

EVALUATION OF HOSPITAL REGULATION

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota

Program Evaluation Division

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February 1981

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Office of the Legislative Auditor
State of Minnesota**

PREFACE

In June 1980, the Legislative Audit Commission directed the Program Evaluation Division to conduct a study on hospital regulation. The study was prompted by concern that state regulation of hospitals may be costly, duplicative, unnecessary, or ineffective.

In conducting this study, the evaluation staff examined the regulatory framework for hospitals in Minnesota, reviewed existing studies of the cost and effectiveness of hospital regulation, and identified concerns of the Minnesota Hospital Association regarding costly, duplicative, or unfair regulation.

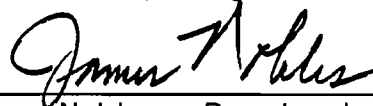
While Minnesota hospitals are governed by many regulatory programs, evaluation staff found that the state does not add a large regulatory burden to requirements established by the federal government or voluntary organizations. Studies of the cost of hospital regulation suggest that roughly one or two percent of hospital costs can be directly attributed to hospital regulation. These studies also indicate that the state controls only a small proportion of the cost of hospital regulation. Further, most of the Minnesota Hospital Association's concerns with hospital regulation have recently been addressed by the state Legislature or are beyond the control of the state government. Nonetheless, this report identifies those regulations which the association regards as duplicative, unfair, or costly and over which the state has some control.

During our study, the evaluation staff received the full cooperation of the Minnesota Department of Health and the Minnesota Hospital Association. We thank them for their assistance.

This study was conducted by Dan Jacobson under the direction of Elliot Long. Dan Jacobson is the author of this report.



Eldon Stoehr, Legislative Auditor



James Nobles, Deputy Legislative Auditor for Program Evaluation

February 10, 1981

PROGRAM EVALUATION DIVISION

The Program Evaluation Division was established in 1975 to conduct studies at the direction of the Legislative Audit Commission (LAC). The division's general responsibility, as set forth in statute, is to determine the degree to which activities and programs entered into or funded by the state are accomplishing their goals and objectives and utilizing resources efficiently. A list of the division's studies appears at the end of this report.

Since 1979, the findings conclusions, and recommendations in Program Evaluation Division final reports and staff papers are solely the product of the division's staff and not necessarily the position of the LAC. Upon completion, reports and staff papers are sent to the LAC for review and are distributed to other interested legislators and legislative staff.

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EXECUTIVE SUMMARY

This report on hospital regulation describes the regulatory framework for hospitals in Minnesota, summarizes what other studies have revealed about the cost and effectiveness of hospital regulation, and discusses concerns of hospital providers regarding hospital regulation in Minnesota.

Our major findings and conclusions in each of the following areas are summarized below:

- Regulatory Framework: What are the principal regulatory programs governing the operation of hospitals in Minnesota? What is the role of state, federal, and local governmental agencies and voluntary organizations?
- Cost of Regulation: What does existing research show to be the cost of complying with regulatory requirements? How much do state-administered programs contribute to the cost of hospital regulation?
- Effectiveness of Regulation: What does existing research show to be the impact of hospital regulation on the cost and quality of hospital services?
- Concerns of Hospital Providers: What do hospital care providers consider to be the areas of unnecessary regulation or duplicative or onerous requirements?

A. REGULATORY FRAMEWORK

Minnesota hospitals are regulated by governmental agencies at the federal, state, and local level and by private organizations. The major regulatory programs governing hospitals in Minnesota are:

Licensing and Certification: Programs include federal certification for hospitals participating in Medicare and Medicaid, licensing by the Minnesota Department of Health (MDH), and certification by the Joint Commission on Accreditation of Hospitals (JCAH), a private organization.

Certificate of Need (CON): This program requires approval by MDH for capital investments, new services, and changes in bed capacity which exceed certain thresholds.

Hospital Rate Review/Reimbursement Controls: Under the state rate review program, hospitals submit prospective budgets to the Minnesota Hospital Association for review and comment. The federal government attempts to control

hospital rates for Medicare and Medicaid patients by defining which costs are eligible for reimbursement.

Utilization Review/Professional Standards Review Organization (PSRO) Program: Under this federal program, physicians review care provided for Medicare and Medicaid patients to ensure that services are medically necessary, cost efficient, and meet professional standards of care.

Overall, the state's role in hospital regulation is secondary to that of the federal government and voluntary organizations. For most hospitals, state licensure and federal Medicare/Medicaid certification are granted primarily on the basis of decisions by the Joint Commission on Accreditation of Hospitals, a private accrediting authority. For the remaining hospitals (those not accredited by JCAH), state licensure is granted on the basis of inspections conducted by MDH under the federal Medicare program. While certificate of need is a state program, it is mandated by the federal government. Rate review is performed under state authority, but it is largely delegated by MDH to the Minnesota Hospital Association. State law requires hospitals in Minnesota to participate in the program, but compliance by hospitals with recommended rates is voluntary. Finally, utilization review and reimbursement controls for Medicare and Medicaid are federal programs.

Therefore, Minnesota does not appear to be adding an unusual administrative burden to existing regulatory programs established by the federal government or voluntary associations of providers. While MDH previously was considering a more active state licensure program, the Legislature has already established the policy of accepting JCAH accreditation in lieu of state licensure inspections. Nevertheless, hospitals do have concerns about some regulations over which the state has some control and which they regard as duplicative or unfair. These concerns are discussed later.

B. COST OF HOSPITAL REGULATION

We reviewed existing research on the cost of hospital regulation. Our major findings and conclusions are presented below in terms of:

- overall cost of hospital regulation, and
- cost of hospital regulation attributable to state programs.

Estimates made by studies in other states on the cost of hospital regulation have varied greatly--ranging from a high of 25 percent of hospital operating expenses in New York to a low of 1.5 percent in Michigan. However, if the cost of regulations which are not unique to hospitals are excluded--such as social security taxes,

unemployment insurance, and workers compensation payments--most studies estimate that approximately 1 to 2 percent of hospital expenses can be directly attributed to hospital regulation. In 1979, this represented approximately \$12 million to \$24 million for Minnesota hospitals.

- The only exception is the 25 percent estimate made by the study sponsored by the Hospital Association of New York State. This estimate, however, is not a valid measure of the cost of hospital regulation because it includes costs of activities required by regulation regardless of whether they would have been performed without regulation.
- The best available evidence on the cost of hospital regulation is provided by studies in Michigan, North Carolina, and South Carolina. These studies estimated that approximately 1.1 to 1.5 percent of hospitals' operating expenses can be directly attributed to regulation in the areas of utilization review/PSRO, reimbursement mechanics for Medicare/Medicaid, plant codes, and personnel management (excluding social security taxes, workers compensation payments, and unemployment insurance). This may be a conservative estimate of the cost of regulation in that it does not include indirect costs which are difficult to measure, nor does it include the cost of several minor regulatory programs.
- A less rigorous study in Massachusetts estimated that the cost of regulation is approximately 4 percent of hospital expenses. Excluding regulations not unique to hospitals appears to reduce this estimate to about 2 percent.

In Minnesota, the major regulatory programs include those examined by the studies in Michigan and the Carolinas plus rate review and certificate of need. Adding the estimated cost of these two state programs to the previous estimate brings the estimated cost of regulation to approximately 1.2 to 1.6 percent of hospital operating expenses.

- In 1979, the administrative cost of Minnesota's Rate Review program was approximately \$390,000, most of which was paid by hospitals. Additional expenses incurred by hospitals due to rate review have not been documented, but the Minnesota Hospital Association (MHA) estimates that an additional \$400,000 per year could be spent by hospitals preparing for review. MDH believes this overestimates the cost of rate review because much of this preparation should be performed regardless of whether rate review exists.
- Data from an MHA study suggest that certificate of need reviews cost hospitals roughly \$400,000 per year for personnel, supplies, and equipment. It is not clear, however, how much, if any, of this amount represents the cost of

planning which hospitals would conduct without any regulation. Another study sponsored by the Federation of American Hospitals found that time delays caused by CON reviews added significant costs to hospital projects. This finding, however, was not adequately supported.

Studies of the cost of regulation also indicate that state regulatory programs account for only a small proportion of the cost of regulation.

- The two largest state programs for hospitals--certificate of need and rate review--account for less than 10 percent of the cost of regulation. In contrast, the two largest federal program areas--utilization review/PSRO and reimbursement mechanics for Medicare and Medicaid--account for approximately one-half of the cost of regulation.
- The study sponsored by the Hospital Association of New York State indicates that in New York, the state accounts for 26 percent of the cost of inspections, questionnaires, and agency contacts. Non-government organizations account for nearly one-half of this cost. The state's share in Minnesota is likely to be smaller than it is in New York because New York has more regulation than Minnesota.

C. EFFECTIVENESS OF HOSPITAL REGULATION

We reviewed existing research evidence on the effectiveness of the following regulatory programs for hospitals:

- Hospital Rate Review,
- Certificate of Need, and
- Certification and Licensure.

Our major findings and conclusions in each of these areas are summarized below.

1. HOSPITAL RATE REVIEW

Evidence indicates that rate review programs, particularly mandatory programs operated by state agencies, reduce hospital costs. But evidence on how rate review programs affect the quality of care and the financial viability of hospitals is inconclusive.

- Recent studies have found that mandatory rate review programs substantially reduce hospital costs after a few years of experience. Estimated reductions range from 6 percent to 10 percent of hospital operating expenses per admission.

- There is some evidence that voluntary rate review programs operated by non-governmental agencies, at both the state and national level, reduce hospital costs, but by a smaller amount than mandatory programs. Results for voluntary programs, however, are not conclusive because of methodological problems and/or statistical uncertainty.
- The administrative cost of rate review programs is small compared to the program's estimated effect on hospital costs.
- Some early studies examined how rate review programs affected quality of care. Results were mixed and inconclusive because of difficulty in measuring quality and because most programs were in their early stages of development during the time period covered by the studies. We found no recent studies on how rate review programs affect quality of care.
- Evidence on the impact of hospital rate review programs on the financial condition of hospitals is inconclusive. One national study found that hospital rate review programs did not significantly affect retained earnings of hospitals as of 1978. However, the author noted that recent financial problems for some New York hospitals suggest that rate review may be starting to affect hospital bankruptcies. Other national studies did not address this issue.

While the evidence suggests that mandatory rate review programs reduce costs more than voluntary programs, we found no evidence on how mandatory programs compare with voluntary programs in terms of how they affect quality of care or hospitals' financial viability. Therefore, existing studies, by themselves, do not indicate which type of program is more effective.

2. CERTIFICATE OF NEED

Many studies have examined how effectively certificate of need programs have reduced capital investment and overall hospital costs. We did not find any studies, however, which examined whether certificate of need programs have achieved other objectives, including improved access to health care and quality of health care.

Overall, we found no empirical evidence that certificate of need programs reduce hospital costs and little evidence that they reduce capital investment. Some studies used the value of projects denied certificates of need as evidence that CON programs reduced capital expenditures and hospital costs. As many researchers have observed, however, this approach is not a valid measure of certificate of need's impact because it fails to take into account possible increases in operating costs which may affect reductions in capital expenditures and it does not demonstrate that all projects proposed under the CON Program would have been completed if CON did not exist.

National studies which used regression analysis found that certificate of need programs had no discernible effect on costs or capital investment through 1978 (1977 for capital investment). Because these studies also have methodological limitations, however, it is not possible to conclude that certificate of need has no effect on hospital costs or capital investment. For example, these studies have a margin of error of approximately 1 percent due to statistical uncertainty. This means that certificate of need could reduce (or increase) costs by as much as 1 percent and still not be detected by these studies. In Minnesota, 1 percent of hospital expenses amounted to approximately \$12 million in 1979.

Consequently, these estimates are not precise enough to conclude whether certificate of need programs actually cost more than they save. In any case, these studies suggest that CON has not been a major factor in restraining hospital cost inflation.

3. CERTIFICATION AND LICENSURE

We found no studies which examined how the quality of care in hospitals is affected by state licensing, federal certification, or private accreditation activities. There is some evidence, however, on how well state health agencies monitor hospitals under the federal Medicare certification system and on how well the Joint Commission on Accreditation of Hospitals monitors hospitals.

A U.S. General Accounting Office (GAO) study found that JCAH is more effective than the federal-state certification system both in detecting hospital deficiencies and in obtaining corrections for observed deficiencies. The significance of this finding, however, is not known because no evidence was presented on how these deficiencies affect patient care. Validation surveys, which are designed by the federal government to monitor JCAH performance, indicate that JCAH accredited hospitals frequently do not meet federal Medicare standards, particularly those standards relating to life-safety codes. This finding is consistent with the GAO study since GAO found that both JCAH surveys and state surveys frequently do not report deficiencies identified by the other. As a result of the validation surveys, JCAH modified its standards and procedures with regard to life-safety codes and utilization review. We found little evidence, however, on whether this has improved JCAH's performance.

Regarding Minnesota's licensing program, these results suggest that JCAH is generally effective. It is not possible, however, to conclude from these studies how effectively the Minnesota Department of Health would license hospitals if it had primary responsibility instead of JCAH. This is because the performance of Minnesota may differ from that of other states and because the federal government is in part responsible for the program's performance.

D. CONCERNS OF HOSPITAL PROVIDERS

We identified the concerns of hospital providers on the basis of interviews with the Minnesota Hospital Association and their response to a questionnaire. In summary, MHA is concerned with the cumulative impact of regulatory programs at the federal, state, and local levels of government. MHA believes that the proper role of state regulatory agencies is to set statewide standards to implement health care policy established by the Legislature but not to specify how hospitals should meet these standards. Most of MHA's concerns with hospital regulation have recently been addressed by the state Legislature or are beyond the control of the state government.

