospitals to put community needs above their own institutional aspirations. They did this primarily by submitting their plans to the MHPA for review. As this process evolved, the MHPA's role was to react to initiatives taken by the hospitals. Its influence became strongest in fine tuning the direction in which the hospitals had chosen to grow and develop rather than in suggesting or setting that direction.

While the region's hospital system was still expanding, it was not, in most cases, difficult for the hospitals to cooperate with the agency. They knew that a review might yield suggestions to change their plans, but for a time it was extremely unlikely that it would recommend that the project be canceled. By the late 1960s it was clear that further expansion of the region's hospital system was not desirable. The Twin Cities population was not growing as fast as had been previously anticipated. Most planners agreed that the best strategy would be for there to be no new bed growth until the population caught up with the existing supply.

There was reason to doubt the voluntary planning system's ability to function in a meaningful way under no-growth circumstances. For example, in 1969 North Memorial Medical Center decided to proceed with the installation of beds on three floors which had been shelled in earlier, despite the planning agency's specific disapproval of this action. North Memorial's action made it clear that hospitals could, when they pleased, act unilaterally without fear of sanction. Before there could be further major tests of the voluntary system, the Metropolitan Health Board (a public agency) was created, and soon thereafter the MHPA stopped functioning.

For a more detailed discussion of the MHPA, see the Citizens League's 1970 report, "Hospital Centers . . . and a Health Care System", pages 36 to 42.

Public planning was initiated primarily in response to federal law.

The Hill-Burton Act, 1946, provided funds

for hospital construction, but in order to qualify, states had to prepare a plan for developing facilities. Initially, Hill-Burton funds could be used only for hospitals in rural areas, and as a result the state's plan did not include metropolitan area hospitals. However, in the early 1960s, funds were made available for construction in any under-served area . . . urban, rural or suburban. At that point, the State Health Department began to include the metropolitan area in its plan. However, most local hospitals were still financing expansion through private giving, and consequently were not affected by the state's plan.

A changing perspective on the nature of health problems and the planning process resulted in the enactment by Congress of the Comprehensive Health Planning Act in 1967. The new law encouraged local health planning by making it a requirement to qualify for federal grant-in-aid programs and by offering to share the expense of planning. Planning under this law differed from that initiated through Hill-Burton in three major respects: First, it required that separate planning agencies be set up at both the state and metropolitan levels. Second, it required that consumers play a major role in all planning decisions; previously providers had dominated. Third, the planning agencies were to be concerned with the whole health care system and not just the hospital; that is, they were to be comprehensive. In addition to the agencies' planning responsibility, they were given the job of reviewing requests for funding under several federal grant-in-aid programs. Requests were to be reviewed in terms of the community's comprehensive plan.

At the state level, the Governor designated the State Planning Agency as the state-wide planning body. After lengthy debate, the Metropolitan Council became the local agency. In July 1970, the Council delegated its administrative responsibility under the act to what became known as the Metropolitan Health Board. The Health Board was to have between 15 and 25 members appointed by the Council for four-year terms. It was administratively separate from the Council, but legally under the Council's authority, and all of its actions had to be approved by the Metropolitan Council.

In addition to its planning responsibility, the Health Board was also delegated the role of reviewing applications for certificates-of-need from metropolitan area health care facilities.

The state's certificate-of-need law was adopted in 1971. It requires that all health care facilities (i.e., hospitals, nursing homes, extended care facilities) obtain a certificate of need before making any expenditures for construction or equipment if:

-The cost is greater than $100,000 and if the project would have some effect on the hospital's diagnostic or therapeutic facilities.

-Construction resulted in a change in the facility's type or scope of services and if the cost is greater than $50,000.

-The project will increase the institution's bed complement.

As the law is currently written, construction related to physicians' offices and equipment purchased for use in doctors' offices or clinics do not require a certificate. However, these purchasers are required to inform the local review agency and the Commissioner of Health that the purchase is being made if its value exceeds $100,000. If the Commissioner finds that the purchases are designed to circumvent the provisions of the certificate-of-need law, then he can order a special hearing. As a result, the physicians may be required to obtain a certificate-of-need.

Whether or not to continue the physician's exemption from certificate-of-need is currently being debated in the Minnesota Legislature. General concern arises out of expansion of the range of services available through the doctor's office. In the past, the hospital was the site for doing diagnostic work or treatment involving high technology and major expense. Today, for example, three local radiology clinics own and operate their own C.A.T. Scanners. With the physician free to purchase equipment, order its use, and then be reimbursed for his costs, expensive services might be over-utilized. This could counteract any impact which the certificate-of-need might have in limiting expenditures at other locations in the health care system. In addition, exempting physicians' offices could interfere with the planning of the health care system and the implementation of that plan.

Ultimate authority for granting certificates-of-need rests with the Commissioner of Health. The Commissioner's decisions are based, however, on recommendations he receives from the local planning agency . . . the Metropolitan Council and its administrative agency, the Metropolitan Health Board. The Council has delegated the review responsibility, including the public hearing, to the Health Board. Following each review, the Board submits its findings and a recommendation to the Council. The Council acts on this recommendation (usually adopting it) and then passes on the request for a certificate to the Commissioner.

Since 1972, the Council has rejected the Health Board's recommendation on only two occasions, both during 1977 and both related to requests by major hospitals (North Memorial and Methodist). In both cases, the Council instructed the Health Board to reconsider its recommendations that both certificates be denied. After reconsideration and some revision by the hospitals of their requests, the Health Board recommended approval and the Council concurred. While the Commissioner may have made some minor changes to the Council's recommendations, he has in no case reversed or substantially changed its recommendations.

The Health Board is in the midst of a new round of long-range planning. The end product of this work should make clear the long-term role of each hospital in the metropolitan area.

The National Health Planning and Resources Development Act of 1974 replaces the Comprehensive Health Planning Act of 1967 and is the first law to require health planning nation-wide. Through the act, the nation has been divided into health planning districts. Each district is subdivided into local planning bodies known as Health Systems Agencies (HSAs). Local implementation of the act is the responsibility of the HSA. State agencies have also been designated to coordinate the work of HSAs. The Metropolitan Council and its advisory board, the Metropolitan Health Board, has been granted conditional designation as the HSA for the seven-county metropolitan area.

To be designated, the size and composition of the Health Board had to be changed. The size was increased from 25 to 29. And, the number of consumer members was increased from 13 to 16, while the number of provider representatives increased from 12 to 13. Members will continue to serve for four years and be appointed by the Metropolitan Council.

To comply with the rules and regulations for the act, the Department of Health, Education and Welfare (HEW) is also demanding that there be a major change in the relationship between the Health Board and the Metropolitan Council. Specifically, HEW is asking that the Health Board's recommendations on certificates-of-need move directly to the State Commissioner of Health and thereby excluding review of these requests

by the Council. If the Council complies with HEW's request, the certificate-of-need process will no longer include any policy-makers whose responsibility reaches beyond health issues. That is, it will involve participation by only the Health Board and the Commissioner, both of which deal only with health policy.

As an HSA, the Health Board has the additional responsibility of developing and implementing a Health Systems Plan. This plan is currently being developed. By comparison with the planning done under the Comprehensive Health Planning Act, the systems plan will cover a broader range of health services and will be focused more on long-term size, shape and structure of the region's hospital system. Once completed, the plan will be updated on an annual basis, and, in addition, an Annual Implementation Plan detailing activities for the coming year will be formulated.

Of particular interest to the subject of this report will be the chapter of the Health Systems Plan dealing with general hospital acute in-patient services. The groundwork for this chapter will be completed during fall 1977 by the Health Board's Viable Hospitals Committee. Among other things, this committee is charged with:

-Determining the number and location of acute hospital beds appropriate for the future needs of the metropolitan area.

-Recommending how the appropriate distribution can be accomplished.

-Defining the role/roles of hospitals and hospital organizations in the overall health system -- more specifically, determining the extent to which hospitals and hospital corporations should provide non-acute in-patient services.

-Describing the characteristics of hospitals and hospital organizations that will be a viable component of the region's health system in the long run.

In addition to its planning and certificate-of-need review responsibilities, the National Health Planning and Resources Development Act also requires that the Health Board conduct appropriateness reviews of each local hospital. While the exact purpose of these reviews is not completely clear, it appears that the Health Board will be evaluating hospitals in terms of their immediate and long-term role in the region's health care system. The results of its evaluations will be reported to the State Health Planning and Development Agency. Beyond this report, the consequences for a hospital judged inappropriate are not well-defined; however, it could lose all of its federal funding. This would include certification for both Medicare and Medicaid reimbursement. Appropriateness reviews are unlikely to begin before 1980.

The Health Board also has responsibility for reviewing plans for the use of Community Health Services funds.

