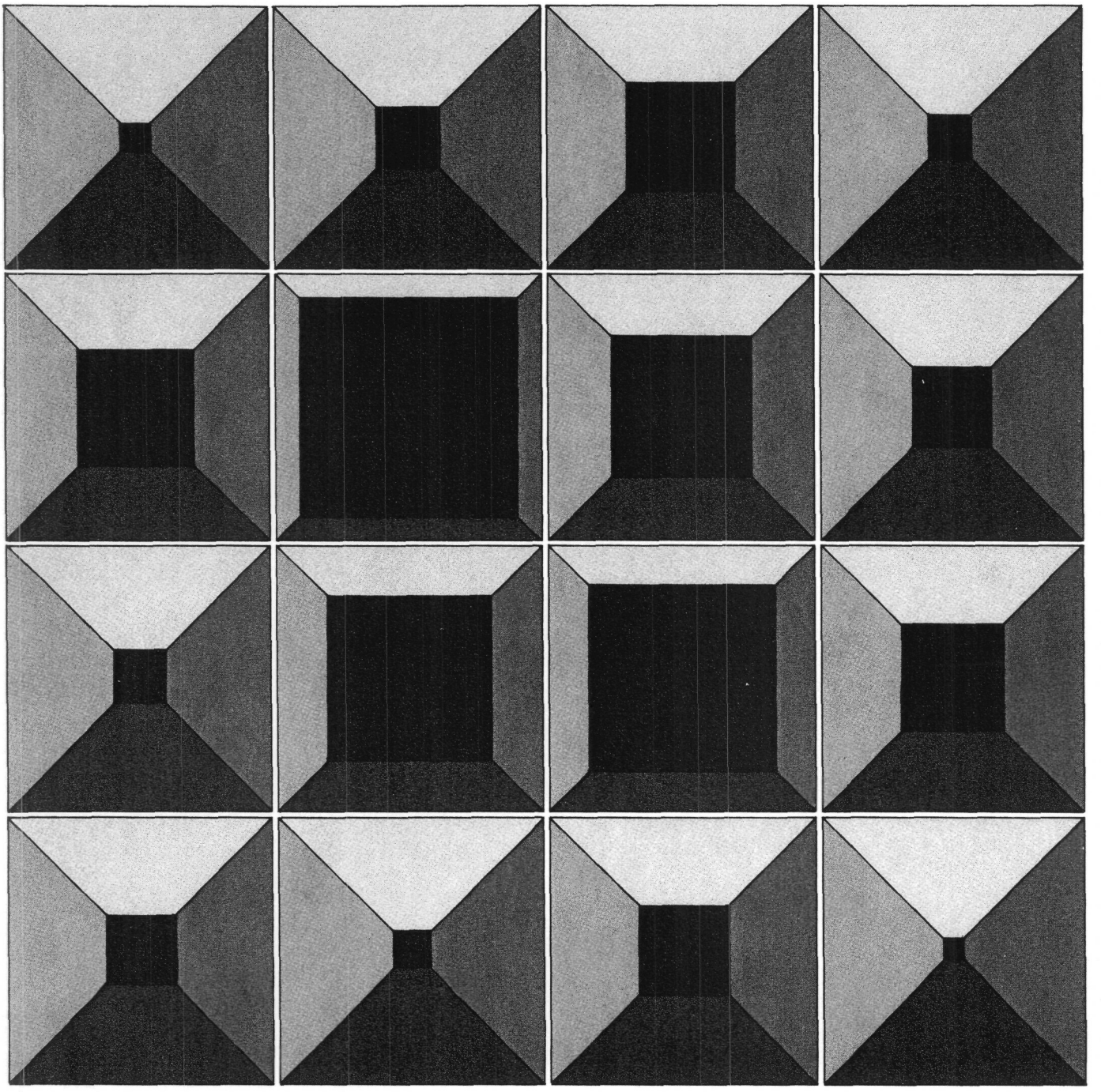
A CBO STUDY

Health Planning: Issues for Reauthorization

March 1982

Congress of the United States
Congressional Budget Office



HEALTH PLANNING: ISSUES FOR REAUTHORIZATION

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ERRATA SHEET

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Page 49
In line 6 of the second paragraph, the estimate of increased revenue should be $2.8 billion, not $1.8 billion.