- MHA's primary concern with duplicative regulation involves the potential duplication between JCAH accreditation and state licensure. Riders to MDH appropriation bills have required JCAH accreditation to be accepted in lieu of state licensure since 1977. The proposed hospital licensure bill (H.F. No. 475) would establish this role for JCAH in statute and would adopt federal Medicare standards as state licensure standards.
- The proposed hospital licensure bill would also address MHA's concerns with coordination of state inspections by requiring state agencies to obtain MDH approval before conducting routine hospital inspections.
- The two state programs cited by MHA as being particularly costly or burdensome were rate review and certificate of need. As indicated in the cost section, however, these programs cost hospitals substantially less than the major federal programs. Furthermore, the state only partially controls the cost of these programs since CON is mandated by the federal government and rate review is carried out by MHA.
- Problems cited by MHA due to unfair regulation were primarily due to federal regulations.

Nevertheless, MHA advocates changes by state government in the following areas of hospital regulation:

- MHA advocates that the state terminate its participation in the federal Section 1122 program because it duplicates the state certificate of need program.
- MHA argues that Medicaid reimbursement under Minnesota Department of Public Welfare's (DPW) Rule 49 should be changed in order to address inequities for hospitals with attached nursing home facilities.
- MHA argues that MDH should make more projects eligible for waivers under the state certificate of need program.

- MHA argues that the State Planning Agency and regional Health Systems Agencies should seek an exemption from federal appropriateness review requirements because they duplicate state and regional health plans.
- MHA is concerned that the certificate of need program goes beyond legislative authority in that some proposed projects are approved on the condition that the health facility make changes unrelated to the original proposal.

We found that terminating participation in the federal Section 1122 program would save the state and hospitals some regulatory expense, although agencies involved maintain that the savings would be small. We also found that the state's Medicaid reimbursement system under DPW Rule 49 can create inequities for hospitals with attached nursing home facilities, although the extent to which it occurs has not been documented. State agencies involved in the other areas generally disagree with MHA on the issues of extending waiver provisions for certificate of need, seeking exemption from federal planning requirements, and whether changes in hospital projects initiated by planning agencies are unrelated to the original proposal.

INTRODUCTION

Over the last 15 years, hospitals have faced an increasing amount of regulation from many governmental and non-governmental agencies. There is concern that this regulation significantly increases hospital costs and that it may be duplicative, unnecessary, or ineffective.

In June 1980, the Legislative Audit Commission directed the Program Evaluation Division, Office of the Legislative Auditor to conduct a study on hospital regulation. In this study, we describe the major regulatory programs governing hospitals in Minnesota, examine existing research evidence on the cost and effectiveness of hospital regulation, and identify concerns of hospital providers regarding duplicative, unnecessary, and unfair regulation.

We did not conduct independent research on the cost or effectiveness of hospital regulation. Such a project would require a major commitment of resources from the Program Evaluation Division in a specialized area of research in which there has been much activity in recent years. Several studies have examined the cost of hospital regulation in other states and there is some evidence on the cost of state regulatory programs in Minnesota. Many studies have examined the effectiveness of rate review and certificate of need programs. There is also some evidence on the effectiveness of federal and voluntary certification programs.

This report presents our findings and conclusions and is organized as follows: Chapter I describes the major regulatory programs governing hospitals in Minnesota. Chapter II reviews existing research on the cost of hospital regulation. Chapter III examines existing research on the effectiveness of hospital rate review, certificate of need, and hospital licensure and certification. Finally, Chapter IV identifies the concerns of hospital providers with regard to duplicative, burdensome, or unfair regulation.

I. REGULATORY FRAMEWORK

In this chapter, we describe the major regulatory programs governing Minnesota hospitals. Minnesota hospitals are regulated by governmental agencies at the federal, state, and local level and by private organizations. The major regulatory programs governing hospitals in Minnesota are:

Licensing and Certification: Programs include federal certification for hospitals participating in Medicare and Medicaid, licensing by the Minnesota Department of Health (MDH), and certification by the Joint Commission on Accreditation of Hospitals (JCAH), a private organization.

Certificate of Need (CON): This program requires approval by MDH for capital investments, new services, and changes in bed capacity which exceed certain thresholds.

Hospital Rate Review/Reimbursement Controls: Under the state rate review program, hospitals submit prospective budgets to the Minnesota Hospital Association for review and comment. The federal government attempts to control hospital rates for Medicare and Medicaid patients by defining which costs are eligible for reimbursement.

Utilization Review/Professional Standards Review Organization (PSRO) Program: Under this federal program, physicians review care provided for Medicare and Medicaid patients to ensure that services are medically necessary, cost efficient, and meet professional standards of care.

Overall, the state's role in hospital regulation is secondary to that of the federal government and voluntary organizations. For most hospitals, state licensure and federal Medicare/Medicaid certification are granted primarily on the basis of decisions by the Joint Commission on Accreditation of Hospitals (JCAH), a private accrediting authority. For the remaining hospitals (those not accredited by JCAH), state licensure is granted on the basis of inspections conducted by MDH under the federal Medicare program. While certificate of need is a state program, it is mandated by the federal government. Rate review is performed under state authority, but it is largely delegated by MDH to the Minnesota Hospital Association. State law requires hospitals in Minnesota to participate in the program, but compliance by hospitals with recommended rates is voluntary. Finally, utilization review and reimbursement controls for Medicare and Medicaid are federal programs.

Therefore, Minnesota does not appear to be adding an unusual administrative burden to existing regulatory programs established by the federal government or voluntary associations of providers. Nevertheless, hospitals do have concerns about some regulations over which the state has some control and which they regard as

duplicative or unfair. These concerns are discussed in Chapter IV. In the remainder of this section, we discuss regulatory programs in the following areas:

- Licensing and Certification;
- Planning and Certificate of Need;
- Hospital Rate Review and Reimbursement Controls;
- Utilization Review/PSRO; and
- Environmental Health.

A. LICENSING AND CERTIFICATION

Licensing and certification programs are designed to ensure that health facilities meet standards governing the facilities' procedures, organization, and physical environment. These standards are believed to provide a framework within which quality care can be given.

The major licensing and certification programs for hospitals are: federal certification for hospitals participating in Medicare and Medicaid, licensing by the Minnesota Department of Health (authorized by Minn. Stat. §§144.5-144.693), and certification by the Joint Commission on Accreditation of Hospitals, a private organization. All hospitals in Minnesota are licensed by the Minnesota Department of Health and are federally certified for participation in the Medicare and Medicaid programs. The state's program legally prohibits hospitals from operating without a state license.

The Social Security Amendments of 1965 (Pub. L. No. 89-97) require hospitals to meet certain quality standards in order to receive funds under Medicare--a federally funded health insurance program for the elderly. Federal law also requires hospitals to meet the Medicare standards in order to receive funds under Medicaid--a federal/state health assistance program for welfare recipients and other low income persons.

Both the federal and state programs rely heavily on the accreditation program of JCAH. Approximately 125 out of the 189 hospitals in Minnesota currently are accredited by JCAH. State law (Minn. Laws 1979, ch. 336, §7) requires JCAH accreditation to be accepted as evidence that the hospital meets state licensure standards. Similarly, under the federal Medicare program, JCAH accredited hospitals automatically meet all Medicare standards except for utilization review standards. These accredited hospitals are deemed by state law (Minn. Laws 1979, ch. 336, §7) to meet state licensure requirements and are deemed by federal law to meet all of the federal Medicare standards except in the areas of institutional planning and utilization review.

Consequently, the state does not have a major role in licensing or certifying JCAH accredited hospitals. The state's role consists of the following:

- (1) The Minnesota Department of Health annually inspects hospitals to determine whether the hospitals' grievance procedures comply with state standards (as required by Minn. Stat. §144.691).
- (2) The Office of Health Facility Complaints investigates complaints against hospitals relating to state requirements. This office is not an integral part of MDH, although it reports to the Commissioner of Health. In 1978, it investigated 128 complaints against hospitals. After receiving a complaint, this office conducts an unannounced inspection to determine if there are any violations of state regulations and, if violations are found, it later inspects the hospital to determine whether the violations have been corrected. Complaints involving federal regulations are investigated by MDH under the direction of the U.S. Department of Health and Human Services (HHS). Few complaints are received each year regarding federal regulations.
- (3) The Minnesota Department of Health conducts validation surveys to determine whether JCAH accredited hospitals meet federal Medicare standards. The federal government selects a national sample of hospitals and informs MDH which hospitals in Minnesota are to be inspected. These surveys represent the only full-scale inspection of JCAH accredited hospitals under either Minnesota's licensing program or the federal certification program. But only a small percentage of hospitals are affected. The largest percentage of JCAH accredited hospitals sampled by the federal government in a one-year period was approximately 3 percent. In 1979 and 1980, only one hospital was selected each year in Minnesota. Hospitals found not to comply with Medicare standards are monitored by MDH until the deficiencies are corrected.
- (4) Under contract with the U.S. Department of Health and Human Services, MDH determines hospitals' compliance with Medicare standards for institutional planning and, in some cases, utilization review. Most hospitals are certified for utilization review under the federal Professional Standards Review Organization (PSRO) program (described in section D of this chapter). For these hospitals, MDH determines compliance with institutional planning requirements through correspondence. For the few hospitals which do not have fully delegated PSRO status, MDH certifies both requirements through on-site inspections.
- (5) The Minnesota Department of Health inspects new hospitals or hospitals which remodel or expand to determine whether they meet new construction standards.

Hospitals which are not accredited by JCAH are certified by the federal Department of Health and Human Services on the basis of inspections conducted by MDH. Under contract with HHS, the Minnesota Department of Health inspects unaccredited hospitals annually for compliance with Medicare standards, makes certification recommendations, and monitors hospitals until reported deficiencies are corrected. MDH also relies on these inspections for determining compliance with state licensure standards. This does not require much additional effort since federal Medicare standards are more stringent than state licensure standards, which have not been updated since 1955.

Over the past several years, MDH has drafted revised licensure standards in order to update and strengthen its standards. However, MDH is no longer pursuing the implementation of new standards because, since 1977, the JCAH accreditation program has effectively replaced the state licensure program. Riders to both the 1977 and 1979 appropriation bills for MDH required the department to accept accreditation as evidence that a hospital meets state licensure standards. Furthermore, there is strong legislative support for a law to make JCAH's role permanent and to adopt federal Medicare standards as the official state standards, although the state would continue to use its own standards for new construction. In fact, a bill (H.F. No. 475) to this effect passed both the House and the Senate during the 1980 session, but the conference committee report was not adopted because of failure to resolve an unrelated issue that was attached to the legislation.

This hospital licensure bill, if passed, would also make the following changes:

- JCAH accredited hospitals would have to give MDH their current accreditation certificates, accreditation letters, and any recommendations or comments submitted by JCAH in order to be automatically licensed. Currently, MDH does not receive JCAH reports. However, the bill does not require hospitals to submit detailed work papers upon which JCAH's recommendations and comments are based. MDH contends that they should have access to all JCAH survey records for each hospital in order to monitor JCAH activities and to be able to maintain files equivalent to those currently maintained as public record for unaccredited hospitals.
- The Minnesota Department of Health would conduct validation surveys on a sample of up to 10 percent of JCAH accredited hospitals to determine whether they comply with state standards. Currently MDH does not make these surveys.

B. HEALTH PLANNING AND CERTIFICATE OF NEED

Most health planning and certificate of need activities are mandated by the National Health Planning and Resource Development Act of 1974 (Pub. L. No. 93-641). Health planning programs involve examining how much or how many health facilities, equipment, and services are needed in different geographic areas. Their purpose is to improve access to health care by influencing the distribution of health facilities and services, and to reduce costs by preventing unnecessary duplication of facilities and services. They may also attempt to improve the quality of care by controlling the diffusion of highly specialized services in order that facilities which perform these services do so frequently enough to ensure high quality.

Minnesota designated the State Planning Agency as the "state health and planning development agency" and established seven regional "health systems agencies" to carry out federal planning requirements. The Health Systems Agency for the Twin Cities metropolitan area is the Metropolitan Health Board.

Certificate of need is the primary regulatory tool for implementing these health plans. It requires health institutions to obtain advance approval in order to construct new facilities, purchase new equipment, establish new services, or expand or modify existing facilities and services.

The Minnesota Legislature established a certificate of need program in 1971. Minnesota's current certificate of need program, administered by the Minnesota Department of Health, is designed to meet the requirements of the National Planning and Resource Development Act of 1974. States can adopt more stringent requirements than are contained in federal regulation, but Minnesota's program is basically consistent with minimum federal requirements. While federal regulations are currently being revised, MDH does not expect this to lead to significant changes in Minnesota's program.

Another program in Minnesota which reviews proposals for expanding health facilities and services is authorized by Section 1122 of the federal Social Security Act. Unlike the certificate of need program, federal law does not mandate that states participate in the Section 1122 program. In Minnesota, the State Planning Agency administers the Section 1122 program. This program is a small scale program since it relies on the substantive review performed by regional Health Systems Agencies under the state's certificate of need program. While the federal government pays for all the expenses of the regional Health Systems Agencies, the state pays for the program's expenses incurred by the State Planning Agency. Both of the certificate of need programs are described below.

Another program mandated by the 1974 National Planning Act is the appropriateness review program, carried out by the State Planning Agency and the Health Systems Agencies. Whereas certificate of need programs review proposals to construct or establish new

facilities and services, this program examines the appropriateness of existing facilities and services. However, it does not require hospitals to comply with its recommendations.