Through the Community Health Services Act, 1976, counties and some cities receive block grants from the state for public health and some social services. The Health Board's function in the review process is similar to that under certificate-of-need. It reviews each county's plans, recommends to the Metropolitan Council, and the Council in turn makes a recommendation to the State Department of Health.

This review responsibility has broadened the Health Board's scope of planning activity to include a full range of public health (e.g., restaurant inspection) and health maintenance programs (e.g., primary care clinics). As a result, the Health Board is now a part of a debate which is emerging over the method of delivering community health services. The Health Board has recently formed a task force to develop the "Community Health Services" chapter of its Health Systems Plan. In addition, the role of the hospital in providing community health services is one

subject to be considered by the Health Board's Viable Hospitals Committee.

In recent years, public health departments and county social service departments have either provided these services directly or they have contracted with private agencies for them. Hospitals have for the most part been excluded; however, they are now showing major interest in providing some of these services, particularly home health care, health education, health screening. In one case, an administrator included among the hospital's future responsibilities a full range of public health and social services, including such services as inspecting the restaurants and monitoring air quality.

Despite its planning responsibilities, the Health Board has been primarily a reactive agency.

Although it has had planning responsibilities since its creation, the Health Board has not until recently made a major effort to develop its own view of the region's hospital system and the way it ought to be developed. During 1974, the Board published a health chapter for the Metropolitan Council's Development Guide, but this document did not describe future specifications for the hospital system.

CONTROLLING HOSPITAL COSTS

Current arrangements between providers and payers have resulted in uncontrolled hospital expenditures.

The costs of health care and particularly the hospital portion have gone up faster than other consumer products (see Table 14). In 1975, the consumer price index

Table 14

RISE IN HEALTH CARE COST COMPARED TO OTHER CONSUMER GOODS
1960-1975

Period of Time	Consumer Price Index (CPI) for All Items Percent Change	CPI Physicians' Fees Percent Change	CPI Semi-Private Hospital Room Percent Change
Pre-Medicare/ Medicaid, 1960-1965	1.3%	2.8%	5.8%
Post-Medicare/ Medicaid			
1966	2.9%	5.8%	10.0%
1968	4.2%	5.6%	13.6%
1970	5.9%	7.5%	12.9%
Economic Stabilization			
1972	3.3%	3.1%	6.6%
1973	6.2%	3.3%	4.7%
1974 (Jan.-May)	12.6%	12.6%	10.1%
Post-Economic Stabilization			
1975	9.1%	12.3%	17.2%

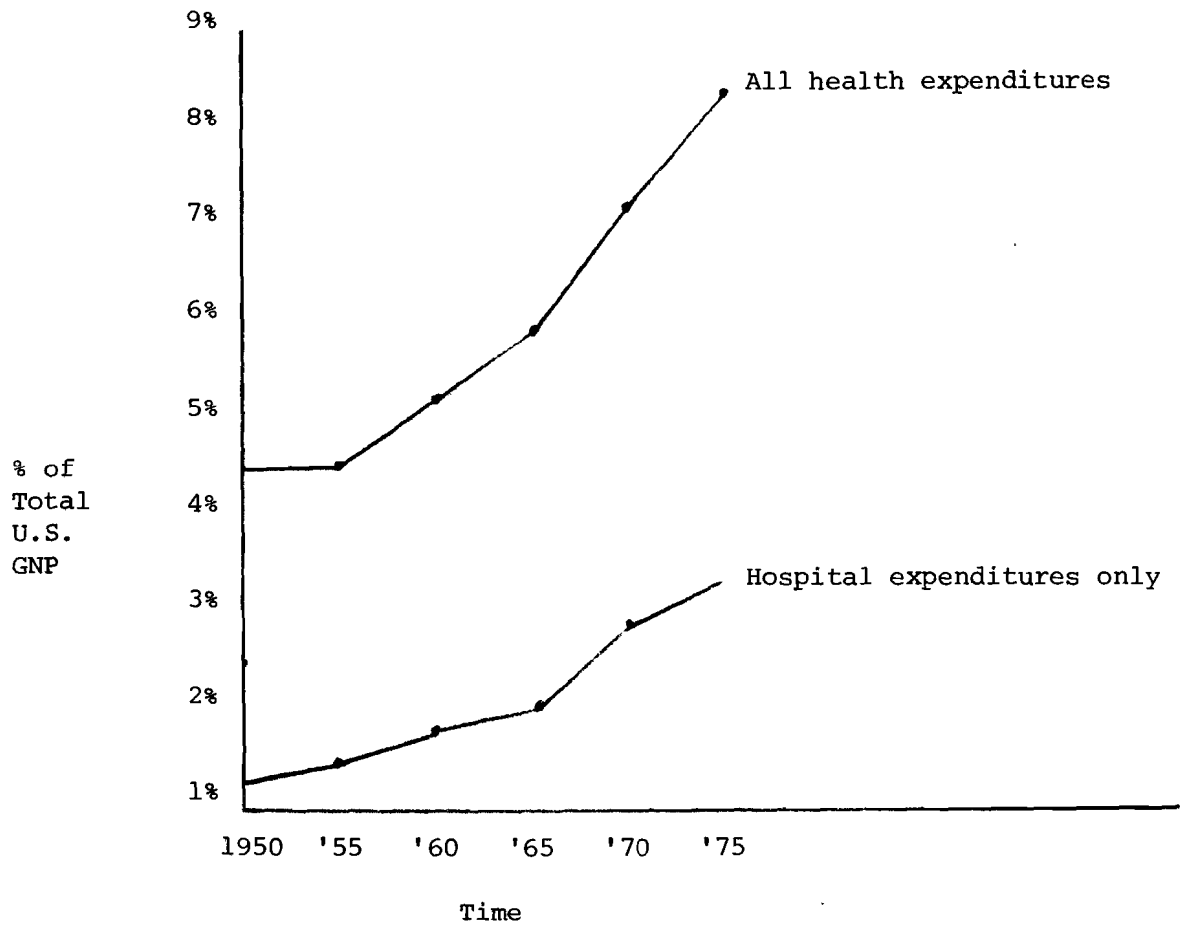
SOURCE: Report of Special Senate Health Costs Subcommittee, 1975, page 4. Consumer Price Index Detailed Report, Bureau of Labor Statistics.

for all consumer items increased by 9.1%, for physicians' fees by 12.3%, and for hospital rooms by 17.2%. Except for the period of wage and price control (1972-1973), this has been the pattern since the early 1960s.

As a result of higher prices and increases in the amount of care being given, the portion of our nation's gross national product derived from health care has grown from about 5% in 1950 to about 8% in 1975 (see Figure 3). Most of this growth has occurred since 1965. Between 1950 and 1965, the health care portion of the GNP grew by only 1% (moving from 5% to 6% of the GNP). Between 1965 and 1975, the health care share grew by just over 2% (moving from 6% to 8.3% of the GNP).

Figure 3

HEALTH AND HOSPITAL EXPENDITURES AS A PERCENT OF GROSS NATIONAL PRODUCT (GNP)



SOURCE: U. S. Department of Health, Education and Welfare, Research and Statistics Note No. 20, 1975. Hospital Statistics, 1976 Edition, American Hospital Association.

Since 1965, the share of the nation's health care bill paid by the public has increased substantially, going from about 25% in 1965 to just over 40% in 1974. For hospital care alone, the public's share is much greater. About 55% of the nation's total hospital bill in 1974 was paid by state or local government (see Figure 4).

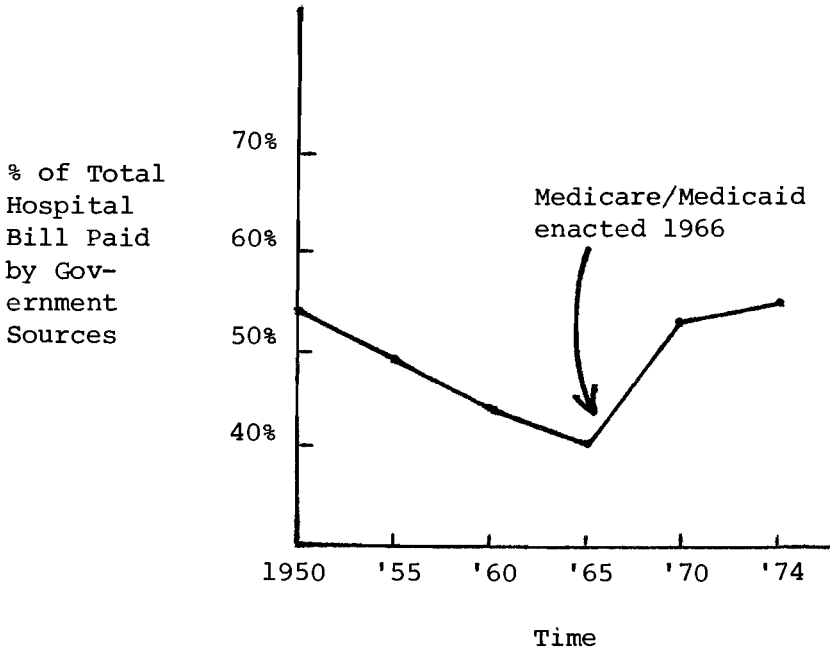
The way the system now works, hospitals have no major incentive to limit the resources they make available to doctors and patients.