PREFACE

The Congress is now considering reauthorization of the health planning program. This paper, prepared at the request of the Senate Labor and Human Resources Committee, examines the background and effects of the program, and discusses options for continuing or changing the federal role in health planning. In keeping with the Congressional Budget Office's mandate to provide objective and impartial analysis, this study offers no recommendations.

Lisa A. Potetz of the Human Resources and Community Development Division of the CBO prepared the paper, under the supervision of Nancy M. Gordon and Paul B. Ginsburg. The author wishes to thank a number of people for their valuable contributions, particularly Brian Biles, Harry Cain, Judy Lewis, and Malcolm Curtis, and many individuals involved in health planning at the federal, state, and local levels. Patricia H. Johnston edited the manuscript. Reba Williams, along with Mary Braxton and Jill Bury, typed the earlier drafts and prepared the paper for publication.

Alice M. Rivlin
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SUMMARY

The federal health planning program, authorized by the National Health Planning and Resources Development Act of 1974, funds state and local planning agencies that assess area health needs, set priorities, and attempt to direct health-care resources to the most needed services and locations. These agencies also conduct certificate of need (CON) review of proposed construction and major equipment purchases by health facilities--their major tool for controlling hospital costs.

Funding for health planning averaged about $130 million annually between 1976 and 1981, but was reduced to $58 million in fiscal year 1982. Authorization for the program expires at the end of this year, and the Administration has proposed terminating it at that time.

The health planning program addresses a number of problems associated with the allocation of health resources--excess capacity, unnecessarily duplicated services, high hospital costs, and unevenly distributed health services. These problems result primarily from two sets of factors: those that encourage overinvestment--extensive third-party reimbursement, competition among hospitals for physicians, and the availability of tax-exempt financing, in particular; and those that result from the exclusion of consumers from decisions determining the kind of available health care.

Through funding local and state agencies, the health planning program attempts to redirect resources to better reflect patient needs at lower costs. The 1974 act requires that health-care consumers must be major participants in this process, as well as providers and insurers. Access to care, costs, and quality are all factors to be considered in developing health plans.

THE EFFECTS OF HEALTH PLANNING

Although available evidence does not support the hypothesis that CON review has restrained growth in aggregate hospital investment or costs, these results must be interpreted with

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caution. First, evaluations of CON review reflect decisions made before the implementation of the federal law. If CON programs have become more effective as a result of federal requirements and funding, the gains would not have appeared in these studies.

Second, despite the fact that studies did not find aggregate effects from CON review, a few individual state programs may have been successful at restraining growth in hospital investment and costs. Since the studies were designed to measure the national average effects of CON review programs, effects of successful programs could have been diluted sufficiently by the experience in other states to preclude measurement of restraining CON effects in the aggregate. Third, the studies have other technical limitations that could preclude identifying effects.

Even if total investment and costs are not affected, CON review may affect the mix of capital projects. Hospitals may be forced to shift investment toward those projects favored by health planning agencies because others might be denied.

Although the effect of CON review on hospital investment and costs has been the focus of most evaluations of health planning, agencies have emphasized this goal to varying degrees. The planning act requires a number of other goals, such as improving access to care and promoting quality care, that can conflict with that of containing costs. In addition, cost containment was not added as a specific national priority until 1979, and many agencies perceive other goals as more important.

Anecdotal evidence of planning agency successes with other goals exists, but there have been no systematic evaluations of the effects of these efforts. Some results--improved quality of care, for example--are difficult to measure, and the role of planning agencies in affecting these results cannot easily be separated from other factors.

PROBLEMS WITH THE HEALTH PLANNING PROGRAM

A number of problems limit the potential of the current health planning program to meet its goals, particularly cost containment. Five of them could be at least partially solved through program changes. First, unclear and conflicting goals have limited the effectiveness of health planning. The broad mandate given by the planning act and sometimes poor communication between the federal government and state and local planning agencies have

contributed to the problem. Second, planning agencies have little authority other than using powers of persuasion to implement their goals. CON review is the only direct authority available, and agencies can act only to deny projects in response to proposals made by providers. Third, hospitals are reluctant to accept planning agency recommendations to merge, share services, or otherwise cooperate because such actions might lead to antitrust suits. Fourth, because hospitals can invest in services and equipment that are not subject to CON review, the potential effect on total investment and costs is reduced. Fifth, federal requirements, such as those for representative local governing boards and comprehensive health plans, may have absorbed agency resources without improving effectiveness.