1. TYPE OF SANCTION

Minnesota's certificate of need program legally prohibits a health care facility from making investments covered by the law unless it first obtains a certificate of need or a waiver. The Section 1122 program has financial sanctions whereby the federal government may deny reimbursements under Medicare and Medicaid for depreciation, interest, and other costs associated with the project in question.

2. COVERAGE

The state's certificate of need program generally applies to the following types of facilities:

- general hospitals;
- nursing homes;
- psychiatric, alcoholic, convalescent, and nursing care facilities;
- boarding care homes; and
- supervised living facilities.

It does not cover day care facilities or residential facilities.

The Section 1122 program applies to generally the same facilities. Some facilities covered by the state program are not covered by Section 1122 (e.g., boarding care homes which are not certified as intermediate care facilities).

Under the state's certificate of need program, a certificate of need is required, unless a waiver is obtained, whenever any of the following conditions is met:

- capital expenditures exceed \$150,000;
- expansion of services requires more than \$50,000 in capital expenditures;
- bed capacity or distribution of beds increases (changes) by more than 10 beds or 10 percent of total bed capacity, whichever is less;
- a new institutional health service is established;
- a new health care facility is established;
- an existing health care facility costing more than \$150,000 is acquired; or
- predevelopment activity exceeds \$150,000 or involves arrangement or commitment for financing new institutional health service.

A certificate of need is also required before physicians can acquire diagnostic or therapeutic equipment if the Commissioner of Health determines that it was designed to circumvent the program and if it requires a capital expenditure exceeding \$150,000.

The Certificate of Need Act allows the Commissioner of Health to waive the requirement for a certificate of need if:

- "the proposed capital expenditure is less than 3 percent of the annual operating budget of the facility applying for a waiver, and the expenditure is required solely to meet mandatory federal or state requirements of law" [Minn. Stat. §835.4(a)]; or
- the proposal is not related to direct patient care services.

In addition, the act allows the commissioner to establish by rule other conditions for granting waivers. These rules are currently being drafted.

The Section 1122 program has similar thresholds, although there are some differences. For example, capital projects which cost over \$100,000 require Section 1122 review compared to \$150,000 under the state's program. As a result of these differences, according to State Planning Agency staff, approximately one to three projects per year require Section 1122 review but do not require a certificate of need under the state's program.

3. PROCESS

The Minnesota Certificate of Need Act requires health facilities to notify their regional Health Systems Agency before beginning any construction or modification activity covered under the law. If there is any question as to whether a certificate of need is required or if a waiver is sought, the Minnesota Department of Health has the statutory authority to make a decision after receiving a recommendation from the Health Systems Agency. An application for a certificate of need is also submitted to the Health Systems Agency. These applications are also used for Section 1122 review by the State Planning Agency. If the application is complete, the Health Systems Agency holds hearings, reviews the application, and submits its recommendation to MDH, which decides whether to issue a certificate of need. The State Planning Agency conducts its Section 1122 review at the same time that MDH reviews the application. By state statute, MDH's decision is the final administrative decision unless it is contrary to the recommendation of the Health Systems Agency, in which case the decision may be appealed to a hearing examiner, who then makes the final administrative decision. The burden is on the party making the appeal to demonstrate that the decision was not supported by the record. Affected parties have the right to obtain judicial review of decisions on whether to waive certificate of need requirements or whether to issue a certificate of need.

C. HOSPITAL RATE REVIEW AND REIMBURSEMENT CONTROLS

There are programs at both the state and federal levels designed to control hospital rates. The state rate review program (authorized by Minn. Stat. §§144.695-144.703) requires hospitals to submit prospective budgets to the Minnesota Department of Health or to an approved private organization for review and comment. The review agency is responsible for analyzing the financial reports, investigating the rate structure, and commenting on whether the rates are reasonable or in question. Neither MDH nor the review agency can require hospitals to comply with rate review findings. In 1979, the Legislature amended this program in order to reduce regulatory expenses by exempting any hospital from rate review whenever its rates increase less than an amount designated by MDH. The Minnesota Hospital Association (MHA) also questions whether the procedure for exempting hospitals from rate review will substantially reduce regulatory expenses.

The federal government attempts to control hospital rates for Medicare and Medicaid patients by defining which costs are eligible for reimbursement. It also has a program which limits Medicare reimbursements for hospitals whose costs are well above the average of their peers. These federal programs do not, however, control rates charged to patients not covered by Medicare and Medicaid. Consequently, hospitals may increase rates for other payers in order to make up for limits on federal reimbursement.

The scope of the state's program is more comprehensive than the federal program in that it reviews overall hospital costs. Hospitals are then expected to set rates so that they generate enough revenue to equal their approved financial requirements. To the extent that the rate review system recognizes different financial requirements than do Medicare and Medicaid, the state's rate review system allows hospitals to make up any resulting losses from Medicare and Medicaid patients by increasing rates for other payers. In order to achieve greater equity among different payers, MDH and DPW are attempting to obtain a waiver from the federal government in order to set Medicaid rates on the basis of rate review recommendations. However, the state does not have similar plans to obtain control over Medicare rates. While a few states have obtained waivers from the federal government to let Medicare rates be set by a state program, Medicare waivers are very difficult to obtain. For example, recent applications by other states for waivers have been denied by HHS because the state's rate review program did not have mandatory compliance or did not have any experimental features. Minnesota's voluntary program does not meet these criteria currently being used by HHS.

1. MINNESOTA HOSPITAL RATE REVIEW SYSTEM

The first rate review program in Minnesota was a voluntary program established by the Minnesota Hospital Association in 1974. Approximately 60 out of 180 general hospitals agreed to have their rates reviewed by MHA. The Minnesota Hospital Administration Act of 1976 gave the Minnesota Health Department authority to maintain a hospital rate review system, which became effective in mid-1977. It required all hospitals to participate but compliance with rate recommendations remained voluntary.

The Minnesota Hospital Association continues to have a major role in the state's rate review system. In fact, the rate review process under the state system is similar to the previous voluntary program operated by MHA. The Minnesota Hospital Association is the only approved voluntary review agency. All hospitals in Minnesota except state hospitals have chosen MHA's system to review their rates. Under this system, hospitals submit financial reports to MHA staff who prepare technical analyses for rate review panels, which review and comment on the reasonableness of the hospitals' budget proposals.

MHA has established three rate review panels, each of which consists of two hospital representatives and three non-hospital representatives (third-party payer representatives and consumer representatives). These panel members are appointed by the hospital association for indefinite terms.

The role of MDH is to develop reporting requirements and rate review procedures by making administrative rules, to monitor the procedures used by MHA, and to ensure that these procedures comply with the rules of the rate review system. By statute, in order for hospitals to have their rates reviewed by a voluntary agency, MDH must approve the voluntary agency's rate review system as having "substantially equivalent" rate review procedures and reporting requirements as are adopted in rule by the Commissioner of Health.

The rules adopted by MDH have not imposed stringent reporting requirements and have allowed MHA to retain most of its previous procedures in reviewing rates. MDH does not require uniform financial reporting systems because of impending federal uniform reporting requirements. Further, small hospitals are allowed to submit financial reports in less detail than large hospitals in order to reduce regulatory expenses. While more than one-half of Minnesota hospitals may submit abbreviated financial reports, MHA contends that the savings are small.

As pointed out in a case study of Minnesota's rate review system by Abt Associates (1979), the financial requirements defined in MDH rules are generally consistent with the definition recommended by the American Hospital Association and used by the Minnesota Hospital Association's rate review program before the state program began. Abt Associates concluded that MDH rules on financial requirements are more generous than those used by rate review systems in other states.

2. FEDERAL RATE CONTROLS

The 1972 amendments to the Social Security Act give HHS authority to limit hospital costs reimbursable under Medicare. HHS's Section 223 regulations limit reimbursement for routine costs (room, board, and nursing). The maximum reimbursement equals 115 percent of the average per diem cost for hospitals of the same size (number of beds) and location (urban-rural). Adjustments are made for the area's wage index and for states that have low hospital patient days per capita because of low admission rates or short hospital stays. HHS intends to expand Section 223 regulations to cover ancillary services.

D. UTILIZATION REVIEW

Both JCAH and the Medicare program require hospitals to have a program for reviewing the appropriateness of medical care for individual patients. The most stringent requirements are those of the federal government, which has established a national utilization review system to review care provided for Medicare and Medicaid patients. The purpose of this program is to ensure that payment is made only for services that are medically necessary, meet professional standards of care, and cannot be efficiently provided by less expensive means (such as on an outpatient basis). The system is managed by Professional Standards Review Organizations (PSROs), which are community based and operated by private physicians. Two PSROs manage this system for nearly all Minnesota hospitals: The Foundation for Health Care Evaluation and the Professional Standards Quality Council of Minnesota, an organization affiliated with the Mayo Clinic.

E. ENVIRONMENTAL HEALTH

Two environmental health programs which affect hospitals are the occupational safety and health program and the radiation control program.

1. OCCUPATIONAL SAFETY AND HEALTH

The federal occupational safety and health program was established in 1970 by the Williams-Steiger Act (Pub. L. No. 91-596) in order to protect employees from acute injuries and chronic health hazards while at their place of work. Minnesota is one of approximately 20 states which have an agreement with the federal government whereby the state administers the occupational safety and health program. The federal government closely monitors the program and

authority to approve the program. All places of work except those under exclusive jurisdiction of the federal government are covered by the program.

The state adds to the program in the following ways. First, the state-administered program covers state hospitals in addition to acute care hospitals whereas if the federal government administered the program, it would not cover state hospitals. Second, the state has adopted its own standards for the program in addition to standards developed by the U.S. Department of Labor.

The Minnesota Department of Labor and Industry is the lead agency for this program in Minnesota. The Minnesota Occupational Safety and Health Act of 1973 (Minn. Stat. §182) authorizes the department to adopt standards, conduct investigations, and enforce standards for the program. The Minnesota Department of Health assists by conducting investigations for the health portion of the program and forwarding the results to the Department of Labor and Industry for enforcement action.

The Department of Labor and Industry conducts unannounced inspections either for targeted industries or in response to complaints to determine compliance with safety standards. Most inspections are targeted in industries which the department determines to warrant special attention. In 1979, hospitals were a target industry because of high injury rates reported for hospital employees. As a result, the department inspected approximately 38 hospitals in 1979. The department does not expect to inspect as many hospitals in 1980. Typically, inspections for a large general hospital (about 500 beds) last about one and one-half days.

Investigations by MDH are primarily in response to complaints. Since MDH does not receive many complaints against hospitals, it inspects fewer than five hospitals per year. Unlike the Department of Labor and Industry, MDH conducts few inspections in targeted industries because of fewer staff and because health investigations take longer and involve more lab analysis.

2. RADIATION CONTROL

The state, the federal government, and JCAH each has a program which is designed to control the health hazards of radiation in hospitals. However, duplication among these programs is minimized because each relies on technical inspection reports prepared by Minnesota's Department of Health. Under the state's radiation control program (authorized by Minn. Stat. §§144.12-144.121), MDH adopts standards for the use of x-ray machines and for exposure to radiation, conducts inspections, and registers all x-ray machines. State law requires MDH to inspect x-ray machines on the basis of frequency of use and at least once every four years. MDH policy is to inspect x-ray machines every two years or less. Facilities with a high workload are inspected annually. MDH also examines personnel monitoring reports during inspections.

While JCAH's accreditation program also has standards for x-ray machines, it uses x-ray machine reports prepared by MDH when assessing the hospital's compliance with its standards. MDH x-ray machine inspections are also used to determine compliance with federal Medicare standards for non-JCAH-accredited hospitals.

II. COST OF HOSPITAL REGULATION

The amount of hospital regulation has increased rapidly since the mid-1960s. There is concern that the cost of complying with these regulations has contributed to rising hospital costs. In this section we discuss what existing studies say about the cost of complying with hospital regulations. We did not conduct independent research on the cost of regulation in Minnesota for several reasons:

- It is not feasible to precisely determine the cost of hospital regulation in Minnesota. Studies on the cost of hospital regulation are speculative since they depend on estimates by hospitals on how much it costs to comply with regulations. In order to make these estimates, many difficult decisions must be made concerning which expenses are caused by regulation and which expenses would exist even without regulation.
- Existing studies on the cost of hospital regulation provide a rough estimate of the cost of regulation in Minnesota. As pointed out in the previous chapter, the federal government and the Joint Commission on Accreditation of Hospitals have major roles in regulating hospitals across the nation. Therefore, the cost of many major regulatory programs in Minnesota would likely be similar to their cost in other states. Further, the Minnesota Hospital Association has estimated the cost of certificate of need and rate review programs--the two largest state programs for hospitals in Minnesota.
- It would require an ambitious effort just to match the best existing studies on the cost of hospital regulation in other states. It is doubtful that duplicating these studies in Minnesota would significantly improve upon what can be learned from existing studies, particularly in terms of helping the Legislature make policy decisions.

This chapter is organized as follows: First we discuss the results of studies in other states on the cost of hospital regulation. Next we examine the evidence on the cost of major state regulatory programs in Minnesota--rate review and certificate of need. These estimates are then combined to estimate the cost of major regulatory programs in Minnesota. Finally, we discuss what these studies show to be the state's share of the cost of hospital regulation.

The best available research evidence indicates that approximately 1 to 2 percent of hospital costs can be directly attributed to hospital regulation. This appears to be a conservative estimate in that it does not include indirect costs of regulation which are difficult to measure, nor does it include costs of several minor regulatory programs. We found no evidence, however, on how much of this cost

can be attributed to duplicative or unnecessary regulation. The research evidence also indicates that state programs account for a small proportion of the cost of hospital regulation.