The hospital functions in a world where both the doctor and the patient have little concern for expenditures. The patient usually has some kind of insurance, the premium for which he pays indirectly through his taxes or a payroll deduction. The physician makes all decisions on what resources will be used , but he too has no responsibility for the expenses incurred. Most physicians have no idea of what the hospital charges for the services which they order. Only in rare instances do physicians receive duplicate copies of patients' bills.

In 1975, 92% of all hospital bills were paid through either Medicare/Medicaid (55%) or Blue Cross and private insurance (36%). Medicare/Medicaid reimbursed according to a predetermined formula. Private insurers have traditionally reimbursed hospitals according

Figure 4

GOVERNMENT'S SHARE OF THE NATION'S HOSPITAL BILL



SOURCE: U. S. Statistical Abstracts, 1976, Tables 106 and 109

to "charges".[1] That is, if a procedure or service was covered by insurance, the hospital was reimbursed for whatever it charged. The Medicare/Medicaid formulas have not been as generous. In many cases the government's formulas paid at less than 100% of charges.

Charges have not always reflected the hospital's true cost for providing services. Many hospitals have charged excessively for some services or treatments in order to keep down the charges for others or to support a service which is not covered by any reimbursement program. This practice, known as cross-subsidization, is commonly used in computing room rates and drug charges. One local hospital is reported to have been charging $29 for an aspirin tablet. In this particular case, the profit was being used to pay off the hospital's construction debt; however, in other cases it has been used to provide laboratory or nursing service for community clinics. Some hospitals have also used cross-subsidization as a means of keeping their room rates artificially low. The room rate is one of the most commonly reported hospital charges, and thus it has been advantageous for hospitals to keep the charge as low as possible. To do this, hospitals, in some cases, were charging $2.00 for a box of Kleenex or a pair of paper slippers.

1972 amendments to the Social Security Act required that Medicare/Medicaid reimbursement formulas be based on "hospital charges or true costs, whichever is *less*". More recently, Minnesota's hospital rate review program has been designed to expose cross-subsidization. While these efforts may end cross-subsidization and make hospital bills more reflective of true cost, they will not stop the rise in hospital expenditures. That is, they will have no effect on the incentives in the system which urge patients to seek the best possible care and encourage physicians to accommodate them.

The reimbursement system, with or without cross-subsidization, allows and probably encourages the hospital to cater to the wants of its doctors and, through them, its patients. Since physicians are relatively free to practice at the hospital(s) of their choice, they have a certain amount of bargaining power with the hospital when it comes to the purchase of new equipment or operating procedures. The reimbursement formulas give the latitude it needs to meet many of these demands. A hospital can purchase equipment or add a new service and meet the cost by charging for the service at a rate which includes not only the operating, but also the capital or start-up expense associated with the new service. In other words, as long as the hospital has some assurance that its doctors will use the new service and that it will be covered by insurance, there is little financial risk.

It has been suggested that the cost problem might be solved if the private insurance industry took a harder line in its reimbursement practices for hospitals. For example, the companies might refuse to pay bills where the length-of-stay was exceptionally long with no medical justification. Or, they might expand their efforts to investigate claims or items in bills where the charges seem excessive. Or, they might refuse to reimburse for certain procedures except when performed on an out-patient basis.

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[1]Blue Cross has, to a certain extent, been an exception. These plans got their start during the depression, when hospitals, like other businesses, were having major problems with bad debts. Because Blue Cross could eliminate the risk of bad debts for patients covered under their plan, Blue Cross was able to negotiate a discount with the hospitals. In Minnesota, Blue Cross reimbursed at 95% or 98% of charges. This practice continued in a modified form until this year.

While this industry is by no means helpless, its ability to lead the fight to control hospital expenditures is severely limited for several reasons. First, there are over 200 insurance companies writing health insurance policies in Minnesota. No single firm sells to more than 5% of the market. Blue Cross (which, technically speaking, is not considered an insurance company) covers only about 20% of Minnesota residents. As a result, the insurance providers are not easily organized. Furthermore, if the insurance companies tried to organize, it is likely they would face charges of restraining trade.

Second, state law dictates to a considerable extent the kinds of coverage which must be provided, and as a result the companies are not entirely free to limit coverage. Third, the companies say they have never vigorously investigated claims because such efforts have always been seen by doctors and patients as potentially interfering with medical practice and quality of care. Employers have not encouraged insurance companies to investigate claims because their employees are likely to be held responsible for any unpaid bill and this will hurt employer-employee relations.

Finally, insurance companies have the option of raising premiums as the claims they must pay increase. That is, they can pass the increased cost, and therefore the problem, on to whoever pays the premium (usually an employer).

Administrative regulation, market incentives, or a combination of both could be used to shape a strategy for cost control.

Under either strategy it is essential that providers and consumers be grouped. Degree of organizations can vary, but there must be some kind of grouping to establish control over spending and to ensure high-quality care. Without grouping, the performance of the health care system is impossible to track. It is impossible to make any link between the amount of care and the outcome. For example, if the physicians are grouped and the patients are not, it may be relatively easy to keep track of both the amount and cost of the care they give, but we cannot be sure of its effect on the patient because he could have also been getting care from some other source. By grouping the patients, it becomes easier to keep track of the care they receive, its quality and cost.

The purpose of grouping physicians and patients could be achieved with varying degrees of organization. At one extreme would be a multi-specialty group of physicians who practice in the same office and provide a full range of medical services for a specific group of people. At the other extreme might be a group of physicians who practice in separate offices, with members of the patient group choosing freely among them when they need care. The method used to pay for care is not affected by the type of grouping. Prepayment or fee-for-service is possible with almost any type of grouping. (For examples of two approaches to grouping, see the description of Health Maintenance Organizations on page 66 and Health Care Alliances on page 70.

Once providers and consumers are grouped, strategy is focused on administrative regulation, or market incentives can be used to control quality and spending. The two strategies have major differences (see Table 15).

Combinations of the two strategies are also possible. A system of "performance based" regulation might allow any health care plan (that is, a group of providers serving a defined population) to escape regulation as long as it met certain standards regarding expenditures and quality. For example, if the community had a goal of keeping the annual rate of increase in hospital spending at 9% or less, then any health care plan which kept its cost increase below 9% would be exempt from any kind of regulation.

Table 15

COMPARISON OF STRATEGIES FOR HOSPITAL COST CONTROL

Strategy	Organization	Grouping of Consumers	Prices
Administrative regulation	Limited number of provider groups, working in a monopolistic environment	Geographic; persons living or working in a particular location are served by a designated provider	Prices set by regulator
Market incentives	Multiple provider groups with a variety of organizational forms....competition for consumers	Free choice: Consumers choose the organization that meets their budget and quality demands	Market sets the price

Table 16

CERTIFICATE-OF-NEED (C/N) APPROVALS, DENIALS, REMANDS, 1972-1977*

Year	Cost of Projects Issued C/N	Cost of Projects Denied C/N	Cost of Project Remanded	Number of C/N Issued	Number of C/N Denied	Number of C/N Remanded
1972	$ 86,083,000	$ 300,000	$1,345,000	13	1	1
1973	7,650,000	1,345,000**	-	4	1	-
1974	2,900,000	-	-	12	-	-
1975	6,109,000	-	-	8	-	-
1976	120,393,000	-	-	21	-	-
1977 (to 1977)	26,376,000	-	-	11	-	-
Total:	$249,511,000	$1,645,000	$1345,000	69	2	1

SOURCE: Minnesota Department of Health.

*Excludes Veterans Administration Hospital, Anoka, Gillette and Hastings State Hospitals.

**This application for the Ridges Health Center was re-submitted in 1975 and approved.

Parts of the regulatory system are already in place.

The most prominent part of the existing regulatory system is the state's certificate-of-need law. Table 16 summarizes the actions taken under this law. Only two requests for certificates have been denied, and in both cases the hospitals re-submitted their requests and had them approved. In eleven cases the Health Board has modified the request before recommending that the certificate be approved.

In addition to the extremely low rate of denial, the impact of the certificate-of-need law in controlling hospital expenditures has been limited because:

-The certificate-of-need law will not necessarily result in reduced utilization of health services. While it may limit expansion of the system, it does not limit the extent to which existing capacity can be used.