Three general problems with health planning would be more difficult to address with program changes. First, the absence of a scientific basis for standards makes them subject to challenge. Quantitative guidelines upon which planning agency activities are to be based are somewhat arbitrary because of a lack of knowledge about how health services translate into improved health. In addition, detailed data on the health status of local populations are not available and can be expensive to gather. Second, because the costs of overinvestment are often shared by areas larger than the ones covered by the local planning agencies, local reviewers have little incentive to deny services for their area. In addition, providers may be able to dominate the process because of their expertise. Third, the costs of CON review--including those to hospitals applying for project approval--offset any savings from deferred projects. The extent of this problem is unknown.

OPTIONS

Four broad options for changing the health planning program are available, including:

- o End the requirement for planning and eliminate federal funding for the program (Administration proposal);
- o Continue a federal role in health planning, either by maintaining the current program with changes to focus on cost containment or by providing federal grants only to states that chose to continue planning programs;
- o Encourage state hospital cost-containment programs by including funds for health planning as part of a performance contract;

- o Eliminate tax-exempt bonds for private hospital construction.

End the Federal Role in Health Planning (Administration Proposal)

The Administration's proposal would discontinue the federal planning program after fiscal year 1982, in favor of measures to increase competition in health care in order to contain costs. Under this option, states could maintain their own planning programs should they desire, but federal funds would not be available. Most states are expected to continue CON review, but local planning would be eliminated in most areas.

This option would reduce federal spending, eliminate regulation in states that discontinue CON review, and would probably not significantly affect aggregate hospital investment and costs. There is no evidence that, in the aggregate, CON review has restrained growth in hospital investment or costs, although studies are limited. It is possible that some individual states have had successful programs, but they would not be likely to discontinue CON review. Also, financial analysts predict that there will be limited opportunities for hospitals to finance expensive investments in coming years.

The risk of a less likely but costly scenario exists, however. Some observers contend that, because the incentives for investment would remain, ending the health planning program could lead hospitals to step up their investment plans. To the extent that any successful state CON review programs would either be ended or become less effective without federal support--and if enough financing was available--hospitals could increase capital spending, leading to faster growth in hospital costs and higher outlays for Medicare and Medicaid.

The Administration's proposal could change the mix of projects undertaken. In states that abandon CON review, hospitals would no longer have to develop projects that planning agencies approve. To the extent that planning agency goals differ from those of providers, this could alter the location and types of projects.

Ending the federal health planning program probably would not affect competition among hospitals appreciably, but could impede competition from Health Maintenance Organizations (HMOs). Some state laws do not exempt these organizations from CON review as required by the planning act, and more might drop the exemption if the requirement is withdrawn.

Continue a Federal Role in Health Planning

Federal participation in planning would continue under this option, in one of two ways. One approach would maintain the current program with changes to increase the focus on cost containment. The other approach would end the requirement for planning but offer federal grants to states that chose to continue a planning program.

One reason put forth in favor of maintaining a federal role in health planning is that the program has not been adequately evaluated. As discussed earlier, available studies do not reflect the impact of the federal program and have technical limitations.

Another reason is that the federal government--which pays for 32 percent of total hospital expenditures--benefits from any success in cost containment. Although Medicare and Medicaid savings from a continued federal program may be too small to show up in the evaluations of CON review, they might nevertheless exceed federal outlays for health planning.

Finally, if federal funds are withdrawn, the expected cutbacks in data collection and analysis could reduce the ability of continuing state CON programs to identify the most needed projects. This problem would be particularly serious if the availability of funds for hospital investment is limited, as is expected in the near future.