A. STUDIES IN OTHER STATES

The following studies have estimated the cost of hospital regulation in other states:

<u>Study</u>	<u>Hospitals Studied</u>
The Hospital Association of New York State (1978)	148 hospitals in New York
Michigan Hospital Association (1978)	6 hospitals in Michigan
South Carolina Hospital Association (1978)	3 hospitals in North Carolina and 3 hospitals in South Carolina
Kinzer (1978)	An unspecified number of hospitals in Massachusetts
Tregenza & Wolfe (1979)	1 hospital in Iowa

This section discusses the findings and limitations of these studies.

Estimates made by the above studies on the cost of hospital regulation have varied greatly--ranging from a high of 25 percent of hospital operating expenses in New York to a low of 1.5 percent in Michigan. However, if the cost of regulations which are unique to hospitals are excluded--such as social security taxes, unemployment insurance, and workers compensation payments--most studies estimated that approximately 1 to 2 percent of hospital expenses can be directly attributed to hospital regulation.

1. NEW YORK STUDY

The only study whose estimated cost of regulation significantly differed from 1 or 2 percent is the study sponsored by the Hospital Association of New York State (1978). This study surveyed 285 out of the 309 acute care hospitals in the State of New York. A total of 148 hospitals, or 52 percent of those surveyed, responded.

This study estimated that the cost of activities required by regulation equals 24.9 percent of the hospitals' total costs. However, most of the required activities may have been performed by hospitals even without any regulation. For example, the cost of maintaining medical records for patients was included in the estimated cost of

regulation because it is required by regulation even though hospitals would maintain many of these records without regulation.

Activities which are clearly the result of regulation--inspections, questionnaires, and contacts with regulators--account for approximately 0.5 percent of hospital expenses. For the remaining 24.4 percent of hospitals' costs required by regulation, however, it is not clear what proportion is caused by regulation and what proportion would exist even without regulation.

This study also identified the regulatory programs which a majority of hospitals considered to be duplicative, capable of consolidation, unnecessary, or non-productive. But the study did not give the cost of regulations placed in these categories.

2. STUDIES IN MICHIGAN, SOUTH CAROLINA, AND NORTH CAROLINA

The best available evidence on the cost of hospital regulation is provided by studies sponsored by the Michigan Hospital Association (1978) and the South Carolina Hospital Association (1978). The two hospital associations hired Arthur Young and Company to design and conduct the cost studies for six Michigan hospitals, three South Carolina hospitals, and three North Carolina hospitals.

a. Results

In Michigan, the estimated cost of regulation ranged from 0.9 percent to 2.7 percent of hospital operating expenses. In North and South Carolina, the estimated cost ranged from 0.4 percent to 1.7 percent. These estimates represent the cost that can be directly attributed to regulation in the areas of utilization review/PSRO, reimbursement mechanics for Medicare and Medicaid, plant codes, and personnel management (excluding social security taxes, workers compensation payments, and unemployment insurance).

The average estimated cost of regulation was approximately 1.4 percent in the Michigan hospitals and approximately 0.9 percent in the Carolina hospitals. There was no data available on the cost of plant codes in the Carolina hospitals. If the cost of complying with plant codes in the Carolina hospitals is similar to the cost in Michigan hospitals, the average cost for Carolina hospitals would be approximately 1.1 percent instead of 0.9 percent.

As the above results indicate, the estimated cost of regulation varies widely among hospitals both in Michigan and the Carolinas. This variation among hospitals occurs for several reasons, including the following:

- Large hospitals appear to spend a substantially smaller proportion of their budget on regulation than do small hospitals.

- Some hospitals were required to improve their facilities in order to comply with fire-safety requirements, while other hospitals already met these requirements.
- Hospitals differ as to which costs are caused by regulation. For example, some hospitals included the cost of maintaining records required by federal wage-hour laws. Other hospitals did not include these costs because they would maintain these records even without regulation.

b. Limitations

While the studies sponsored by the Michigan and South Carolina hospital associations were thorough and well-documented, they have several limitations. First, the preceding estimates of the cost of regulation may be conservative in that they do not include indirect costs which are difficult to measure, nor do they include the cost of several minor regulatory programs. For example, the Michigan study included the recordkeeping costs caused by the federal wage-hour laws, but it did not attempt to measure the effect of minimum wage requirements on labor costs.

Second, the small size and non-random selection of the sample make generalizations to the entire state difficult. The studies included only six hospitals in Michigan and six in the Carolinas. Since the cost of regulation varies considerably among hospitals, there is a fairly high amount of uncertainty in estimating statewide costs on the basis of six hospitals. Further, only hospitals which had recently participated in the certificate of need program were selected. Willingness to cooperate, availability of data, and participation in Michigan's medical arbitration program also affected the sample selection. The above estimates do not include the cost of certificate of need and medical arbitration to avoid bias in these estimates. The cost of certificate of need is discussed in a later section. It is not clear whether these factors bias the reported costs of other programs.

Another limitation of the cost studies is the difficulty in identifying what costs can be attributed to regulation. For example, the cost of maintaining records required by federal wage-hour laws were included by some hospitals. However, other hospitals excluded these costs because they said that they would maintain these records, even without regulation. Ultimately, the cost estimates depend on hospitals' opinions as to which costs can be attributed to regulation.

3. MASSACHUSETTS STUDY

A study sponsored by the Massachusetts Hospital Association (Kinzer, 1978) estimated that in 1976, government regulation cost hospitals in Massachusetts between \$60 million and \$80 million

(approximately 4 percent of total hospital costs). This figure is based on estimates by several hospitals of how much costs had increased due to new regulations since Medicare began in 1966. It excluded capital costs and other costs that are difficult to measure. It did include, however, costs of regulations that apply to many types of institutions (for example, unemployment insurance). The detailed example provided suggests that regulations designed especially for hospitals account for approximately one-half of the above estimate.

It is difficult to assess the quality of this study because neither the results nor the methodology was described in detail. Further, cost estimates in Massachusetts may overstate the cost of regulation in Minnesota because Massachusetts is considered to have more hospital regulation than most other states (Drake, 1980). And since the study does not break down costs by program, the cost of programs similar to Minnesota's programs cannot be identified.

4. IOWA STUDY

Tregenza & Wolfe (1979) estimated the cost of hospital regulation in one large Iowa hospital using the methodology developed in the studies sponsored by the Michigan and South Carolina hospital associations. Excluding the costs of social security taxes, unemployment insurance, and workers compensation, the estimated cost of regulation for this Iowa hospital is 0.7 percent of its operating expenses. This estimate includes the cost of utilization review/PSRO, reimbursement mechanics for Medicare and Medicaid, certificate of need, plant codes, and personnel management. While the usefulness of data on one hospital is limited, the results are consistent with the findings of the studies in Michigan and the Carolinas. The 0.7 percent estimate is close to the cost estimates for hospitals of the same size (over 500 beds) in Michigan and the Carolinas.

B. CERTIFICATE OF NEED AND RATE REVIEW PROGRAMS

In this section, we examine the research evidence on the cost of the two largest state regulatory programs governing hospitals--certificate of need and rate review.

1. CERTIFICATE OF NEED

Several studies have examined the cost of certificate of need programs, including the following:

Minnesota Hospital Association (1978)
South Carolina Hospital Association (1978)
Michigan Hospital Association (1978)
Federation of American Hospitals (1980)

Each of these studies examined the cost of preparing and processing CON applications. In addition, the study sponsored by the Federation of American Hospitals examined the cost of time delays caused by the CON process and the administrative costs of state and regional agencies. The study sponsored by the Federation of American Hospitals found that the administrative costs of state and regional agencies averaged about \$2,000 per CON application. This is small compared to the estimated CON application cost incurred by hospitals.

a. Cost of Preparing and Processing CON Applications

The Minnesota Hospital Association surveyed 31 hospitals which completed the CON process between mid-1976 and late 1977. Based on responses from 18 hospitals, MHA found that the estimated cost to prepare and process CON applications varied greatly among projects--ranging from \$385 to \$71,925.

Based largely on the findings of the MHA study, the annual cost for Minnesota hospitals to prepare and process CON applications can be estimated to be approximately \$400,000. This estimate was obtained as follows: MHA's study found that the estimated cost of CON applications varies by project size, as shown in Table 1. The estimated average CON cost ranged from about \$4,000 for projects which cost less than \$500,000 to approximately \$40,000 for projects which cost more than \$5,000,000. We estimated how many projects per year hospitals propose within each size category on the basis of projects MDH acted upon during the one-year period April 1979 - April 1980. The 30 projects which MDH acted upon during this one-year period is a typical number for recent years. During each of the years between 1973 and 1979, hospitals in Minnesota have applied for between 23 and 40 certificates of need.

This estimate on the cost of the certificate of need program should be considered a rough estimate for several reasons. First, it is not clear to what extent, if any, cost estimates made by individual hospitals include the cost of planning activities which are related to the CON program but would have been performed even without CON regulation. Another potential problem is that the 18 sample hospital projects may not be representative of all CON applications for hospitals. Finally, Minnesota's 1979 Certificate of Need Act changed the criteria for determining which projects require certificates of need. Consequently, the cost data does not reflect any changes that may have occurred as a result of this act.

These results are generally consistent with the findings of studies carried out in other states. Studies sponsored by the Michigan Hospital Association (1978) and the South Carolina Hospital Association (1978) found that the average CON application cost for hospitals was approximately \$19,000 in Michigan and approximately \$11,000 in the Carolinas.

TABLE 1
ESTIMATED ANNUAL COST OF CERTIFICATE OF NEED
INCURRED BY HOSPITALS

Project Cost		Estimated CON Application Cost	Number of Annual CON Applications ²	Estimated Cost of Annual CON Applications
Less than	\$ 500,000	\$ 4,073	14	\$ 57,000
\$500,000 -	\$5,000,000	17,777	13	231,000
More than	\$5,000,000	39,717	<u>3</u>	<u>119,000</u>
TOTAL:			30	\$407,000

¹Source: Minnesota Hospital Association (1978).

²Source: MDH data on CON decisions between April 1979 and April 1980. The 30 projects acted upon during this one-year period is a typical number since during each of the last seven years, hospitals in Minnesota have applied for between 23 and 40 projects.

b. Cost of Time Delays

A study sponsored by the Federation of American Hospitals (Werronen, 1980) estimated the cost of time delays under the certificate of need program. The first phase of this study was based on 6 out of 22 hospital projects processed by a Health Systems Agency in Kentucky during 1979. The study found that time delays caused by CON review added significant costs to hospital projects. It estimated that time delays added \$300,000 to the cost of 6 projects whose total cost was \$7.5 million, or an increase of approximately 4 percent. In Minnesota, the total estimated cost of hospital projects obtaining certificates of need averaged \$65.8 million per year between 1972 and 1978. If time delays also increased the cost of Minnesota hospital projects by 4 percent, then the cost of time delays would be approximately \$2.6 million per year under Minnesota's certificate of need program.

The method used by this study, however, may greatly overestimate the cost of time delays. The study determined the length of time between the hospitals' CON applications and the final decision by the Health Systems Agency. Then it calculated how much the cost of projects would increase during this time, assuming that construction costs increased at an annual rate of 12 percent. For example, if a \$1 million project took four months to be approved, the estimated cost increase would be 4 percent of \$1 million, or \$40,000.

The problem with this analysis is that it ignores the decline in the value of the dollar during the time the project is being reviewed. Measured in terms of real purchasing power, \$1 million is equivalent to \$1,040,000 four months later if the inflation rate is 12 percent. Thus, this study presents no evidence that time delays increase costs when measured in terms of real purchasing power. From a different perspective, if a hospital funds this project with depreciation funds, it will be able to invest the \$1 million for an extra four months and earn additional investment income.

2. HOSPITAL RATE REVIEW

The Minnesota Hospital Association (1980) also estimated the cost of Minnesota's rate review program. The administrative cost of this program was estimated to be approximately \$390,000 in 1979. Hospitals paid \$280,000 of this amount in fees to cover MHA's administrative costs. In addition, MDH had an operating budget of \$113,800 for administering this program in 1979. Additional expenses incurred by hospitals to prepare for rate review are more difficult to estimate. While these costs have not been documented, MHA estimates that hospitals could spend an additional \$400,000 per year in order to prepare for rate review. MDH staff believes this overestimates the cost of rate review because much of this preparation should be performed regardless of whether rate review exists.

C. ESTIMATED COST OF REGULATION IN MINNESOTA

As we have seen, studies in Minnesota and in other states estimated the cost of major regulatory programs which govern Minnesota hospitals. In this section, we combine these estimates to estimate the cost of hospital regulation in Minnesota.

Collectively, studies by the Michigan Hospital Association (1978), the South Carolina Hospital Association (1978), and the Minnesota Hospital Association (1978 and 1980) have estimated cost data for the following regulatory programs in Minnesota:

- hospital rate review;
- certificate of need;
- utilization review/PSRO;
- reimbursement mechanics for Medicare and Medicaid;
- plant codes; and
- personnel management (including equal opportunity laws, occupational safety and health regulations, and wage-hour laws).