-The doctor's office has been exempted from the requirement of obtaining a certificate. While in-hospital utilization may be limited by controlling the amount of available facilities, total utilization has not decreased because services are available in the physician's office.

-The Health Board can only react to proposals by hospitals and cannot initiate action to reshape or reduce the size of the hospital system. The Health Board has begun attaching conditions to its recommendations, but the legality of this action has not been tested.

-Requests for certificates-of-need are reviewed one by one throughout the year. The Health Board has not set any goals (or ceilings) for total capital spending per year. As a result, if any hospital can prove need, or if the Health Board cannot prove there is *no* need, then there is little alternative but to make a positive recommendation.

-Individual hospitals have not been required to submit long-range plans as a part of their requests. At times the Health Board may have recommended that a certificate be granted without knowing that it was part of a much larger plan for the hospital. For example, a hospital might first request permission to install a C.A.T. Body Scanner and then later return with a request to expand its entire radiology department, arguing that with the scanner it has become a major radiology center.

-The process focuses attention on capital expenditures and away from operating expenditures. By comparison, operating expenses far outweigh capital spending. In approximately two budget years, the average hospital's operating expenses will equal its total capital investment.

-Like other regulatory procedures, the process is time-consuming and sometimes cumbersome.

The certificate-of-need has to a certain extent been effective in reducing hospital expenditures and had some positive effect on the hospital system. For example:

-The process itself has probably been a deterrent to some kinds of construction. That is, knowing they would have to go through the review process and fearing rejection has probably discouraged some hospitals from considering certain kinds of projects--for example, bed expansion.

-Hospital trustees and administrators can use the review process and their concern about rejection as a means of resisting pressure from doctors and others to expand facilities.

-Hospitals have been forced to plan their capital programs with a greater amount of care. While it has been mostly private, many probably initiated their own internal long-range planning programs.

-Hospitals have felt more pressure to begin sharing programs and services with other hospitals.

In addition to the certificate-of-need, the state's mandatory rate review program is the second major component of the regulatory strategy which is already in place. The mandatory rate review program was enacted during the 1975 legislative session. The law requires that every hospital in the state have its rates reviewed on an annual basis. This review can be done either by the Minnesota Department of Health or by an outside agency authorized by the Health Department. The Minnesota Hospital Association has set up a rate review program and been authorized by the state to do reviews. With the exception of a couple of out-state hospitals, all hospitals are now being reviewed by the Minnesota Hospital Association program.

The program has been given authority to *review rates* and not to *set rates*. Hospitals are not bound by the findings of the rate review process. That is, they may fix their rates at higher levels than those recommended through the annual review. However, it is widely held that hospitals will not ignore the comments they receive through the rate review process. If they do, they fear that the Legislature could easily change the law to allow rate setting rather than rate review. The machinery set up to do reviews could be easily adapted to a rate setting program.

In its recent contract negotiations with the state's hospitals, Blue Cross has taken some steps to require hospitals to abide by the decisions of the rate review program. New contracts state that hospitals will be reimbursed at the rates recommended by rate review or less. Blue Cross insures about 20% of the state's population, and its actions bring this portion of the population into a rate setting situation.

As it is currently functioning, the rate review program is aimed at insuring that hospitals are competently managed. Based primarily on the hospital's size, occupancy and case mix, assumptions are made about its rate structure. As was true with the Professional Standards Review Organization (PSRO) review, these assumptions are based on a community standard formulated from the rates of other hospitals in the community having similar case mixes and being of similar size and occupancy. Hospitals with rates higher than what had been assumed are given the closest review.

In the review process, hospitals are not currently penalized (that is, given negative comments) for low occupancy. As such, they are permitted to raise their charges to whatever level is necesssary in order to cover their costs. Rate review will watch carefully to make sure the administrator has done as much as possible to cut his *variable costs* . . . for example, to have cut staff, closed off a wing, or taken other steps consistent with low occupancy. But, at this time, it is not suggesting that the hospitals with low occupancy also cut their fixed costs . . . that is, permanently close or sell a portion of their facilities.

Until the rate review program begins to watch fixed costs as closely as it appears to be reviewing variable costs, it is unlikely that it will bring about any significant control over expenditures. At present, hospitals seem to be under little pressure to take steps to lower their fixed costs. Rather, they are permitted to increase charges for those services which are fully used in order to cover their expenses for maintaining unused or under-utilized facilities.

The certificate-of-need and the rate review process are currently run separately. The Health Board is responsible for the former and the Minnesota Hospital Association for the latter. There is some coordination at the state level. Both programs are under the authority of the Commissioner of Health. Locally, however, there are no formal ties. This could further limit the effectiveness of rate review or even a rate setting program. A recent case in Maryland (a state with rate setting) will illustrate. A hospital applied for and was granted a certificate-of-need to expand. As a result of the expansion, the hospital's

proposed rates were higher than what had been set by the state's rate setting program. The hospital took the case to court, and the Maryland Supreme Court ruled that the hospital had the authority to charge higher rates because it was doing so to 'meet a recognized community need' acknowledged by the granting of a certificate-of-need. The same situation could arise in Minnesota.

The Health Board's planning activities is the third major component of the regulatory strategy. While the Health Board has established criteria for use in evaluating requests for certificates-of-need, it is just now in the process of developing a long-range plan for the region's hospital system. This planning effort is a major opportunity for the Health Board to set out its vision of the future size, shape and structure of the region's hospital system. To implement its plan, the Health Board can use its certificate-of-need reviews, the appropriateness reviews required under the National Health Planning and Resources Development Act, and, if a cooperative relationship can be worked out, the rate review program. With these actions, the Health Board will still be relying on essentially reactive measures to implement its plan; however, unlike the past, it could be reacting with a clearer picture vision of the size, shape and structure of the region's hospital system.

Local Health Maintenance Organizations (HMOs) could be the basis for building market incentives.

Multi-specialty physician groups each serving a defined patient group at a predetermined annual charge--i.e., Health Maintenance Organizations (HMOs)--competing with each other and the fee-for-service system for patients, may be a means of cost containment and an alternative to regulation. The HMO and other prepaid health delivery plans introduce a different set of incentives into the health care system. They are structured with cost control as a major objective along with high-quality care. HMO providers have a limited amount of funds with which to provide a full range of care for their members. With the third-party reimbursement plans, providers work on a fee-for-service basis and are under no similar pressure to budget their use of health services.

If the HMO can provide a full range of services at lower cost than the fee-for-service providers with an acceptable level of quality, then it can become a major competitive force in the health market place. Evidence of this was found in a study completed by the Federal Trade Commission (FTC) and reported on in the August 5, 1977, Wall Street Journal. The FTC found that, "Blue Cross . . . maintains its lowest 'bed utilization rates' . . . where HMOs have the greatest share of the market." The report also observed that in communities where HMOs were of significant size, ". . . health insurance companies put greater pressure on hospitals and doctors to hold down costs."

Because of its limited budget, HMOs try to limit hospitalization. They hospitalize at a rate significantly lower than that for comparable populations receiving care through the fee-for-service system. For example, in 1976 the hospital utilization rate for all local HMOs was about 500 days per 1,000 enrollees. The range was 475 days per 1,000 to 700 days per 1,000 enrollees. For the metropolitan area as a whole, the utilization rate (adjusted to eliminate use by non-residents) was about 1,350 days per 1,000 population.

Part of the difference in utilization rates may be accounted for by differences in the characteristics of the populations being compared. Twin Cities HMO members are, for the most part, all under age 65 and either employed or members of the immediate family of an employed person. It is

logical to expect that they will use less patient days than the population in general.

A better comparison of HMO and fee-for-service hospital use would be with another group of persons under 65 and employed. Blue Cross of Minnesota reports that their enrollees used hospital days at a rate of 900 per 1,000 enrollees, significantly greater than the 500 days per 1,000 reported by the HMOs. Again, there are some problems with this comparison. The Blue Cross rate is for all of their enrollees in Minnesota, a large share of which come from the Iron Range. At least a portion of the difference in the utilization rates may be accounted for by the fact that a disproportionate share of Blue Cross's enrollees are engaged in relatively hazardous work. This difference alone, however, cannot account for the entire difference of 400 days per 1,000. Some of it must be explained by the HMO's structure. Aside from differences in job characteristics, the health delivery system is the only major difference between the Blue Cross and the HMO populations.

The Twin Cities already has seven functioning HMOs and the beginnings of a competitive system. Both the size and number of HMOs have grown rapidly in the last few years. In 1972 the region had only one HMO with about 50,000 enrollees. Today there are seven HMOs with about 150,000 members (about 8% of the Twin Cities population). Tables 17 and 18 describe their operation.