Maintain the Planning Program with Modifications. This approach would continue the planning program and attempt to increase its effectiveness by focusing more on cost containment. Continued federal spending would be required, however, and these changes might not improve the performance of CON review, particularly in those states without a commitment to its success. Examples of changes that could be made include:

- Make cost containment the major program goal;
- Alter federal CON requirements to target review only on the potentially most costly projects;
- Grant exemptions from antitrust laws when hospitals act in accordance with recommendations by health planning agencies;
- Change some federal process requirements, such as those for health plans and governing board membership; and

o Consolidate health systems areas.

Offer Grants to States. A second approach to maintain a federal role would end the requirement for state and local planning, but offer grants and technical assistance to states that chose to maintain a planning program. Grants could be awarded in one of several ways--by application, on a formula basis, as part of a block grant for cost containment programs--or states could require hospitals to help fund health planning, with the federal share collected by including these payments as an allowable cost under Medicare and Medicaid.

Under this strategy, states that believe their programs have been successful at controlling costs or improving the distribution or quality of health services could continue them, while those that are not interested in planning could drop their programs. On the other hand, federal funding might not increase the number of states continuing CON review, or the effectiveness of the programs. In addition, this approach might interfere with regional planning. Fifteen major metropolitan areas have local planning agencies that cross state boundaries, presenting a potential problem should adjoining states disagree about whether to maintain planning.

Encourage State Hospital Cost-Containment Programs

The third option would offer states an incentive for hospital cost containment by sharing resulting Medicare savings. States that held growth in hospital expenditures to a predetermined level would receive a share of the estimated savings in Medicare reimbursements. States could choose the cost-containment method--CON review, rate review, voluntary programs, for example, or a combination of approaches. States choosing CON review could be required to have health plans and to exempt HMOs from review.

Depending on the extent to which states would begin new programs, total federal expenditures could increase or decrease. States with mandatory rate review have been successful at slowing the rate of growth in hospital costs and if new successful programs are begun, federal savings could be achieved. Some states are philosophically opposed to regulation, however. Others might begin programs even without the federal incentive, as a result of Medicaid budgetary pressures. If states that already have programs would receive more in federal payments than the savings generated from adoption of new cost containment programs, federal expenditures would actually increase.

Eliminate Tax-Exempt Bonds for Private Hospital Construction

Eliminating tax-exempt financing for private hospitals would reduce the availability of funds for hospital construction projects, thereby limiting overall investment. Up to $2.8 billion in federal revenues would be added over fiscal years 1983 to 1987, although roughly one-third of the impact on the federal deficit could be offset by increased Medicare and Medicaid payments to hospitals.

Although this proposal would shrink the pool of funds available for hospital investment, it would not necessarily have the same effects as continuing health planning. Because investments would be made on the basis of hospitals' financial standing, some projects that would have been disapproved by CON review would be financed, whereas ones that would have been approved might not. Hospitals with a relatively high proportion of Medicare and Medicaid patients would find it more difficult to obtain financing for projects, and nonprofit hospitals would be affected more than proprietaries, because the latter currently have limited access to tax-exempt financing.

CHAPTER I. INTRODUCTION AND BACKGROUND

In recent years, rapidly rising hospital costs have contributed to significant increases in federal outlays for health-care programs. Inpatient hospital costs rose at an average annual rate of about 15 percent between 1970 and 1981. Federal Medicare and Medicaid outlays for hospital services rose about 17 percent a year during this period, to an estimated $32.4 billion in fiscal year 1981. Moreover, hospital costs are expected to continue their rapid growth in coming years.

Excess investment in hospital construction and equipment, leading to both unnecessary duplication of expensive facilities and overuse of hospital services, is a major cause of the growth in hospital costs. Several factors have contributed to over-investment: the prevalence of third-party payment for hospital care, which removes the incentive for patients to demand cost-effective treatment; hospital competition for physicians through offering the latest techniques and equipment; and the availability of federal subsidies to finance capital investments.

THE FEDERAL ROLE IN HEALTH PLANNING

The intent of the federal health planning program, as authorized by the National Health Planning and Resources Development Act of 1974, is to prevent unnecessary and costly hospital investment and to improve the distribution of health-care services. The act created a network of state and local planning agencies. The latter, called Health Systems Agencies (HSAs), are composed of representatives of local health-care providers, consumers, and insurers that analyze the need for health services in their areas. The 1974 act also mandated that states enact certificate of need (CON) legislation requiring state agency approval for hospital investment in new facilities, equipment, or services, in conformance with local and state planning agency goals.