For each of these regulation categories, Table 2 summarizes estimates made from data in Michigan, the Carolinas, and Minnesota. The composite column presents the range of these estimates for each

TABLE 2
COST OF HOSPITAL REGULATION

PERCENTAGE OF HOSPITALS' COSTS ATTRIBUTED TO REGULATION					Estimated Cost Per Patient Day ⁴ (Minnesota 1979)
Regulation Category	Michigan ¹	North & South Carolina ²	Minnesota ³	Composite	
Hospital Rate Review	-	-	.03 - .06%	.03 - .06%	\$.05 - \$.11
Certificate of Need	-	-	.03	.03	.05
Utilization Review/PSRO	.67%	.35%	-	.35 - .67	.62 - 1.18
Reimbursement Mechanics for Medicare/Medicaid	.33	.27	-	.27 - .33	.48 - .58
Plant Codes	.24	-	-	.24	.42
SUBTOTAL:	1.24%	.62%	-%	.92 - 1.33%	\$1.63 - 2.35
Personnel Management	.22	.28	-	.22 - .28	.39 - .49
TOTAL:	1.46%	.90%	-%	1.14 - 1.61%	\$2.02 - 3.85

¹Source: Michigan Hospital Association (1978).

²Source: South Carolina Hospital Association (1978). The above estimates were obtained by averaging two estimates. The first estimate weighs each sample hospital by its total expenses. The second estimate weighs each sample hospital equally.

³Source: Minnesota Hospital Association (1978 and 1980) and MDH records.

⁴Based on American Hospital Association (1980) data--\$176 is the estimated cost per patient day for Minnesota hospitals in 1979.

regulation category. The estimated total cost of regulation in these categories is 1.1 to 1.6 percent of hospital operating expenses. In 1979, this amounts to \$13.7 million to \$19.4 million for Minnesota's community hospitals, or \$2.01 to \$2.85 per patient day. As explained earlier, these estimates should be considered rough approximations of the cost of hospital regulation.

In order to estimate the cost of regulations especially designed for hospitals, one must subtract the estimated cost of personnel management regulations since they apply to many types of industries in addition to hospitals. The resulting estimated cost of regulations especially designed for hospitals is 0.9 percent to 1.3 percent of hospital expenses.

D. COST OF REGULATION ATTRIBUTABLE TO STATE PROGRAMS

Studies of the cost of regulation indicate that state regulatory programs account for only a small proportion of the cost of regulation. Table 2 shows that the two largest state programs for hospitals--certificate of need and rate review--account for less than 10 percent of the cost of regulation. In contrast, the two largest federal program areas--utilization review/PSRO and reimbursement mechanics for Medicare and Medicaid--account for approximately one-half of the cost of regulation. Regulations in the personnel management category are predominantly federal. It is difficult to attribute plant code costs to specific programs because state and federal governments and JCAH all have programs covering plant codes.

The study sponsored by the Hospital Association of New York State (1978) broke down the cost of inspections, questionnaires, and agency contacts by the source of regulation. While these categories of regulation do not account for a very large share of hospital regulation, they do include many small programs not included in the other cost studies. We calculated the estimates presented in Table 3 from the study's list of costly inspections, questionnaires, and agency contacts for each of 32 hospital departments. The results indicate that in New York, the state accounts for 26 percent of the cost of inspections, questionnaires, and agency contacts. Non-government organizations account for nearly one-half of this cost. The state's share in Minnesota is likely to be smaller than it is in New York because New York has more regulation than Minnesota, including an active licensure program.

¹These figures are based on American Hospital Association (1980) estimates for total expenses (\$1.2 million) and expenses per patient day (\$1.76) in Minnesota's community hospitals during 1979.

TABLE 3
COST OF INSPECTIONS, QUESTIONNAIRES, AND AGENCY CONTACTS
IN NEW YORK HOSPITALS,
BROKEN DOWN BY SOURCE OF REGULATION

Source of Regulation	Annual Cost, Per Hospital ¹	Percent
GOVERNMENT		
State	\$15,580	26.4%
Federal	7,950	13.5
Local	8,400	14.2
HSAs	<u>1,320</u>	<u>2.2</u>
Subtotal:	\$33,250	56.3%
NON-GOVERNMENT		
JCAH	\$13,460	22.8%
Other	<u>12,270</u>	<u>20.8</u>
Subtotal:	\$25,730	43.6%
TOTAL:	<u>\$58,980</u>	<u>100.0%</u>

¹Source: These cost figures were calculated from the list of costly inspections, questionnaires, and agency contacts in the study sponsored by the Hospital Association of New York State (1978).

III. EFFECTIVENESS OF HOSPITAL REGULATIONS

In the previous chapter, we discussed the cost of hospital regulation. Before judging the value of regulation, whatever the cost, it is necessary to consider the effectiveness of regulation. In this section, we review existing research on the effectiveness of the following types of hospital regulation:

- Hospital Rate Review;
- Certificate of Need; and
- Licensing and Certification.

Nationally, many studies have been conducted on the impact of hospital regulation, particularly for rate review and certificate of need. The federal government is currently financing a comprehensive three-year study on state rate review programs, including Minnesota's program. We did not conduct independent research on the effectiveness of hospital regulation because it would not be feasible for our office to significantly add to the existing research in the above areas.

A. SUMMARY

Our major findings and conclusions are summarized below for rate review programs, certificate of need programs, and certification and licensure programs.

1. HOSPITAL RATE REVIEW

Evidence indicates that rate review programs, particularly mandatory programs operated by state agencies, reduce hospital costs, but evidence on how rate review programs affect quality of care and hospitals' financial viability is inconclusive.

- Recent studies found that mandatory rate review programs substantially reduce hospital costs after a few years of experience. Estimated reductions range from 6 percent to 10 percent of hospital operating expenses per admission.
- There is some evidence that voluntary rate review programs operated by non-government agencies, at both the state and national level, reduce hospital costs, but by a smaller amount than mandatory programs. Results for voluntary programs, however, are not conclusive because of methodological problems and/or statistical uncertainty.
- The administrative cost of rate review programs is small compared to the programs' estimated effect on hospital costs.

- Some early studies examined how rate review programs affected quality of care. Results were mixed and inconclusive because of difficulty in measuring quality and because most programs were in their early stages of development during the time period covered by the studies. We found no recent studies on how rate review programs affect quality of care.
- Evidence on the impact of hospital rate review programs on hospitals' financial condition is inconclusive. One national study found that hospital rate review programs did not significantly affect retained earnings of hospitals as of 1978. However, the author noted that recent financial problems for some New York hospitals suggest that rate review may be starting to affect hospital bankruptcies. Other national studies did not address this issue.

While the evidence suggests that mandatory rate review programs reduce costs more than do voluntary programs, we found no evidence on how mandatory programs compare with voluntary programs in terms of how they affect quality of care of hospitals' financial viability. Therefore, existing studies, by themselves, do not indicate which type of program is more effective.

2. CERTIFICATE OF NEED

Many studies have examined how effectively certificate of need programs have reduced capital investment and overall hospital costs. We did not find any studies, however, which examined whether certificate of need programs have achieved other objectives, including improved access to health care and quality of health care.

Overall, we found no empirical evidence that certificate of need programs reduce hospital costs, and little evidence that they reduce capital investment. Some studies used the value of projects denied certificates of need as evidence that CON programs reduced capital expenditures and hospital costs. As many researchers have observed, however, this approach is not a valid measure of certificate of need's impact because it fails to take into account possible increases in operating costs which may affect reductions in capital expenditures and it does not demonstrate that all projects proposed under the CON Program would have been completed if CON did not exist.

National studies which used regression analysis (Sloan, 1980; Policy Analysis, 1980; Sloan & Steinwald, 1980; Salkever & Bice, 1979) found that certificate of need programs had no discernible effect on costs or capital investment through 1978 (1977 for capital investment). Because these studies also have methodological limitations, however, it is not possible to conclude that certificate of need has no effect on hospital costs or capital investment. For example, these studies have a margin of error of approximately 1 percent due

to statistical uncertainty. This means that certificate of need could reduce (or increase) costs by as much as 1 percent and still not be detected by these studies. In Minnesota, 1 percent of hospital expenses amounted to approximately \$12 million in 1979.

Consequently, these estimates are not precise enough to conclude whether certificate of need programs actually cost more than they save. Nevertheless, these studies suggest that CON has not been a major factor in restraining hospital cost inflation.

3. CERTIFICATION AND LICENSURE

We found no studies which examined how the quality of care in hospitals is affected by state licensing, federal certification, or private accreditation activities. There is some evidence, however, on how well state health agencies monitor hospitals under the federal Medicare certification system and on how well the Joint Commission on Accreditation of Hospitals monitors hospitals.

A U.S. General Accounting Office study (1979) found that JCAH is more effective than the federal-state certification system both in detecting hospital deficiencies and in obtaining corrections for observed deficiencies. The significance of this finding, however, is not known because no evidence was presented on how these deficiencies affect patient care. Medicare validation surveys, which are designed by the federal government to monitor JCAH performance, indicate that JCAH accredited hospitals frequently do not meet federal Medicare standards, particularly those standards relating to life-safety codes. This finding is consistent with the GAO study since GAO found that both JCAH surveys and state surveys frequently do not report deficiencies identified by the other. As a result of the validation surveys, JCAH modified its standards and procedures in the areas of life-safety codes and utilization review. We found little evidence, however, on whether this has improved JCAH's performance.

Regarding Minnesota's licensing program, these results suggest that JCAH is generally effective. However, it is not possible to conclude from these studies how effectively the Minnesota Department of Health would license hospitals if it had primary responsibility instead of JCAH. This is because the performance of Minnesota may differ from that of other states and because the federal government is in part responsible for the program's performance.

B. HOSPITAL RATE REVIEW PROGRAMS

The purpose of rate review programs is to reduce hospital costs by setting or recommending hospital rates in advance of the year they take effect. In this section, we review the evidence on how effectively hospital rate review programs reduce hospital costs.

The only study that examines the effectiveness of Minnesota's program has not yet been released by the study's sponsor, the U.S. Health Care Financing Administration. Nevertheless, several national studies have examined how rate review programs in other states affect hospital costs.

Nationally, there are many differences among rate review programs in different states. Some programs are controlled by state governments while other programs are controlled by private authorities, including hospital associations and Blue Cross. In some of the state programs, compliance with findings of the rate review agency is mandatory, but in other states, including Minnesota, compliance is voluntary. National studies on rate review programs have usually focused on state programs with mandatory rate controls. These studies have not examined the impact of voluntary state programs. A few studies have examined programs controlled by private authorities.

In several respects, Minnesota's program is similar to privately controlled programs. The Minnesota Hospital Association originally developed the rate review program in Minnesota and currently operates the program subject to state approval of the program's procedures. Recommendations concerning the reasonableness of particular hospital expenses are made by review panels established by the Minnesota Hospital Association.

There are important differences between Minnesota's program and state mandatory programs, including the role of the Minnesota Hospital Association. Organizations affiliated with hospitals do not have as important a role in mandatory state programs as the Minnesota Hospital Association has in Minnesota's program. In a comparative study of different state rate review programs, Abt Associates (1980) found that Minnesota's program was not as stringent as state mandatory programs.

While the purpose of rate review programs is to reduce hospital costs by improving efficiency, these programs may have the following unintended effects:

- Hospitals may reduce the quality of service in order to reduce costs.
- Rate review programs may increase the volume of services provided by hospitals. Since many programs control the rates for specific services, hospitals may increase the number of admissions or the length of patients' stay in order to obtain additional revenue. This could be undesirable to the extent that hospitals are accepting patients who could be adequately treated on an outpatient basis and to the extent that patients are kept in the hospital longer than necessary.
- Rate review programs may lead to hospitals charging different rates to different payers for the same services. Since

most rate review programs do not apply to all hospital payers, hospitals may increase rates for patients not covered by these programs faster than normal in order to make up for revenues lost because of the rate review programs. For example, these programs may exclude such categories of patients as Medicare patients, charge-paying patients, or patients covered by commercial insurers.

- Rate review programs may jeopardize the financial condition of some hospitals. Salkever (1979) and Sloan (1980) have noted that some inner-city hospitals may be vulnerable to rate controls and that closing them may hurt access to hospital service for certain low income areas.

In the remainder of this section, we discuss the evidence on how rate review programs affect hospital costs, service volume, service quality, and the financial condition of hospitals. The national studies do not address how these programs affect rate discrimination.

First, evidence is presented for mandatory state programs, followed by private rate review programs and the American Hospital Association Voluntary Effort Program.

1. MANDATORY PROGRAMS

The evidence on mandatory rate review programs indicates that they substantially reduce hospital costs after a few years of experience. But evidence on how these programs affect quality of care and hospitals' financial condition is inconclusive.

a. Hospital Costs

Several studies have examined how mandatory rate review programs have affected hospital costs. These studies include:

<u>Study</u>	<u>Time Period Covered</u>
Sloan	1963-1978
Congressional Budget Office	1976-1978
Biles, Schramm & Atkinson	1970-1978
U.S. General Accounting Office	1974-1977
Sloan & Steinwald	1970-1975
Case studies in New York, New Jersey, and Rhode Island	1968-1974

The four most recent studies found that state rate review programs have substantially reduced hospital costs. Sloan (1980) found that while mandatory programs less than three years old did not significantly reduce hospital costs, mature programs (those three or more years old) did significantly reduce hospital costs. This was based on a regression analysis of hospital costs between 1963 and

1978. Sloan estimated that mature programs reduced hospital costs per admission by between 3 and 4 percent in the short run and by between 8 and 10 percent in the long run. Results from a different model used by Sloan imply that in 1978, these mature programs reduced hospital costs per admission by approximately 7 percent. The estimated impact on a state's total hospital costs depends on what proportion of hospitals' revenue is covered by the rate review program. The above estimates apply to a state which covers all hospital revenues. If a rate review program covers 70 percent of the hospital revenue, the estimated effect would be 70 percent of the above figures.