With the exception of the Physicians Health Plan and the Minnesota Health Maintenance Network, all of the local HMOs operate their own clinics, which are staffed by physicians employed by the plans. The availability of extensive diagnostic and treatment facilities at the clinics is one way in which the HMOs are able to minimize their use of the hospital. Three of the plans (Group Health, MedCenter, Nicollet-Eitel) have more than one clinic site. Group Health has seven clinics. MedCenter contracts with physicians in St. Paul, Shakopee and Coon Rapids to provide service for members in these parts of the metropolitan area; however, since it is a subsidiary of the St. Louis Park Medical Center, most of the plan's work is done at the medical center. Nicollet-Eitel has three locations: Central Minneapolis, Wayzata and Burnsville. Both the SHARE and the Ramsey Health Plans are hospital-based (Samaritan and St. Paul-Ramsey, respectively) and have no satellite locations.

Both the Physicians Health Plan (PHP) and the Minnesota Health Maintenance Network (MHMN) are organized as Independent Practice Associations (IPA). The plans do not own their own clinics and do not employ doctors. Rather, doctors join the association and are then authorized to treat members of the plan. As a condition of joining the association and an incentive for cost control, member doctors are reimbursed for their services at a predetermined discounted rate. For example, PHP was reimbursing at 80% of charges and recently decreased that to 70% of charges. At the end of each year, members of the association receive a bonus from the plan provided it has operated in the black. This bonus serves to make up for the discount which the physicians granted during the year.

The IPAs offer their members a broader selection of physicians. The Physicians Health Plan has about 1,100 physicians associated with it. By having such a large number of physicians, people can join an HMO without also changing their doctor. The IPA is more difficult to manage because it is so decentralized. With each physician practicing in his own office, the plan cannot oversee their use of services as easily as when all of the physicians are practicing at a single or limited group of plan-owned clinics.

Table 17

GROWTH OF MEMBERSHIP IN TWIN CITIES HMOs, 1972-1976

Name	July 1972	July 1974	July 1975	July 1976	Jan. 1977
Group Health Plan, Inc. (1955)*	46,000	60,000+	75,000	90,220	91,400
Ramsey Health Plan (1972)	-	1,945	2,600	3,045	3,500
SHARE Health Plan (1974)	-	4,000	8,500	11,000	12,200
MedCenter Health Plan (1972)	-	6,000	9,500	15,000	21,000
Nicollet-Eitel Family Health Plan (1973)	-	1,300	2,400	3,200	3,200
Minnesota Health Maintenance Network Plan (Blue Cross Plan) (1974)	-	-	2,700	4,000	7,500
Physicians Health Plan (1975)	-	-	-	7,500	10,000
Totals	46,000	73,245	100,700	134,325	148,800

SOURCE: Twin Cities Health Care Development Project

*Date became operational

Hospitalization in IPA plans is also more difficult to control. Physicians are likely to continue using the hospital without any special concern for cost. Many will need it for diagnostic purposes because they do not have elaborate office equipment. This has been the case with the PHP. As a result, the plan now requires its physicians to advise the plan before hospitalizing except in emergency cases. This step helped to bring the plan into the black for June 1977 and to break even for the month of July. Without its action to control hospitalization, the PHP would be in serious financial trouble. If it raised its rate in order to pay for the higher hospital use rates, it would not be able to compete with other HMOs and insurance plans.

To stimulate development of HMOs, Congress established a loan and grant program for federally qualified HMOs in 1973. In addition to financial support, the Health Maintenance Organization Act also required that all employers with greater than 25 employees offer an HMO option as a part of their health benefit package, if a federally qualified HMO is operational in their community. To date, only 41 HMOs (including the SHARE plan in St. Paul) have been able to meet the requirements to become federally qualified. So few plans have become qualified because the benefit package required to receive federal qualification is so broad that few HMOs could offer it and remain competitive with traditional insurance programs. Amendments to the law in 1976 were

Table 18

HOSPITAL UTILIZATION BY TWIN CITIES HMOs, 1976

Name	Use of Hospital (Patient Days per 1,000 Enrollees)	Hospital Affiliation	Approximate Percent of Hospital's Total Use Due to HMO Patients
Group Health Plan, Inc. (1955)*	500	Fairview**	40% (based on GHP's use of 45,000 patient days at Fairview
Ramsey Health Plan (1972)	708	St. Paul-Ramsey	2% (based on RHP's use of 2,500 patient days at St. Paul-Ramsey
MedCenter Health Plan (1972)	375	Methodist St. Francis St. John's Mercy	4% (based on MedCenter's .5% use of 5,700 patient .2% days at Methodist, 2% 1,200 days at Mercy, 240 at St. John's and 160 at St. Francis)
Nicollet-Eitel Family Health Plan (1973)	610	Eitel	6% (based on N-E's use of 1,950 patient days at Eitel)
SHARE Health Plan (1974)	475	Samaritan	31% (based on SHARE's use of 5,800 patient days at Samaritan)
Minnesota Health Maintenance Network Plan - Blue Cross Plan (1974)	650	Not specified	-
Physicians Health Plan (1975)	688	Not specified	-
Average	510	-	-

SOURCE: InterStudy (1976 use rates only). Share of each hospital's use from HMO members was calculated with data from the Metropolitan Health Board and assuming that *all* hospitalization occurred at the named hospital.

*Year became operational.

**Group Health hospitalizes eye patients at Mt. Sinai Hospital.

designed to ease requirements and encourage development.

Consistent with 1976 amendments, there also appears to be growing interest in HMOs coming from HEW, the federal agency responsible for qualification. An article in the July 23, 1977 issue of the National Journal reported that the Carter Administration is ". . . planning to revitalize the Department of Health, Education and Welfare's troubled HMO program." The article detailed steps being taken by the administration to encourage HMO development including: Major personnel changes, a commitment to reduce the backlog of HMOs seeking qualifications and to seek ways of expanding HMO membership by Medicare/ Medicaid recipients.

Business has also been showing signs of greater interest in the development of prepaid health delivery plans. The National Association of Employers on Health Maintenance Organizations (NAEHMO) was formed in the Twin Cities in early 1976. By the end of that year, it had 87 corporate members, each employing an average of 30,000 persons. R. J. Reynolds Industries of Winston-Salem, North Carolina, established its own HMO in 1976. Hospital use for enrollees has decreased from about 900 days per 1,000 to about 450 days per 1,000. More recently, the Ford Motor Company has been seriously considering starting its own HMO for employees in southeastern Michigan, where over half of Ford's health care expenses are incurred. Locally, several major companies are already offering the HMO option, among them General Mills, Dayton-Hudson, Cargill, First National Bank of Minneapolis, and the University of Minnesota. Control Data is in the midst of its first enrollment effort, and Honeywell will be offering an HMO option to its employees early in 1978.

In addition to the HMO, other less organized alternative delivery systems are possible. Like the HMO, they are designed to use market incentives to control expenditures. One alternative would be for insurance companies to adjust their rates according to a physician's or group of physicians' (known as a Health Care Alliance, HCA) use of the hospital. Physicians with similar specialties would be compared according to their rate of hospitalization. On the basis of this comparison, insurers could offer lower premiums to those patients choosing physicians who make relatively less use of the hospital (by comparison with other physicians in the same specialty).

To encourage their employees to choose physicians who hospitalize least, employers might set their contribution for health benefits at a level which will cover the whole premium for these physicians. Employees choosing physicians who make greater use of the hospital would have to pay any additional premium charge themselves. Presumably, this kind of plan would put an incentive on physicians to make less use of the hospital in order to achieve a lower premium rating from insurers and thus be more attractive to employees. While this plan would organize both providers and patients into groups, it would not have the same kind of budget constraint that is found in the HMOs.

The Carter Administration's expenditure control strategy would regulate hospital revenues and capital spending by placing a *cap* on both kinds of spending.

The Administration's proposal would place a 9% limit on annual increases in hospital revenues and would limit capital spending to $2.5 billion per year nation-wide, of which Minnesota's share would be about $50 million. Excluded from the revenue cap would be those funds necessary to support wage increases for certain classes of hospital workers. Together the caps on revenues and capital spending will cut the growth of the hospital system's physical size and will also limit the flow of patients through

the system.

It has been suggested that the Carter plan will be particularly advantageous to the large medical centers. Hospitals doing the most sophisticated kinds of care will probably be able to continue in this kind of work, or, if they choose, they would begin providing more common types of care while substantially increasing their volume. Smaller hospitals do not have the same option. They are for the most part locked-in to continuing their current services and level of sophistication.

The proposal would exempt states with operating cost containment programs from the caps. Minnesota's program currently requires rate review and not rate setting. It is unlikely that the state would be exempt from the federal control. The proposals also offer an exemption to hospitals serving primarily HMO patients. Again, it is unlikely that any Minnesota hospitals would be exempt under this provision.