As the Congress discusses the reauthorization of the health planning act in 1982 it will need to consider the following questions:

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- What has been the experience of health planning in containing hospital costs? Although cost containment did not become an explicit federal priority until the 1979 amendments (Public Law 96-79), it has been the most common basis for judging the success of the planning program.

- Does health planning limit competition? The Administration proposes to end health planning, in part on the grounds that it has limited competition among health facilities, and interferes with its goal of increasing competition.

- What have been the effects of federal requirements for health planning? Some states had CON review programs before the 1974 Act, and most of these would maintain them even if the federal requirements were repealed. Most local planning agencies would not survive, however.

Funding for Health Planning

From fiscal years 1976 through 1981, federal expenditures for health planning averaged $130 million annually. HSAs received 75 percent of these funds; state planning agencies, 21 percent; and Centers for Technical Assistance, which provide support for local agencies, the remaining 4 percent (see Table 1).

As a result of Administration efforts to reduce federal spending, the Congress voted to rescind $18 million from the fiscal year 1981 appropriation for local health planning.[1] This action reduced 1981 funding for HSAs to $82.9 million, an 18 percent cut.

The Continuing Resolution (Public Law 97-92) appropriated $58.2 million for the entire planning program in fiscal year 1982, a 63 percent cut from 1980 funding levels. HSA funding was reduced by about 70 percent.

Plan of the Paper

This paper presents an overview of the federal health planning program, assesses its effectiveness, and analyzes options for

1. A rescission for consulting fees for the Department of Health and Human Services resulted in an additional cut of $0.8 million for HSAs and $0.3 million for state agencies.

TABLE 1. APPROPRIATIONS FOR HEALTH PLANNING, FISCAL YEARS 1975-1982 (In millions of dollars)

	1975	1976	1977	1978	1979	1980	1981	1982[a]
Local Planning Agencies	0	64.1	97.0	107.0	107.0	124.7	82.9[b]	37.7
State Planning Agencies	0	19.0	24.5	29.5	29.5	32.0	31.7	19.2
Centers for Technical Assistance	10	7.5	6.5	6.5	6.5	1.0	1.7	1.3
Total	10	90.6	128.0	143.0	143.0	157.7	116.3	58.2

a. Appropriations under the Continuing Resolution (Public Law 97-92) which provides funds through March 31, 1982.

b. The $18.8 million recission for 1981 has been deducted to arrive at this number.

change. The remainder of this chapter examines the rationale for health planning. Chapter II explains how the federal health planning program operates. Chapter III examines the effectiveness of health planning by analyzing evaluations of CON review, and discusses problems with the health planning program. Chapter IV analyzes options for changing the program and the probable effects of these changes.

PURPOSES OF HEALTH PLANNING

The health planning program is intended to improve the distribution of health services to ensure that they are available to those who need them and to restrict investment in unnecessary facilities and services. Problems of medically underserved areas and investments in duplicate facilities that are rarely used were factors motivating federal participation in planning activities.

The rationale underlying the program structure was that health resources allocated by representatives of a cross-section of the community would provide better health services at less cost than those allocated only by providers. In seeking to provide the best quality care for their patients, physicians and other medical professionals do not necessarily consider the total costs or the distribution of services. Planning agencies are expected to consider these factors, which are not always relevant to decisions made independently by providers. For example, planning may encourage development of services in rural or other needy areas.

Overinvestment

Planning agencies were given authority to review hospital investment because it is widely believed that, without restrictions, hospitals will add too many beds, purchase too much equipment, and provide too many services. This overinvestment is considered to be a major source of hospital cost inflation, not only because of the original capital costs, but also because of the operating costs associated with excess capacity and the additional use of services induced by the presence of these facilities.

Health planners define overinvestment as resources expended on health services that are not needed--that is, do not contribute to improving the health of the community. Because of the difficulties in measuring the need for health services, overinvestment is usually defined in terms of capacity in excess of the amount demanded--low hospital occupancy rates, for example.[2]

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2. The need for health services differs from what is used for several reasons, however. First, needed services may not be available. This can be caused by the location of the services, or because discrimination prevents some groups from using them. Second, the use of services also depends upon the population's perception of what services they require to stay healthy, and how much they are able and willing to pay for such services. The use of services can be greater than needed if perceptions of need are too high and there are few financial or other barriers to access. Use can be less than needed if the reverse is true.