The results of the studies by the Congressional Budget Office (1979), Bile, Schramm & Atkinson (1980), and the U.S. General Accounting Office (1980b) are consistent with the results of Sloan's study. The Congressional Budget Office study found that state mandatory rate review programs reduced hospital expenditures per capita by an average of 6.6 percent in the two-year period between 1976 and 1978. This result was statistically significant. However, this study is not as reliable as Sloan's study because it used only data from 1976 to 1978 and because the model did not include as many control variables as did Sloan's study. Nevertheless, since the Congressional Budget Office study used a different data set and a different cost measure (hospital cost per capita instead of per admission), it adds support to the conclusion of the Sloan study.

Biles, Schramm & Atkinson (1980) found that between 1975 and 1978 hospital costs per admission increased by an average of 11.2 percent per year in states with mandatory rate review programs compared to 14.3 percent in other states, an overall difference of 9 percent for the three-year period. These results were statistically significant. The U.S. General Accounting Office study (1980) found similar results for the time period between 1975 and 1977. However, the reliability of these two studies is limited by the fact that neither study used any control variables.

Earlier studies of mandatory rate review programs did not find significant effects on hospital costs. These studies covered time periods up to 1975, by which time few programs had acquired much experience. Consequently, the findings of these studies are consistent with Sloan's finding that it takes several years before rate review programs significantly reduce hospital costs. The study by Sloan & Steinwald (1980) estimated that mandatory rate review programs reduced costs per admission by 0.8 percent, but this was not statistically significant. The case studies (Thornberry & Zimmerman, n.d.; Abt Associates & Policy Analysis, 1976; Dowling et al., 1976; Geomet, 1976) also found slight reductions in hospital costs but again these were generally not statistically significant. Further, several methodological problems cited by Sloan (1980) and Salkever (1979) indicate that these case studies were not conclusive.

b. Volume of Services

Evidence from national studies suggests that rate review programs increase patients' average length of stay but not enough to offset the cost reductions brought about by lower rates. In an analysis of hospital utilization, a study by the Health Care Financing Administration (1979) found that in 1977 state mandatory rate review programs significantly increased days of care within hospitals. Further, Sloan (1980) found that mature mandatory rate review programs reduced costs per patient day more than they reduced costs per admission, implying that they increased the average length of stay. This difference, however, was not statistically significant in Sloan's study.

Overall, the national studies indicate that mandatory rate review programs do not affect service volume enough to offset the cost reductions reported above. Sloan's study found that these programs did not increase hospital admissions. And since any effects on patients' length of stay are included in the cost per admission figures reported previously, the results imply that total hospital expenditures also declined as a result of mandatory rate review programs. The study by the Congressional Budget Office (1979) also supports this conclusion because by measuring the effect of the program in terms of hospital costs per capita, the study already takes into account any effects on admissions and length of stay.

c. Quality of Care

Only the early case studies in New York, New Jersey, and Rhode Island attempted to assess the impact of rate controls on service quality (see Salkever, 1979). The only study that found any effect on a quality indicator was the downstate New York study (Dowling et al., 1976). It found that the "percentage of hospitals receiving only provisional (one-year) approvals from the Joint Commission on Accreditation of Hospitals increased much more rapidly" for hospitals in downstate New York than for the control group after rate controls were established in New York. However, there is no evidence linking accreditation decisions by JCAH with quality of care.

Using different quality indicators, Geomet (1976) and Thornberry & Zimmerman (n.d.) found no effect of rate controls on quality of care in New Jersey and Rhode Island respectively. Geomet rated quality of care for three diagnostic groups on the basis of medical records and abstracts. Thornberry & Zimmerman measured changes in percentage of patients receiving certain basic diagnostic and laboratory services. Since these studies were conducted prior to the time when rate review programs began to have significant effects on costs, it is difficult to generalize to the current programs. Indeed, the more these programs reduce costs, the more likely they would affect quality. For this reason and because of the difficulty in measuring quality, the evidence on how rate controls affect quality of care is inconclusive.

d. Hospital Financial Condition

Sloan (1980) found that rate review programs did not significantly affect retained earnings of hospitals. However, Sloan noted that there is some speculation that rate controls may have contributed towards a few recent hospital bankruptcies in low income areas of New York. Other national studies did not address this issue.

2. PRIVATE RATE REVIEW PROGRAMS

The evidence on private rate review programs suggests that they reduce hospital costs, but by a smaller amount than state mandatory rate review programs. This evidence, however, is not conclusive. Moreover, there is little evidence on how private rate review programs affect quality of care or the financial condition of hospitals.

a. Hospital Costs

One national study and one case study have estimated the impact of private rate review programs on hospital costs. While not conclusive, these studies suggest that private rate review programs can reduce hospital costs. The study by the Congressional Budget Office (1979) estimated that private rate review programs in 11 states reduced hospital expenditures per capita by an average of 3 percent between 1976 and 1978. However, these results were not statistically significant. Furthermore, as indicated in the previous section, this study is not as reliable as other national studies.

Spectrum Research, Inc. (1978) conducted a case study of Indiana's voluntary rate review program, which was initiated in 1960 by the Indiana Blue Cross Plan and the Indiana Hospital Association. The study estimated that the program reduced hospital costs by 10 percent between 1960 and 1973 by comparing Indiana hospitals with control hospitals in neighboring states. This result was statistically significant. However, in a review of the methodology of this study, Salkever (1979) noted several questionable features in the regression analysis, including a lack of control variables. He concluded that the results should be considered tentative. If one accepts the conclusion that Indiana's program substantially reduces costs, evidence from additional states is still necessary in order to conclude that private programs are likely to be successful in other states.

b. Quality of Care

National studies have not addressed this issue. In its study of Indiana's program, Spectrum Research, Inc. (1978) rated quality of care by reviewing medical records for patients in 15 diagnostic groups. No program effect on quality of care was found.

c. Volume of Services/Hospital Financial Condition

National studies did not address either of these factors for private rate review programs.

3. VOLUNTARY EFFORT (VE) PROGRAM

The American Hospital Association initiated a nationwide program in December 1977 in order to hold down hospital costs on a voluntary basis. The Congressional Budget Office (1979) estimated that this program reduced hospital expenditures by 2 percent in 1978, but this was not statistically significant. Sloan (1980) found a statistically significant reduction of between 3 and 5 percent for the VE program during 1978. Since this program covers all states, however, there is no control group to help ensure that the observed slowdown in hospital cost increases was in fact due to the VE program rather than some other event during 1978. A potential problem with voluntary programs noted by Sloan (1980) and Steinwald (1980) is that they may remain effective only so long as hospitals think it will help them avoid further government regulation. It is too soon to determine empirically whether such voluntary programs as the VE program have long-term effects on hospital costs.

C. CERTIFICATE OF NEED PROGRAMS

This section examines the research evidence on the effectiveness of certificate of need programs. The principal objective of certificate of need programs is to reduce the growth of hospital costs by controlling the expansion of hospital facilities, equipment, and services. Excess capacity in hospital facilities and equipment is costly because of the extra capital expenditure required and because extra beds may encourage use of hospital beds when adequate care could be provided less expensively on an outpatient basis. Other purposes of certificate of need programs include improving access to health care, quality of care, and quality of health planning. Access to health care may be improved by influencing where hospitals expand. Certificate of need programs may also improve the quality of care by controlling the diffusion of highly specialized services in order that facilities which perform these services do so frequently enough to ensure high quality.

In this section, we discuss the research evidence on how certificate of need programs affect hospital investments and costs. We do not address the other purposes of certificate of need programs because of the lack of studies on how these programs affect service quality, service accessibility, or planning quality.

Various approaches have been used to measure the effectiveness of certificate of need programs--with conflicting results.

Some proponents of certificate of need programs cite proposed projects that have been denied certificates of need as evidence of the program's effectiveness. In addition, they cite projects which have been altered or were not proposed as a result of the planning process established by the program. The American Health Planning Association (1979), which represents local and state health planning agencies, estimated that between August 1976 and August 1978, certificate of need programs saved \$3.4 billion in capital expenditures for health care facilities. This estimate was based on the estimated cost of projects disapproved by planning agencies.

However, other national studies, using regression models, found that certificate of need programs have not significantly reduced hospital costs (Sloan, 1980; Policy Analysis, 1980; Sloan & Steinwald, 1980; Salkever & Bice, 1979). In the remainder of this section, we discuss problems with the approach used by the American Health Planning Association and the findings and limitations of other national studies.

1. LIMITATIONS OF STUDIES OF CERTIFICATE OF NEED APPROVAL RATES

Studies which measured how certificate of need programs affect capital investment by examining approval rates include American Health Planning Association (1979), as discussed above, and Bicknell & Walsh (1975). Critics of certificate of need programs challenge the approach used by these studies for several reasons. First, reductions in capital expenditures may be offset by higher operating costs due to less competition (Salkever & Bice, 1979). Certificate of need programs could prevent efficient health care providers from entering the market on the grounds that they would duplicate existing facilities. By protecting existing hospitals from new competition, there is less pressure to hold down costs. Further, Havighurst (1973) argues that hospitals may substitute labor resources for capital resources when capital expenditures are regulated. Consequently, it is necessary to examine operating costs in addition to capital expenditures to determine the net effect of certificate of need programs on hospital costs.

Critics also question whether certificate of need programs significantly reduce capital costs. They claim that the cost of projects denied may overestimate actual savings because this approach assumes all proposed projects would have been built if there was no CON program (Salkever & Bice, 1979; Urban Systems Research and Engineering, Inc. & Policy Analysis, Inc., 1978). The problem is that the program itself may affect how many projects hospitals propose. If a hospital's proposed project is turned down, the same hospital may later submit another proposal or a different hospital may propose a project that is aimed at the same market as the original proposal. In either case, before concluding that denying a project reduces capital expenditures by the cost of the proposed project, one would have to take into account future reactions to that decision.

Havighurst (1973) noted another way in which hospitals' plans may be affected by certificate of need programs: Hospitals may propose some projects earlier than normal in order to preempt other hospitals from completing similar projects. The last proposal may have the smallest chance of being approved by the regulatory agencies. Also, proposals may be larger than normal in anticipation of being cut back. On the other hand, hospitals may decide not to propose a project because of the CON program. For all of these reasons, it is difficult to predict how many projects would have been completed in the absence of a CON program just on the basis of proposals received by the CON program.

On the basis of these arguments there is at least some question as to whether certificate of need programs actually reduce hospital costs. But estimating the impact of the program on the basis of the cost of projects disapproved guarantees that the conclusion will be that the program reduces costs. This is not an acceptable method for estimating the effects of the program.

2. FINDINGS OF NATIONAL STUDIES ON CERTIFICATE OF NEED

Many national studies have attempted to measure the impact of certificate of need programs on hospital capital investment and hospital costs. These include:

<u>Study</u>	<u>Time Period Covered</u>
Sloan (1980)	1963-1978
Policy Analysis (1980)	1970-1976
Sloan & Steinwald (1980)	1970-1975
Hellinger (1976)	1972-1973
Salkever & Bice (1979)	1968-1972

Each of these studies found that certificate of need controls did not significantly reduce hospital investment and/or hospital costs during the time period studied. None of the four studies which examined the impact on hospital investment found any significant effects. Because of statistical uncertainty, a positive or negative impact on the annual growth rate of hospital investment of 1 or 2 percent would be consistent with these results. Results of four studies which examined hospital costs found no significant effects except that Sloan & Steinwald (1980) found that non-comprehensive programs significantly increased hospital costs. This study estimated the impact on hospital costs separately for states with and without a comprehensive program. A comprehensive program differs from a non-comprehensive program in that it covers service expansion and has a threshold for equipment purchases of less than \$100,000 as of 1975. The study found that comprehensive programs had no significant impact on hospital costs per patient day or per admission as of the end of 1975, and estimated that non-comprehensive programs increased costs per admission by 1 to 3.5 percent. These results were statistically significant.

The following findings indicate that certificate of need programs can have indirect effects which offset the desired impact of the program:

- Studies by Sloan & Steinwald (1980) and Hellinger (1976) found that hospitals anticipated certificate of need programs by increasing capital investments in the year prior to the program's enactment. The other studies did not address this issue.
- Various other compensating effects were found by these studies. Salkever & Bice (1979) found that while certificate of need programs reduced the growth of bed supply, this was offset by the program's positive effect on other capital projects. Each of these effects was statistically significant. Sloan & Steinwald (1980) found that certificate of need programs generally reduced the growth of assets per bed but this was offset by higher than normal increases in labor costs.

3. LIMITATIONS OF NATIONAL STUDIES

Because of statistical uncertainty, it is not possible to conclude that certificate of need had no effect on hospital costs or capital investment. These studies have a margin of error of approximately 1 percent due to statistical uncertainty. This means that certificate of need could reduce (or increase) costs by as much as 1 percent and studies would still not detect this effect. In Minnesota, 1 percent of hospital expenses amounted to approximately \$12 million in 1979.

Consequently, these estimates are not precise enough to conclude whether certificate of need programs actually cost more than they save. Nevertheless, these studies suggest that CON has not been a major factor in restraining hospital cost inflation.

The negative results of these studies can also be challenged with the following arguments:

- It is too soon to judge the performance of certificate of need programs because these programs improve over time and because there is a long lag time between CON decisions and their effect on costs. This is discussed in depth below.
- The studies only address one of several purposes for certificate of need programs--that of reducing costs. Other purposes include improving access to health service, quality of service, and quality of health planning.

- The studies do not take into account all factors which affect health care costs.
- Since certificate of need programs are decentralized, there is considerable variation among state programs. Minnesota's program could be more or less effective than programs in other states.
- Since these studies rely on unaudited data collected by the American Hospital Association, there is concern about the data's accuracy.