The Carter proposal is currently being considered by committees in both the Senate and the House. In the Senate it has been passed by the Human Resources Committee and will now be considered by the Finance Committee. Senator Herman Talmadge, Chairman of the committee's Health Subcommittee, has introduced his own cost control bill and has not scheduled hearings on the Carter proposal. In the House, the legislation is moving much slower . . . the Health Subcommittee of Ways and Means has held one hearing, while none have been scheduled for the Health Subcommittee of the House Commerce Committee. As is true in the Senate, there is at least one proposal in addition to the President's to be considered. Most observers feel it is unlikely that Congress will take action to control hospital costs before adjourning for the year in early October, 1977.

COMMITTEE ACTIVITY

While the focus of this report, Twin Cities hospitals, represents a new topic for the Citizens League, its scope, the health care system, is one that has been a League interest since its formation in 1952. Shortly after formation, the first of three committees to consider the function of Hennepin County Medical Center (then Minneapolis General Hospital) was set up. In 1962-63, a second League committee considered the issues surrounding the hospital's change from city to county administration. In 1969-1970, a League committee was formed to consider the plans for rebuilding General Hospital and the role which the new facility should play in the community's total health care system. While each committee's work was focused on the same hospital, the studies required, in varying degrees, broader understanding of the health care system.

This time the focus moved away from a particular hospital and instead the committee's work aimed at the Twin Cities' entire hospital network. Since the last study, several events have occurred which suggested to the League's Board of Directors that a new study, with broader dimensions, was necessary. Thus, the Board authorized a study committee with the following charge:

"Several forces in health care appear to have major implications for hospitals, public and private, in the metropolitan area.

"First, a new emphasis on in-home care, heavily concentrating on keeping people well, may be emerging. This could be aided or restricted by the extent to which the cost of health care in the home becomes eligible for insurance reimbursement. Such a movement could mean fewer total days of hospitalization for the general population.

"Second, interest in community-based clinics is expanding, although many questions about the clinics themselves exist, such as their purpose, funding, effectiveness, and so forth. These clinics, too, may become more heavily involved in services which emphasize keeping people well, that is, protecting the health of the public, a function traditionally performed by city health departments. Depending upon how the clinics evolve, they may reduce, in total, the need for in-hospital care. They may also increase competition between hospitals desiring to associate in some way with these clinics. Hospitals themselves may establish their own clinics. If total in-hospital care is stable or declining, a hospital affiliated with a clinic may be able to assure itself of a continuing stream of patients.

"Third, Health Maintenance Organizations (HMOs) are helping to reduce the days of hospitalization. Even though the HMO movement is likely to reduce the total demand for in-hospital care, hospitals will be trying to make arrangements with HMOs, because such organizations will be able to provide an individual hospital with a continuing stream of patients.

"Fourth, hospitals themselves are seeking expansion in suburban locations where population growth is occurring and where private physicians are establishing offices. This will mean continued pressure on the certificate-of-need process.

"In the background of all these developments is the fact that the Twin Cities area is a higher-than-average user of hospitalization, the most expensive of all health care costs.

"This project will focus on the changing patterns of health care delivery and reimbursement and their implications for hospital use and expansion."

The committee began work on October 7, 1976, and completed its report on September 6, 1977. A total of 43 meetings were held, an average of one per week with each session lasting about 2½ hours. Some committee members also met informally over dinner before each meeting.

In the course of its work, the committee met with a broad range of people associated with the health care system including doctors, hospital trustees and administrators, insurers, and public health officials. Those persons who visited with the committee and thereby contributed to its understanding of the region's health care system are listed below in the order of their appearance. Their titles and positions are the ones they held at the time they spoke to the committee.

Richard J. FitzGerald, chairman of the Citizens League 1970 Committee on Health Care
Malcolm Mitchell, executive director, Metropolitan Health Board
Katherine Gustafson, demographer, State Planning Agency
Bright Dornblaser, professor and director, School of Hospital Administration, University of Minnesota
William Kreykes, administrator, Hennepin County Medical Center
Fred Sattler, director of research, Minnesota Hospital Association
Harry Sutton, actuary, G. V. Stennes & Assoc.
Richard Lindquist, Blue Cross and Blue Shield of Minnesota
John Dilley, director, Health Planning and Development, State Planning Agency
Donald Van Hulzen, associate administrator, University of Minnesota Hospital, and former executive director, Planning Agency for Hospitals of Metropolitan Minneapolis
Steve Kumagai, administrator, Methodist Hospital, St. Louis Park
Lyndon Carlson, State Representative, chairman, Health Subcommittee of House of Representatives
William Kirchner and B. Robert Lewis, State Senators, members of Special Senate Health Cost Subcommittee.
Sr. Marie dePaul Rochester, C.S.J., administrator, St. Joseph's Hospital, St. Paul
Peter Sammond, executive vice president, Mt. Sinai Hospital, Minneapolis
Gordon Sprenger, president, Abbott-Northwestern Hospital, Minneapolis
Sr. Agnes Otting, administrator, St. Francis Hospital, Shakopee
Thomas Briggs, M.D., St. Paul, former president, Ramsey County Medical Society
Charles E. Lindemann, M.D., Minneapolis, former president, Hennepin County Medical Society
Lawrence Vorlicky, M.D., St. Louis Park Medical Center
Richard YaDeau, M.D., St. Paul, past president, Foundation for Health Care Evaluation
John K. Iglehart, National Journal, Washington, D.C.
Paul Ellwood, president, InterStudy
Boris Levich, former deputy health officer, St. Paul Health Department
James Brinda, director of environmental health, Minneapolis Health Department
Robert Hiller, assistant commissioner, Minnesota Department of Health
Donna Anderson, health program specialist, Hennepin County Department of Planning and Development
K. C. Spensley, director, Metro Community Health Consortium
Sharol Hopwood, nutritionist, Community-University Health Care Center

John O. Dizon, director of public education, American Cancer Society, Minnesota Division
Gordon Slovut, Minneapolis Star health columnist
Donald Loizeaux, groups and special markets, Western Life Insurance Co.
David Schoeneck, public information officer, Blue Cross of Minnesota
James Craig, M.D., medical director, General Mills, Inc.
William Mays, director, community health services, Metropolitan Medical Center
Ward Edwards, vice president, North Memorial Medical Center
Doris Caranicas, chairman, Richard G. Slade, former chairman, and Beverly Boyd, Harriet Mhoon and Sally deLancey, members, Metropolitan Health Board
Steve Rogness, executive director, Minnesota Hospital Association
Richard Keck, Foundation for Health Care Evaluation
Tobey Lapakko, Minnesota AFL-CIO
Gerald Christenson, Commissioner of Finance, State of Minnesota
Robert J. Crabb, trustee, and Steve Orr, vice president, Fairview Hospitals, Minneapolis.
J. Stanley Hill, trustee, United Hospitals, St. Paul
Herbert Bissell, trustee, Abbott-Northwestern Hospitals, Minneapolis
Rollin Crawford, trustee, Riverview Hospital, St. Paul
John C. Dumas, director of planning, Joel Kovner, director of medical economics, Lawrence Rubenstein, economics and statistics department, and Jerry Gillman, all of the Kaiser Medical Care Program, Southern California Region.

While all of the input sessions added insight, three are worth special mention. John Iglehart, health correspondent for the National Journal, shared with the committee his perspective on national health policy, particularly developments surrounding the debate on national health insurance and planning. John C. Dumas, director of planning for the Kaiser Foundation Medical Care Program, Southern California Region, shared with us via conference call information on the development of the Kaiser prepaid health delivery plans in Southern California. Gerald Christenson, Commissioner of Finance for the State of Minnesota, has worked closely with the problem of declining school enrollments. We asked him to describe the retrenchment process which is now occurring in education and then proceeded to compare that with what we knew about hospitals.

In addition to its formal resource persons, the committee had a regular group of observers from the health care community, particularly from hospitals and the Metropolitan Health Board. These people contributed to committee discussion on occasion and were helpful in answering questions for committee members. We appreciated their presence.

Outside the meetings, staff talked regularly with people from a variety of organizations in the health care system. They all were helpful in supplying data, checking it for accuracy, and answering questions.

A total of 79 Citizens League members originally signed up for the committee. Twenty-two participated actively in the committee's work. They were:

James R. Pratt, Chairman
Harold J. Anderson
Herbert O. Bloch
Lynn W. Carlson,
Charles H. Clay
Ward E. Edwards[1]
Mina K. Harrigan
Katherine Howard
Elizabeth L. Jones
Scott Knudson
Aaron L. Mark
Walter McClure
Tom Mortenson
Barbara O'Grady
Dorothy Ohnsorg
James L. Shaw
Wyman Spano
Norman Sterrie
Harry Sutton
James Swadburg
Donald Van Hulzen
Stephen Wellington

[1]Dissented on vote to approve the report.