Some hospital resources are simply not being used. Occupancy rates are often much lower than necessary to meet peak demand.[3] Services other than beds also often suffer from excess capacity. Underuse of specialized facilities, such as those for radiation treatment and open-heart surgery, sometimes occur when several hospitals in an area have the same facilities.

One commonly cited cause of hospital overinvestment is third-party payment. Extensive coverage for hospital services by public and private insurance has created a situation in which patients and their physicians have little concern for the costs of care. The typical insurance policy pays the entire cost of hospital room and board and ancillary services. In the aggregate, only 9 percent of hospital costs were paid out-of-pocket by patients in 1980.[4] Since hospitals encounter little resistance to increased prices, incentives to hold down costs are significantly reduced. This tends to protect hospitals from the penalties of excess capacity normally borne by businesses. With extensive third-party payments, competition for patients is often based on amenities rather than price, which in turn leads to increased investment.

Competition by hospitals for physicians may also be a major cause of overinvestment. Because physicians making decisions on behalf of their patients create the demand for hospital services, hospitals compete for patients indirectly by competing for physicians. Physicians, for the most part, are not hospital employees, so rather than offering high salaries, hospitals must attract physicians by providing advanced technology and modern facilities, regardless of how many other facilities in the area already offer them.

The availability of federally subsidized financing also contributes to the problem of overinvestment. About half of all hospital construction is financed by tax-exempt bonds. In the past, direct federal subsidy programs also contributed to the growth in

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3. The occupancy rate is defined as the ratio of the number of inpatients per day to the average number of available beds. See Congressional Budget Office, "Federal Strategies for Closing Excess Hospital Beds" (May 1979, unpublished).

4. Robert M. Gibson and Daniel R. Waldo, "National Health Expenditures, 1980," Health Care Financing Review (September 1981), Table 6A, p. 42.

hospital construction, but this type of funding has been significantly reduced in recent years.

Excess investment increases hospital costs in two ways. First, there are fixed costs associated with idle capacity. For example, an unused hospital bed is estimated to generate between 20 and 65 percent of the costs of a filled bed.[5] The fixed costs of equipment might be even higher, since personnel who operate the equipment are often not capable of performing other functions, even when they are not occupied full time.

The second source of increased costs--possibly larger than the first--are those associated with the so-called "Roemer effect," in which an increase in hospital beds in an area increases hospital utilization rates.[6] Empirical estimates of this effect indicate that a 10 percent increase in beds per capita increases rates of hospital use by about 4 percent.[7] Similar phenomena may exist for major pieces of equipment, although this has not been substantiated.

Mix of Investments

In addition to reducing investment, health planning is expected to affect the types of investments made by hospitals. Planning agencies work with providers to develop needed services, and present evidence of need to those who finance service development. In addition, the link between planning and CON review may lead hospitals to shift to those projects that conform to planning goals, because they are more likely to be approved.

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5. Joseph Lipscomb, Ira E. Raskin, and Joseph Eichenholz, "The Use of Marginal Cost Estimates in Hospital Cost-Containment Policy," in Michael Zubkoff, Ira E. Raskin, Ruth S. Hanft, eds., Hospital Cost Containment: Selected Notes for Future Policy (New York: Milbank Memorial Fund, 1978), p. 531. These are estimates of the short-run ratio of marginal costs to average costs.

6. Milton Roemer and Max Shain, Hospital Utilization Under Insurance (Chicago: American Hospital Association, 1959).

7. Paul B. Ginsburg and Daniel M. Koretz, "Bed Availability and Hospital Utilization: Estimates of the 'Roemer Effect'" (August 1981, unpublished).

Role of Consumers

An important element of the planning program is to increase the involvement of health-care consumers--including employers who purchase group insurance--in shaping local health care services. Consumers are already indirectly involved in making allocation decisions when they choose to purchase medical care, but specific decisions are usually transferred to physicians because consumers lack medical expertise. One goal of planning is to provide technical information to consumer representatives through assistance from a professional planning staff.