There is evidence that certificate of need programs had serious shortcomings during their first few years. Because these shortcomings indicated that the programs may have become more effective as they matured, two studies separately examined the performance of new and mature programs.

a. Problems With Early Certificate of Need Programs

Several studies concluded that early certificate of need programs may have been ineffective because the planning agencies lacked well-developed standards and adequate data. A review of certificate of need planning agencies conducted in 1974 by the U.S. General Accounting Office (1974) found that most of these agencies lacked knowledge of their own area's need for beds. A study by Lewin & Associates (1975) on the federal Section 1122 certificate of need program found that: (1) planning agencies relied on bed-need standards that were inadequate and based on obsolete data; and (2) standards for services and equipment covered by CON laws generally did not exist.

Without such knowledge, it would be difficult for a planning agency to challenge a hospital's proposal to construct additional facilities, particularly those involving services and equipment. Bicknell & Walsh (1975) observed that in Massachusetts, proposals for bed supply increases were more closely reviewed than other proposals and that a higher proportion of bed-related applications were turned down. Lewin's review of 17 states found similar differences in approval rates. These observations are consistent with Salkever & Bice's findings that reductions in bed supply were offset by increased investments in other areas.

Since a program can be expected to improve in these areas as it matures, it is plausible to expect improved performance over time.

b. New Programs Versus Mature Programs

Three of the national studies on certificate of need separately analyzed the impact of new and old programs on hospital costs

or investments. Only one of these studies found any positive effects for older programs, and the results of that study were inconclusive. Further, the three more recent studies found that older programs were not more effective than newer programs.

The results of the analysis by Salkever & Bice updated to 1971-1974 (Congressional Budget Office, 1977) suggest that while new programs increased the growth rate for total assets, the five oldest state programs may have reduced growth in beds and assets. While the estimated impact was as large as a 3 percent reduction in hospital expenditures, the results were generally not statistically significant. Further, this analysis did not examine hospital costs. As indicated earlier, Sloan & Steinwald's study found that reductions in assets were offset by increases in labor costs. Since the 1971-1974 study did not measure the impact on operating costs, one cannot conclude that the program reduced total hospital costs. Further, the authors observed that 1974 was a particularly bad year to sort out the effects of the program because of the influence of federal wage and price controls.

Sloan (1980) found that between 1970 and 1978, programs which operated for three or more years did not more effectively control hospital costs than new programs. Policy Analysis (1980) also found that between 1970 and 1976, programs did not become significantly more effective with age. Sloan & Steinwald (1980) found similar results for 1970 to 1975.

In summary, the evidence does not support the contention that certificate of need planning agencies would effectively control costs after they gain experience. Five states began certificate of need programs prior to 1970, and approximately fifteen states were operating programs by 1972. These states would have at least six to eight years experience by 1978, the time period covered by the most recent study.

D. HOSPITAL LICENSING AND CERTIFICATION

The effectiveness of a licensing or certification system depends on how well the system:

- develops standards;
- detects deficiencies in hospitals; and
- obtains compliance with the standards.

In this section, we discuss existing research evidence in each of these areas.

The purpose of hospital licensing and certification is to ensure that hospitals meet standards governing the hospital's procedures, organization, and physical environment. Licensing and certification decisions are not made by directly assessing each hospital's

quality of care. For example, in order to reach these decisions, agencies do not evaluate treatment outcomes or how well patients' conditions are diagnosed. Instead, agencies rely on standards which, if met, are believed to provide the framework within which quality care can be given.

In our review of the health care literature we found no studies that examined how the quality of care in hospitals is affected by state licensing, federal certification, or private accreditation activities. There is some evidence, however on how well state health agencies monitor hospitals under the federal Medicare certification system and on how well the Joint Commission on Accreditation of Hospitals (JCAH) monitors hospitals.

The Medicare certification system automatically certifies JCAH accredited hospitals for most Medicare standards. The Department of Health and Human Services contracts with state governments to conduct Medicare validation surveys on a statistical sample of JCAH accredited hospitals. The purpose of these Medicare validation surveys is to monitor the performance of JCAH. Unaccredited hospitals are certified by the Department of Health and Human Services on the basis of inspections conducted by state health agencies. These state agencies are also responsible for making certification recommendations and obtaining corrective action for unaccredited hospitals.

In this section, we discuss the results of Medicare validation surveys and a report by the U.S. Government Accounting Office (1979) on the Medicare certification system. These results also apply to Minnesota's licensing activities. Currently, JCAH accredited hospitals are automatically licensed in Minnesota just as they are automatically certified in the federal Medicare program. Unaccredited hospitals are licensed on the basis of state inspections conducted for the federal Medicare program.

1. DEVELOPING STANDARDS

While GAO did not evaluate either JCAH standards or federal Medicare/Medicaid standards, it noted that JCAH frequently re-examines and updates its standards whereas the federal government does so infrequently. This gives JCAH an advantage in keeping up with advances in medical knowledge. The Medicare validation surveys led to changes in JCAH's life-safety standards, the area in which most deficiencies were reported by the Medicare validation surveys.

2. DETECTING HOSPITAL DEFICIENCIES

In order to determine how well surveys detect deficiencies in hospitals, GAO sampled 35 hospitals which underwent both accreditation surveys by JCAH and Medicare validation surveys by the state.

GAO found little similarity between the survey findings of the states and JCAH. Many deficiencies identified by the states were not reported by JCAH and many deficiencies identified by JCAH were not reported by the states. Overall, JCAH reported nearly twice as many deficiencies as the states, primarily because of differences in standards. This suggests that JCAH standards are more stringent than federal Medicare standards. Even among requirements judged to be equivalent by GAO, however, both JCAH and the states overlooked many deficiencies reported by the other. For these equivalent requirements, JCAH and the states reported a nearly equal number of deficiencies, but only 12 percent of the reported deficiencies were the same.

These findings are consistent with the results of Medicare validation surveys (HEW, 1975; GAO, 1979). Validation surveys conducted between 1974 and 1977 found that about 65 percent of JCAH accredited hospitals did not meet federal Medicare standards. The differences between JCAH survey findings and state survey findings noted by GAO imply that while JCAH accreditation does not ensure that a hospital meets federal Medicare standards, neither does federal certification ensure that a hospital meets JCAH standards. In fact, GAO found that federal certification does not ensure that a hospital meets essential federal standards.

GAO findings indicate that JCAH is more effective than states are at detecting violations of essential requirements. Both JCAH and the federal government have designated some of their standards as essential for continued accreditation and certification. Hospitals which do not comply with one of JCAH's essential requirements either lose their accreditation or receive accreditation for only one year instead of the normal two-year term. Hospitals which do not comply with any of Medicare's essential requirements should receive deferred certification until the deficiency is corrected, according to HEW's operations manual. If no corrective action is taken, the hospital may be terminated from the program.

GAO found that JCAH reported more violations of Medicare's essential requirements than did the states in the 35 sample hospitals. JCAH identified 33 violations of Medicare's essential requirements which were not reported by the states, whereas the states did not find any violations of JCAH's essential requirements that were not identified by JCAH.

In a separate review of certification files, GAO found that some significant deficiencies were not detected for several years by state agencies in hospitals not accredited by JCAH. In its review of JCAH accreditation files, GAO did not find evidence of long delays by JCAH in detecting deficiencies.

3. OBTAINING COMPLIANCE WITH STANDARDS

GAO found that hospitals complied with most reported deficiencies before the next scheduled survey under both JCAH's accreditation system and the federal-state certification system. However, the remaining deficiencies were more quickly corrected in JCAH accredited hospitals than in unaccredited hospitals. GAO found that many deficiencies were not corrected by unaccredited hospitals for several years after they were identified. In part, this may be due to the possibility that hospitals which seek JCAH accreditation are more willing or more able to correct their deficiencies than hospitals which do not seek JCAH accreditation. GAO, however, cited two factors which may explain problems in obtaining compliance from unaccredited hospitals--ineffective enforcement tools and inconsistent enforcement of Medicare standards.

a. Inconsistent Enforcement

GAO reviewed JCAH accreditation files and federal certification files in order to determine how accreditation and certification decisions were made. GAO concluded that "JCAH has applied its assessment criteria uniformly to reach accreditation decisions" whereas state and federal agencies did not uniformly apply federal criteria. For example, in some instances, a state found a hospital in overall compliance even when it violated Medicare's essential requirements. GAO attributed many of the problems in interpreting survey findings to a lack of guidance from federal agencies.

b. Ineffective Enforcement Tools

In order to obtain compliance with its findings, the federal-state certification system can defer certification and threaten to terminate certification. The problem is that deferring certification may be too weak as an enforcement tool and termination too harsh. By itself, deferring certification does not affect federal payments to hospitals for treating Medicare and Medicaid patients. And as observed by GAO, "the threat of termination is useful only as a last resort, not as an incentive for correcting lesser deficiencies." Since federal payments under Medicare and Medicaid are a major source of revenue for most hospitals, the federal government may not be willing to jeopardize a hospital's financial viability by terminating certification for non-major violations. Further, GAO noted that terminating certification may be difficult to uphold in court because of the extensive documentation required.

JCAH may have an advantage in enforcing compliance because loss of accreditation is not an extreme penalty. GAO notes that losing JCAH accreditation "may damage an institution's public image and affect its ability to obtain staff," but it will not stop Medicare payments.

IV. CONCERNS OF HOSPITAL PROVIDERS

In this chapter, we discuss the concerns of hospital providers in the following areas:

- duplicative regulations;
- coordination of inspections and information requests;
- costly or burdensome regulations;
- unfair regulations; and
- programs which go beyond legislative intent.

In order to identify the concerns of hospital providers, we interviewed and developed a questionnaire for the Minnesota Hospital Association. We also interviewed state agencies to obtain their views on issues raised by MHA.

In summary, MHA is concerned with the cumulative impact of regulatory programs at the federal, state, and local levels of government. MHA believes that the proper role of state regulatory agencies is to set statewide standards to implement health care policy established by the Legislature, but not to specify how hospitals should meet these standards. Most of MHA's concerns with hospital regulation have recently been addressed by the state Legislature or are beyond the control of the state government.

- MHA's primary concern with duplicative regulation involves the potential duplication between state licensure and JCAH accreditation or federal certification. Riders to MDH appropriation bills have required JCAH accreditation to be accepted in lieu of state licensure since 1977. The proposed hospital licensure bill would establish this role for JCAH in statute and would adopt federal Medicare standards as state licensure standards.
- The proposed hospital licensure bill would also address MHA's concerns with coordination of state inspections by requiring state agencies to obtain MDH approval before conducting routine hospital inspections.
- The two state programs cited by MHA as being particularly costly or burdensome were rate review and certificate of need. As indicated in the cost section, however, these programs cost hospitals substantially less than the major federal programs. Furthermore, the state only partially controls the cost of these programs since CON is mandated by the federal government and rate review is carried out by MHA.
- Problems cited by MHA due to unfair regulation were primarily due to federal regulations.

Nevertheless, MHA advocates changes by state government in the following areas of hospital regulation:

- MHA advocates that the state terminate its participation in the federal Section 1122 program because it duplicates the state certificate of need program.
- MHA argues that Medicaid reimbursement under Minnesota Department of Public Welfare's Rule 49 should be changed in order to address inequities for hospitals with attached nursing home facilities.
- MHA argues that MDH should make more projects eligible for waivers under the state certificate of need program.
- MHA argues that the State Planning Agency and regional Health Systems Agencies should seek an exemption from federal appropriateness review requirements because they duplicate state and regional health plans.
- MHA is concerned that the certificate of need program goes beyond legislative authority in that some proposed projects are approved on the condition that the health facility make changes unrelated to the original proposal.

We found that terminating participation in the federal Section 1122 program would save the state and hospitals some regulatory expense, although agencies involved maintain that the savings would be small. We also found that the state's Medicaid reimbursement system under DPW Rule 49 can create inequities for hospitals with attached nursing home facilities, although the extent to which it occurs has not been documented. State agencies involved in the other areas generally disagree with MHA on the issues of extending waiver provisions for certificate of need, seeking exemption from federal planning requirements, and whether changes in hospital projects initiated by planning agencies are unrelated to the original proposal.

A. DUPLICATE REGULATIONS

MHA's primary concern with duplicative regulation has been the potential duplication between state licensure, JCAH accreditation, and federal certification. The Legislature has avoided much of this potential duplication by requiring JCAH accreditation to be accepted in lieu of state licensure inspections. The proposed hospital licensure bill would further avoid duplication by establishing federal Medicare standards as state licensure standards.

Other duplicative programs cited by MHA are the state certificate of need program administered by MDH and the federal Section 1122 program administered by the State Planning Agency. Both programs attempt to prevent unnecessary construction or expansion of hospital facilities, equipment, and services by requiring advance approval for projects which exceed certain thresholds. While

the state certificate of need program is federally mandated, state participation in the federal Section 1122 program is voluntary. As of November 1980, 16 states have terminated their participation in the Section 1122 program. Both MDH and the State Planning Agency indicated that the appropriate time to decide whether to keep the Section 1122 program in Minnesota is when MDH adopts the rules pursuant to the 1979 Certificate of Need Act.

The effect of terminating participation in the Section 1122 program would be as follows:

- The state would save approximately \$10,000 to \$15,000 in administrative costs per year. According to State Planning Agency staff, administering the program takes the equivalent of one half-time position.
- A few projects would no longer be reviewed under any certificate of need program. According to State Planning Agency staff, approximately one to three projects per year are covered by the Section 1122 program but are not covered by the state certificate of need program because the state's program has higher thresholds.
- The Section 1122 program does not impose significant requirements on hospitals beyond those established by the state program except for those few projects which are covered only by the Section 1122 program. The processes used by both programs are closely integrated. Both programs rely on the Health Systems Agencies to perform substantive review and both programs use the same forms and time schedule.