A minority report was submitted by Herbert O. Bloch. Copies of that report are available from the Citizens League's office.

Irma Sletten, who is homebound, participated in the committee's work through telephone conversations with staff.

Staff assistance for the committee was provided by Ted Kolderie, Executive Director, and Bill Blazar, Research Associate. Jean Bosch arranged all meetings and provided secretarial support.

APPENDIXES

APPENDIX I - LONG-RANGE HOSPITAL PLANNING PROCESS TIMELINE

Date	Activity
July 13, 1977	Long-Range Hospital Planning Committee report accepted
First Year	
August, 1977	Workshops on Analysis of Data Methodology to be offered by the Health Board
August 30, 1977	From Metropolitan Health Board to hospitals and hospital organizations: System trends overall, description of health planning areas (population characteristics and health status)
September, 1977	Long-Range Hospital Planning Seminar for Executives
September 20, 1977	Each hospital or hospital organization's individual Letter of Commitment to Process w/Timing Suggestions
October 1, 1977	Individual dialogue with hospitals and hospital organizations.
January 1, 1978	Date for informal, total plan submission (with emphasis on the inventory of services with analysis)
January 15, 1978	Final draft recommendation from Viable Hospital Model Task Force sent to hospitals
March 1, 1978	Informal small group discussion suggested when Metropolitan Health Board staff identifies overlapping concerns between two or more hospitals Also, continue to dialogue with individual hospital organizations, for example, on perceived strengths and weaknesses in the draft plan

(continued on next page)

APPENDIX I (continued)

Second Year	
October 31, 1978	Date for formal, total plan submission
February 28, 1979	End period of staff review of all plans submitted
March 1, 1979	Begin formal mutual agreement talks with each hospital in committee*
June 1, 1979	Present results to Planning Committee**
June 15, 1979	Public forum on summaries and recommendations
June 30, 1979	Presentation for final Health Board agreement
JULY 1, 1979	Appropriateness Reviews Begin

SOURCE: Metropolitan Health Board, Report of Task Force on Long-Range Hospital Planning.

*Hospital and small subcommittee of the Health Board's Planning Committee will discuss staff review of proposed hospital role -- who is served, service overlaps, impact on system and review goals and objectives, particularly any final difficulties in reaching agreement. They will also look at the strengths and weaknesses of the plan submitted for help the next time around.

**Committee will make summary recommendation to Planning Committee on: Highlights of this Plan; implications of agreeing with this proposed role, goals and objectives in light of system goals and a metropolitan perspective; areas or points of agreement; areas or points of disagreement.

APPENDIX II - BONDHOLDERS' RISKS

The ongoing process of hospital construction and modernization in the Twin Cities area is now being financed largely by borrowing from private investors.

The bonds must be paid off from revenues earned by the hospital. In some recent cases the bonds have been issued by a public agency under the state's Municipal Industrial Development Act. But public tax revenues are not available to pay the principal and interest.

The effort to constrain expenditures in the hospital system affects, or can affect, the level or rate of increase in hospital revenues . . . and, therefore, the ability of the hospital to repay its borrowings.

This latent conflict between hospital financing and the public policy effort at cost containment is fully revealed in a key section included in the prospectus for each of the bond offerings by the hospitals. It is reprinted below.

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"The principal of, redemption premium, if any, and interest on the Bonds is payable solely from the amounts paid by the Hospital under the Loan Agreement or the Guaranty Agreement except to the extent provided from certain other funds held or received by the Trustee (see the information herein under the caption 'Security for the Bonds'). No representation or assurance can be made that revenues will be realized by the Hospital in the amounts necessary to make repayments of the Loan, and other payments at the times and in the amounts sufficient to pay the principal of, premium, if any, and interest on the Bonds, as presently estimated or otherwise. Future revenues and expenses will be affected by future events and conditions relating generally to, among other things, demand for hospital services, the ability of the Hospital to provide the services required by patients, physicians' confidence in the Hospital and its properties, management's capabilities, economic developments in the service area, ability to control expenses during inflationary periods, competition, rates, costs, third-party reimbursement, and governmental regulation. While forecasts of future revenues and expenses are based upon assumptions and rationale which the Hospital believes to be reasonable and appropriate (see The Financial Feasibility Study, attached hereto as Appendix B), they are subject to conditions which may change in the future to an extent that cannot be determined at this time.

"Factors That Could Affect Revenues and Potential Reimbursement

"The future level of revenue of the Hospital could be adversely affected either by increased regulatory actions that could cause the Hospital to receive less income than is presently projected or by increased competition from other health care providers that could cause the Hospital to experience reduced demand for patient care.

"The Hospital is subject to regulatory actions by those governmental or private agencies that administer Medicare and Medicaid programs, Blue Cross and Blue Shield

APPENDIX II (continued)

of Minnesota, the State Board of Health, the National Labor Relations Board (NLRB), the Professional Standards Review Organization (PSRO), the Joint Commission on the Accreditation of Hospitals, the different federal, state, and local agencies created by the National Health Planning and Resources Act of 1974 (PL 93-641), and other federal, state and local governmental agencies. The impact certain of these organizations could have on the potential reimbursement of the Hospital is explained in more detail below. No mention is made of the possible impact of a national health insurance program as there is no reasonable method of determining now the effect any such program would have.

"The following general factors could adversely affect the level of reimbursement:

"(i) *Increased Costs Without a Comparable Increase in Revenue*

"The costs associated with particular health care services could increase without a comparable increase in revenue derived from reimbursement programs allowed by third party payors. Third party payors include Medicare, Medicaid, and Blue Cross and Blue Shield of Minnesota. When costs rise an equivalent increase in the level of reimbursement may also be necessary in order to maintain the same levels of health care services. If costs are viewed as unnecessary and are not allowed by third party payors, the Hospital will lose reimbursement from the third party cost payors. If charges to patients paying charges were not increased, the Hospital would be forced to absorb those costs not approved by the third parties.

"Cost increases could result from among other factors: increases in the salaries, wages, and fringe benefits of the Hospital's employees, increases in costs associated with advances in medical technology, and increases in the costs of operating the physical plants of the Hospital. Certain examples of the foregoing are discussed in the following paragraphs.

"(a) In 1974, the National Labor Relations Act was extended to give the National Labor Relations Board jurisdiction over non-profit hospitals. Future actions, among others, that could affect the costs of the Hospital because of this extension could include increases in the minimum wage, the recognition of new bargaining units, and increased costs arising from strikes that disrupt patient care (see information herein under the caption 'Hospital Employees').

"(b) Future cost increases could also result from the purchase or lease by the Hospital of medical equipment to provide a quality of patient care that is currently not available.

"(c) Another potential source of increased future costs could be higher estimates to maintain the physical plants of the Hospital than are presently forecast. Such increases could result from, among other reasons, changes in present federal or state 'Life Safety Codes' which could result in higher costs of running the hospital.

"(ii) *Future Limits on the Level of Support for Medicare and Medicaid*

Future actions by the federal government for Medicare and by the federal or state governments for Medicaid that could limit the total amount of funds available for either or both of these programs could lower the amount of reimbursement available

APPENDIX II (continued)

to the Hospital. There is presently legislation pending before Congress to place upper limits on the amount of reimbursement to hospitals from Medicare and Medicaid.

"(iii) *Disallowance of Presently Reimbursable Costs*

"The projections of revenue for the Hospital are based on present interpretations of third party cost reimbursement regulations. If these regulations are changed in the future, the projected income of the Hospital could be reduced. A number of third party payors are currently evaluating the initiation of prospective reimbursement programs that could refuse reimbursement for costs not planned for at the beginning of the budget period.

"(iv) *Actions To Limit the Service or Financial Support of a Particular Diagnosis or Class of Patients*

"The projections of revenue and expense are based in part on extrapolations of current patient utilization and reimbursement trends. The recent PSRO legislation is directed in part at regulating the amount of reimbursement that can be given for a particular diagnosis. In addition, recent Medicare regulations have set reimbursement limits on particular categories of care, notably renal dialysis.

"Factors that Could Result in Increased Competition

"The following factors, among others, could result in increased competition:

"The Hospital could face competition in the future from other hospitals and from other forms of health care delivery that could offer comparable health care services to the population which they presently serve. This could include the construction of new or the renovation of existing hospitals, health maintenance organizations, ambulatory surgical centers, and private laboratories and radiological services.

"In addition, competition could come from forms of health care delivery that could offer lower priced services to the same population. These services could be used to substitute for some of the revenue generating services presently offered by the Hospital. The services that could be used to substitute for hospital treatment include: skilled nursing home care, intermediate nursing home care, preventive care, and specialized drug and alcohol abuse programs.