In general, the priorities of consumer participants in planning are expected to be different than those of providers. In addition to concern for cost containment, consumers are often interested in improving quality and access to care by expanding services such as ambulatory care, preventive medicine, emergency care, and health education. Consumers also wish to locate services near those who need them, and often desire to address issues related to environmental health.

In addition to giving consumers a more direct role in allocating health resources, the forum provided by planning is meant to encourage coordination among providers of health services. For example, agreements for mergers or shared services among hospitals may be arranged, possibly leading to lower costs. Although these arrangements could come about without planning agencies, the process creates greater opportunity and can induce community pressure for such changes.

CHAPTER II. DESCRIPTION OF THE HEALTH PLANNING PROGRAM

This chapter describes the health planning program authorized by the National Health Planning and Resources Development Act of 1974. The development of the federal role in health planning and programs that preceded the 1974 act are discussed in Appendix A.

NATIONAL HEALTH PRIORITIES

The National Health Planning and Resources Development Act established a number of national health priorities, encompassing a broad range of health issues. These were to serve as the basis for health planning agency goals to provide care to the underserved, encourage institutions to share and coordinate services, develop alternative systems of care, promote quality care, encourage programs of preventive care and health education, and assure the availability of appropriate mental health services.

Of the six goals added in the 1979 amendments, three reflected an increased emphasis on cost-containment issues. These were the discontinuance of unneeded or duplicative services and facilities; increased efficiency and more appropriate use of resources and cost-saving technology; and strengthening competition to promote quality, access, and cost-effectiveness. The other three new priorities were intended to improve access to appropriate mental health services.

THE HEALTH PLANNING SYSTEM

The federal planning program requires and funds local and state planning agencies.[1] Health Systems Agencies (HSAs) are the local area planning organizations. Composed of representatives of a cross section of their communities, these agencies develop long-range plans for the health needs of their areas, and direct resources in accordance with the plans. At the state level, the

1. In addition, the act funds three regional Centers for Health Planning to provide technical assistance to local and state planning agencies.

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State Health Planning and Development Agencies (SHPDAs) develop state health plans based on those of the HSAs. Through certificate of need (CON) review, planning agencies act to limit investment in duplicate facilities and other unneeded investments in accordance with the local and state health plans. Under federal requirements, final CON approval is granted by the state agencies, which must take into account any recommendations of the HSAs.

Health Systems Agencies

A primary responsibility of HSAs is to gather data; analyze health statuses, health needs, available resources, and use of health services; and design comprehensive health plans that outline a strategy to improve the quality and distribution of health care.[2] The plans, which cover a five-year period, must be updated every three years, and must comply with requirements of the 1974 act to address a broad range of national health priorities and to provide detailed objectives for a number of health services. In addition, annual strategies for implementation of the health plans are required.

The usefulness of health plans in guiding planning agency actions varies among agencies, and has not been systematically studied. Some plans have provided objectives that have been the basis for further actions, either in project review or in encouraging the development of needed health services.[3] On the other hand,

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2. There are currently 203 HSAs, covering geographic areas meant to coincide with health-service delivery areas. Most HSAs are nonprofit corporations. There are 12 HSAs that encompass an entire state, and 15 that include areas from more than one state. Some HSAs may be forced to close as a result of funding cuts and the 1981 reconciliation act which allows the Secretary of Health and Human Services to grant governors the authority to abolish HSAs in their states, if the states will meet the purposes of the 1974 act without the HSAs. Five states have recently received authority to terminate 27 HSAs.

3. For example, one HSA, through the process of assessing the status of community health, learned that infant mortality in one city was much higher than the national average. Further study revealed that 72 percent of the infants that died were born to mothers from six low-income neighborhoods. This in-

(Continued)

some plans are not useful as a basis for further planning agency action. Some contain objectives that are not specific enough to guide project review or other agency activities--encourage consumers and providers to contain health-care costs, for example. Another criticism is that the broad scope of the plans sometimes includes issues over which the planners can have no direct influence, such as reducing the incidence of death from cancer.[4] To some extent, however, this broad scope is mandated by federal planning requirements to address wide-ranging national health priorities and to consider health resources, service delivery, health education, and other aspects of the health system.