B. COORDINATION OF INSPECTIONS AND INFORMATION REQUESTS

MHA is concerned that the timing of inspections, particularly unannounced inspections, is uncoordinated, and as a result interferes with hospital operations. Currently, MDH is unable to coordinate its inspection schedules with other agencies because it neither receives inspection schedules from other agencies nor shares its own inspection schedules with other agencies. MDH indicated that one reason it does not share its inspection schedules is to ensure that it can make unannounced inspections.

MDH believes that better coordination might be possible but that it needs additional legislative authority and additional resources to exchange or coordinate its inspection schedules with those of other state agencies. The proposed hospital licensure bill would give MDH authority to coordinate inspections of state agencies. If enacted into law, all state agencies would be required to obtain approval from the Commissioner of Health before conducting any routine inspection of a hospital. The success of this bill would be limited by the fact that

the state does not have authority over private organizations, federal agencies, or local agencies which inspect hospitals. The study sponsored by the Hospital Association of New York State (1978) indicates that state agencies only account for approximately 26 percent of hospital inspections in New York. In Minnesota, state agencies probably account for an even smaller percentage of inspections because New York has more stringent regulatory programs, including an active licensure program.

C. COSTLY OR BURDENSOME REGULATIONS

MHA cited two state programs as being particularly costly or burdensome for hospitals--hospital rate review and certificate of need. MHA did not advocate terminating either program. In fact, MHA claimed that the administrative costs of rate review are small compared to the overall savings attributable to rate review.

In order to reduce the cost of the certificate of need program, MHA claimed that MDH should more frequently waive requirements for a full review. MDH has statutory authority to define in rules which projects are eligible for waivers.

Specifically, MHA advocates granting waivers for the following projects:

- predevelopment activity;
- projects providing services determined to be needed in the state health plan or health service plans;
- projects designed to meet JCAH requirements; and
- acquisition of facilities when there is no change in service.

MHA is particularly concerned about requiring a hospital to obtain approval before performing certain predevelopment activities because these activities provide much of the information necessary to determine whether a project should be approved.

The Minnesota Department of Health stated that it is reviewing MHA's positions on predevelopment activity and acquisition of facilities as part of its current effort to develop certificate of need rules. However MDH opposes granting waivers in the other categories suggested by MHA:

1. Services determined to be needed in state or regional health plans - MDH opposes waivers in this case because (a) it is often not practical to determine the need for a regional plan, and (b) the plans may not include the most up-to-date information.
2. Projects required for JCAH accreditation - MDH argues that these projects may not actually be necessary because JCAH standards may be higher than minimum regulatory standards and because JCAH accreditation is optional for hospitals. Consequently, MDH believes full review is appropriate.

D. UNFAIR REGULATION

Programs considered to be unfair by MHA are reimbursement regulations under Medicare and Medicaid and charity care obligations under the Hill-Burton program. Problems with the Medicare and Hill-Burton programs are MHA's primary concerns but are beyond the control of the state government. MHA's concern with Medicaid reimbursement involves how hospitals with attached nursing home facilities are reimbursed under Rule 49 of the Minnesota Department of Public Welfare (DPW). MHA's concerns with Medicare and Medicaid are discussed below.

1. MEDICARE

MHA considers Medicare's reimbursement policies to be unfair because Medicare does not fully reimburse hospitals for the cost of services provided. Specifically, Medicare does not recognize working capital costs and has more restrictive depreciation allowances than are used by Minnesota's rate review program. In order to obtain revenue for expenses not covered by Medicare, many hospitals pass these expenses on to other payers, including commercial payers, Blue Cross, and self payers. According to MHA, audited financial statements show that these other payers were charged an extra \$38 million in 1979 that would not have been charged if Medicare paid its full share of hospital expenses.

2. MEDICAID

Hospitals with attached nursing home facilities may not be reimbursed for legitimate expenses because of inconsistencies between the nursing home reimbursement system under DPW Rule 49 and the federal Medicare reimbursement system. In Minnesota, there are approximately 75 hospitals with attached nursing home facilities, most of which are located in small or rural communities. The extent to which these facilities lose reimbursement has not been documented, but MHA has documented one case where the hospital was not reimbursed for approximately \$100,000. DPW staff agree that this problem can occur, but argue that it does not occur very often because these facilities often set rates for private patients below the rates allowable under DPW Rule 49. Since state law requires that rates for Medicaid patients be equivalent to rates for private patients, the rate for Medicaid patients is also less than the rate allowable under DPW Rule 49. Consequently, moderate changes in Medicaid's allowable costs will often not affect the facility.

There is a potential for financial loss because Medicare rates are set retrospectively whereas Medicaid rates are set prospectively with a one-way settle up. While a large proportion of patients in the acute care section of these hospitals is covered by Medicare, a majority of patients in the nursing home section is covered by Medicaid.

In these facilities, there are many expenses which cannot be directly attributed to hospital services or nursing home services. These indirect expenses are allocated between the nursing home section and the acute care section of the hospital on the basis of occupancy. The problem occurs when occupancy in the acute care section of the hospital declines, causing the nursing home section's share of indirect expenses to increase.

In this situation, the federal Medicare program retrospectively reimburses the facility for hospital patients on the basis of the hospital's actual share of indirect expenses. Under DPW Rule 49 however, Medicaid rates for the nursing home patients are set prospectively on the basis of the original budgeted expenses. Medicaid does not recognize the nursing home section's unbudgeted expenses caused by the decline in hospital occupancy.

While Medicaid does not provide additional reimbursement when the facility exceeds its budgeted expenses, it requires the facility to return any savings when its actual expenses are less than its budgeted expenses. Thus, the net effect is that as hospital occupancy fluctuates the facility will sometimes lose reimbursement from Medicare and Medicaid, but never gain reimbursement.

DPW staff indicated that they do not plan to change Medicaid reimbursement rules to specifically address this issue. The Task Force on Nursing Home Rates is not examining this issue, although it is possible that the recommended changes in DPW Rule 49 may affect the nature of this problem.

BIBLIOGRAPHY

- Abt Associates, Inc. and Policy Analysis, Inc. Analysis of Prospective Payment Systems for Upstate New York. Cambridge, MA: 1976; Final Report on Contract HEW-OS-74-261.
- Abt Associates, Inc. A Case Study of Prospective Reimbursement in Minnesota. Report to Health Care Financing Administration, DHHS under Contract No. HCFA 500-78-0036, 1979.
- Abt Associates, Inc. First Annual Report of the National Hospital Rate Setting Study: A Comparative Review of Nine Prospective Rate Setting Programs. Report to Health Care Financing Administration, DHHS under Contract No. HCFA 500-78-0036, 1980.
- American Enterprise Institute. Proposals for the Regulation of Hospital Costs. Washington, D.C.: The Institute, 1978.
- American Health Planning Association. Survey of Health Planning Agencies. Washington, D.C.: The Association, 1979.
- American Hospital Association. Hospital Statistics, 1980 Edition: Data from the American Hospital Association 1979 Annual Survey. Chicago: American Hospital Association, 1980.
- Bicknell, William, and Walsh, Diana. "Certification of Need: The Massachusetts Experience." New England Journal of Medicine, vol. 292 (May 15, 1975), pp. 1054-1061.
- Biles, Brian; Schramm, Carl; and Atkinson, Graham. "Hospital Cost Inflation Under State Rate-Setting Programs." New England Journal of Medicine, vol. 303 (September 18, 1980), pp. 664-668.
- Congressional Budget Office. Expenditures for Health Care: Federal Programs and Their Effects. Washington, D.C.: U.S. Government Printing Office, August 1977.
- Congressional Budget Office. Controlling Rising Hospital Costs. Washington, D.C.: U.S. Government Printing Office, September 1979.
- Department of Health, Education, and Welfare. "Report of Medicare Validation Surveys of Hospitals Accredited by the Joint Commission on the Accreditation of Hospitals." Medicare and Medicaid Guide. Chicago: Commerce Clearing House, Inc., 164 (October 1975), ¶127,504.
- Dowling, William, et al. The Impact of the Blue Cross and Medicaid Prospective Reimbursement Systems in Downstate New York. Seattle: Department of Public Health Services, School of Public Health and Community Medicine, University of Washington, 1976; Final Report on Contract HEW-OS-74-248.

- Drake, David F. "The Cost of Hospital Regulation." In Regulating Health Care: The Struggle for Control, ed. Arthur Levin. Proceedings of the Academy of Political Science, vol. 33, no. 4. New York: 1980.
- Friedman, Emily. "State Rate Review: The High Cost of Saving." Hospitals, March 16, 1980.
- Geomet. Analysis of the New Jersey Prospective Reimbursement System, 1968-1973. Gaithersburg, MD: 1976, Final Report on Contract HEW-OS-74-268.
- Havighurst, Clark. "Regulation of Health Facilities and Services by 'Certificate of Need.'" Virginia Law Review, October 1973, pp. 1143-1242.
- Hellinger, Fred J. "The Effect of Certificate of Need Legislation on Hospital Investment." Inquiry 13 (June 1976): pp. 187-193.
- Health Care Financing Administration. Professional Standards Review Organization: 1978 Program Evaluation. Washington, D.C.: U.S. Department of Health, Education, and Welfare, U.S. Government Printing Office, 1979.
- Hospital Association of New York State. Cost of Regulation. Albany, NY: The Association, 1978.
- Kinzer, David. Health Controls Out of Control. Chicago: Teach 'em, Inc., 1977.
- Lewin and Associates, Inc. Evaluation of the Efficiency and Effectiveness of the Section 1122 Review Process. Springfield, VA: U.S. Department of Commerce, National Technical Information Service, 1975. Available NTIS HRP-0005357.
- Michigan Hospital Association. Hospital Costs Attributable to Government Regulations. Prepared by Arthur Young and Co., 1977.
- Michigan Hospital Association. Hospital Costs Attributable to Government Regulations: Methodology. Prepared by Arthur Young and Co., 1977.
- Minnesota Hospital Association. Preliminary Survey of the Cost of Certificate of Need. Minneapolis, MN: The Association, 1978.
- Minnesota Hospital Association. Preliminary Response to Legislative Audit Commission Questions Concerning Hospital Regulation in Minnesota. Minneapolis, MN: The Association, 1980.
- Policy Analysis, Inc. and Urban Systems Research and Engineering, Inc. Evaluation of the Effects of Certificate of Need Programs. Report to Department of Health and Human Services under Contract No. 231-77-0114, 1980.

- Salkever, David. Hospital-Sector Inflation. Lexington, MA: D.C. Heath, 1979.
- Salkever, David, and Bice, Thomas. Hospital Certificate-of-Need Controls: Impact on Investment, Costs, and Use. Washington, D.C.: American Enterprise Institute, 1979.
- Sloan, Frank. "Regulation and the Rising Cost of Hospital Care." Unpublished manuscript, 1980.
- Sloan, Frank, and Steinwald, Bruce. "Effects of Regulation on Hospital Costs and Input Use." Journal of Law and Economics, vol. 23 (April 1980), pp. 81-109.
- South Carolina Hospital Association. Hospital Costs and Changes in Financial Position Attributable to Selected Government Regulations. Prepared by Arthur Young and Co., 1978.
- South Carolina Hospital Association. Hospital Costs and Changes in Financial Position Attributable to Selected Government Regulations: Methodology. Prepared by Arthur Young and Co., 1978.
- Spectrum Research. Impact of the Indiana Prospective Payment Program on Hospitals. Denver, CO: 1978, Final Report on Contract HEW-OS-74-209.
- Steinwald, Bruce, and Sloan, Frank. "Regulatory Approaches to Hospital Cost Containment: A Synthesis of the Empirical Evidence." Manuscript presented at American Enterprise Institute conference on "Health Care--Professional Ethics, Government Regulation, or Markets?" Washington, D.C.: September 25-26, 1980.
- Thornberry, Helen, and Zimmerman, Harvey. Hospital Cost Control: An Assessment of the Rhode Island Experience with Prospective Reimbursement, 1971 and 1972. Providence, RI: Rhode Island Health Services Research, n.d. Final Report on Contract HEW-OS-74-197.
- Tregenza, T. V., and Wolfe, T. E. The Cost of Regulation Compliance in the Hospital Sector. Des Moines, IA: Unpublished paper, Drake University, 1979.
- Urban Systems Research and Engineering, Inc. and Policy Analysis, Inc. Certificate of Need Programs: A Review, Analysis, and Annotated Bibliography of the Research Literature. Washington, D.C.: U.S. Department of Health, Education and Welfare, DHEW Publication no. (HRA) 79-14006, 1978.
- U.S. General Accounting Office. Comprehensive Health Planning as Carried Out by States and Areawide Agencies in Three States. Washington, D.C.: Government Printing Office, 1974.

- U.S. General Accounting Office. The Medicare Hospital Certification System Needs Reform. Washington, D.C.: GAO Report no. HRD-80-94; May 14, 1979.
- U.S. General Accounting Office. Unreliability of the American Health Planning Association's Savings Estimate for the Health Planning Program. Washington, D.C.: GAO Report no. HRD-80-49; March 13, 1980a.
- U.S. General Accounting Office. Rising Hospital Costs Can Be Restrained by Regulating Payments and Improving Management. Washington, D.C.: GAO Report no. HRD-80-72; September 19, 1980b.
- Werronen, Henry J. "Health Planning Costs Study Indicates Significant Changes Needed in System." Federation of American Hospitals Review, August 1980, pp. 32-33.

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