"One of the stated goals of PL 93-641 is to develop alternative forms of health care delivery to replace acute inpatient care. The text of the law cites several methods the HSA's are encouraged to promote as a matter of policy to reduce acute inpatient care within their service area.

"Recent Administration Proposal

"The Carter Administration has recently proposed the enactment of legislation, entitled the Hospital Cost Containment Act of 1977, which would, among other things, limit increases in hospital inpatient revenues, limit expenditures by hospitals for capital improvements and require the publication and disclosure of hospital rates and charges.

APPENDIX II (continued)

"This proposed legislation would limit increases in hospital revenues derived from inpatient services to a fixed percentage of inpatient revenues received by any hospital during the base year, currently proposed to be 1976 with adjustments. Certain adjustments of the base year may be made for increases or decreases in patient admissions in excess of limits established by the bill; for increases in capacity or types of services, or major renovation or replacement of a hospital facility; and for increased salaries to nonsupervisory personnel. The bill currently provides that charges in excess of the prescribed limits would not be reimbursable by third party payors and must be deducted from otherwise permitted increases in the following year, or, if not, would be subject to a federal excise tax.

"The bill would also set an annual national limit on capital expenditures by acute care hospitals, which would be allocated to the various states. Each state would then issue new certificates of need only up to the aggregate amount of capital expenditures permitted for such state, with the further condition that no certificates of need would be issued if it would result in a net increase in beds in any health service area in which the number of beds exceeds prescribed limits. The Hospital believes that such legislation, if adopted in its presently proposed form, would not affect the validity of the Certificate of Need issued for the Project.

"It is not possible to predict whether such proposed legislation will be adopted or, if adopted, whether it will be adopted in its present form. If the legislation is adopted in its present form, it could have the effect of reducing the Hospital's increase in inpatient service revenues from percentage increases experienced in prior years. The Hospital cannot, however, predict the ultimate effect of such legislation on its overall revenues and net income.

"Other Risk Factors

"In the future, the following factors, among others, may adversely affect the operations of health care facilities, including the Hospital's, to an extent that can not be determined at this time:

"(i) Adoption in the State of Minnesota of legislation which would establish a rate-setting agency with statutory control over hospitals in the State of Minnesota. The Hospital has been complying with the reporting and rate review procedures conducted by the Minnesota Hospital Association established pursuant to the Minnesota Hospital Administration Act of 1976 and regulations of the State Board of Health. The rate review panel is presently reviewing the Hospital's 1977 budget and rates. Compliance with any recommendations made pursuant to such review is solely voluntary at this time but could be made mandatory by subsequent legislation thereby affecting the Hospital's ability to charge rates sufficient to fulfill its obligations under the Loan Agreement.

"(ii) Cost and availability of medical malpractice insurance (see the information herein under the caption 'Abbott-Northwestern Hospital, Inc. - Insurance').

"(iii) If completion of the Project should be delayed beyond the estimated period, the cost thereof may be increased and the receipt of revenues forecase from operation

APPENDIX II (continued)

of such uncompleted portions may be delayed and the ability of the Hospital to make the required payments under the Loan Agreement may be adversely affected. In addition, increases in the Project costs due to changes in the Project directed by the Hospital or resulting from other events may affect the ability of the Hospital to complete the Project within the projected construction period or within the cost estimates presently contemplated.

"(iv) Efforts by insurers and governmental agencies to limit the cost of hospital services, and to reduce utilization of hospital facilities by such means as preventive medicine, improved occupational health and safety and outpatient care:

"(v) Change in revenue rulings governing the tax exempt status of charitable corporations by either the courts or the Department of the Treasury, thereby requiring tax-exempt hospitals, as a condition of maintaining their tax exempt status, to provide increased indigent care at reduced rates or without charge.

"(vi) Developments affecting the tax-exempt status of nonprofit organizations. Taxing authorities in certain jurisdictions have sought to impose or increase taxes related to the property and operations of such organizations, including hospitals, particularly where such authorities have been dissatisfied with the amount of service provided to indigents.

"(vii) The Hospital facilities are specifically constructed for hospital purposes, and in practice are limited to hospital purposes. As a result of the foregoing, in the event of a foreclosure or enforcement of the Mortgage and Security Agreement, the Trustee's remedies and the number of entities which could purchase or lease the Hospital facilities would be limited, and the sale price or rentals would thus be affected. In addition, the security provided by the Mortgage and Security Agreement may be diluted upon the issuance of Additional Bonds or the incurrence by the Hospital of additional Funded Debt (see the information below under the caption 'Additional Indebtedness').

"The occurrence of any of the foregoing events, or the occurrence of other events, could adversely affect the forecasts set forth in the Financial Feasibility Study."

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SOURCE: Preliminary Bond Prospectus, Abbott-Northwestern Hospital, June 1, 1977, section entitled "Bondholders Risks", pages 28-31..

APPENDIX III

UTILIZATION AND OCCUPANCY: TWIN CITIES COMMUNITY HOSPITALS, 1976*

	All Services					Med.-Surg., Peds., Ob. Only				
	Patient Days	Number Licensed Beds	Per Cent Occupancy Licensed Beds	Number Beds in Service	Per Cent Occupancy Beds in Service	Patient Days	Number Licensed Beds	Per Cent Occupancy Licensed Beds	Number Beds in Service	Per Cent Occupancy Beds in Service
Abbott-Northwestern	253,000	1,000	70%	881	78%	182,000	679	73%	603	82%
Bethesda Lutheran	126,000	479	72%	488	70%	73,000	298	67%	317	63%
Children's Medical Center, Minneapolis	27,500	135	56%	107	70%	27,500	135	56%	107	70%
Children's Hospital, St. Paul	23,000	107	59%	107	59%	23,000	107	59%	107	59%
District Memorial	12,700	61	57%	54	64%	11,800	52	62%	46	70%
Divine Redeemer	33,300	152	60%	144	63%	32,000	130	67%	122	72%
Eitel	31,700	160	54%	141	61%	30,000	144	57%	129	63%
Fairview	108,000	425	69%	394	75%	62,700	257	67%	234	73%
Fairview Southdale	127,000	451	77%	448	77%	111,000	401	76%	382	80%
Golden Valley Medical Center	87,900	399	60%	376	64%	24,400	250	62%	140	47%
Hennepin County Medical Center	121,000	449	74%	438	75%	107,000	398	73%	384	76%
Lakeview Memorial	18,400	131	38%	97	52%	16,900	119	39%	85	54%
Lutheran Deaconess	59,400	276	59%	276	59%	56,800	250	62%	250	62%
Mercy	54,200	326	45%	234	63%	47,300	288	45%	190	68%
Methodist	142,000	509	76%	505	77%	124,000	444	76%	440	77%
Metropolitan Medical Center	208,000	853	67%	677	75%	138,000	583	65%	529	71%
Midway	102,000	385	72%	370	75%	96,000	337	78%	330	79%
Mounds Park	60,300	230	72%	226	73%	33,000	127	70%	125	71%
Mount Sinai	73,600	273	74%	273	74%	73,600	273	74%	273	74%
North Memorial Medical Center	160,000	588	74%	588	74%	142,000	524	74%	524	74%
Queen of Peace	13,600	77	48%	68	55%	12,800	60	58%	60	58%
Regina Memorial	14,400	112	35%	119	33%	13,300	100	37%	100	37%
Riverview	17,000	97	48%	99	47%	16,300	75	59%	75	59%
Saint Francis	27,700	138	55%	138	55%	25,700	126	56%	126	56%
Saint John's	107,000	447	65%	399	73%	80,600	293	75%	305	72%
Saint Joseph's	131,000	576	62%	461	77%	99,000	446	60%	353	76%
Saint Mary's	199,000	775	70%	761	71%	93,000	444	57%	367	69%
St. Paul-Ramsey	133,000	600	60%	489	74%	101,000	433	63%	370	74%
Samaritan	18,600	150	34%	103	49%	18,600	150	34%	103	49%
Sanford	30,900	122	69%	122	69%	7,000	47	41%	47	41%
United Hospitals	178,000	762	64%	676	72%	146,000	632	63%	551	72%
Unity	73,900	314	64%	288	70%	68,600	275	68%	252	74%
University of Minnesota	214,000	870	67%	780	75%	178,000	711	68%	650	75%
Waconia	29,900	129	63%	129	63%	27,300	109	68%	109	68%
Watertown	6,700	44	41%	44	41%	6,300	35	49%	35	49%
Totals	3,022,000	12,700	66%	11,600	71%	2,303,000	9,647	65%	8,800	72%

SOURCE: Metropolitan Health Board

THE CITIZENS LEAGUE

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