It is generally acknowledged that most health plans have improved over time. As a result of more experienced staffs and boards, most agencies' plans are better than their earlier versions. In the 1981 grant cycle, federal reviewers attached conditions to grant awards for only six local and two state health plans.[5] These conditions are official federal suggestions for improvement.

HSA Activities. In addition to preparing health plans and making recommendations to state planning agencies for CON applications, HSAs engage in a broad range of activities.[6] Planners

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3. (continued)
formation led to institution of an advisory committee to study the availability of maternal health services and develop methods for increasing the use of prenatal and early infant care. See Health Systems Agency of North Central Connecticut, "Local Health Planning: It Works in North Central Connecticut" (March 1981).

4. General Accounting Office, Health Systems Plans: A Poor Framework for Promoting Health-Care Improvements (June 22, 1981).

5. Department of Health and Human Services, Bureau of Health Planning.

6. Under authority allowed by the 1981 reconciliation act, the Secretary of Health and Human Resources recently waived requirements for a review of the appropriateness of existing services, review of proposed use of federal funds (in which HSAs make recommendations to ensure that federal grant money --for community health centers, for example--is spent in compliance with the local health plan), and publication of hospital charges.

advocate investments in needed services by working with providers and by presenting evidence of the need to financers of health services development. Agencies vary greatly in their activities, with reported successes for programs to educate the public about health-care costs and health promotion, recruit health manpower in underserved areas, assist in developing Health Maintenance Organizations (HMOs), encourage the development of alcohol and drug abuse programs, and stimulate price competition by publishing physician fees.

HSA Membership. HSA decisions are made by a governing board, which obtains technical assistance from a professional staff. Half the board members must be appointed from outside the HSA--usually by public officials and local health interest groups. The board must also meet federal requirements for a mix of consumer and provider representatives. Consumer representatives must comprise between 51 and 60 percent of the board, and must be representative of the HSA population, based on factors such as age, race, income, and handicapped status.

In the aggregate, planning agency governing boards appear to mirror the national population, but this does not mean that all individual HSA boards are representative of their local populations. There are about 9,000 board members, of which fifty-three percent are classified as consumers. Of these, 55 percent are women, a slight over-representation compared to the national population. Nonwhites are also slightly overrepresented in the aggregate--78 percent of board members are white, 14 percent are black, and 4 percent are hispanic. Forty-two percent have family incomes between $10,000 and $25,000.

Some HSAs have expanded consumer representation to include more direct citizen participation in planning activities. For example, subarea councils were often established to learn which health issues concern citizens. These councils had about 14,000 members in 1980, but many have been disbanded as a result of recent cuts in HSA funding.

Grants for HSAs. Federal grants to HSAs are awarded on the basis of population, up to a ceiling of $3.75 million per HSA. The minimum grant level was lowered from $260,000 to $100,000 in the 1981 reconciliation act. The act also changed the restrictions on the use of nonfederal funds by allowing health insurers to make financial contributions to HSAs.

State Health Planning and Development Agencies (SHPDAs)

Unlike HSAs, which are independent organizations, SHPDAs are state government agencies, chosen by the governors to prepare and implement state health plans based on those of the states' HSAs, and to make final CON review decisions, considering recommendations of the HSAs. In most states, the governor has selected the state health department to fulfill this role. These agencies also prepare an annual inventory of state medical facilities and administer federal loans for health facilities development, the former Hill-Burton program.

The other statewide planning agencies required by the 1974 act are the State Health Coordinating Councils (SHCC), whose members are appointed by the governor. These councils both review HSA health plans and have final approval of state health plans proposed by the SHPDA. The councils also review HSA budgets and state applications for federal health grant money.

Grants for SHPDAs are based on state population, with federal funds covering up to 75 percent of operating costs. In some states that operated CON review programs prior to passage of the federal planning act, much of the federal share has been used for data gathering and development of the state health plans rather than for CON review.

CON REVIEW

The 1974 act provided planning agencies with a regulatory tool by requiring that all states eventually enact CON review legislation. This legislation requires that, in order to be licensed, health facilities must receive prior approval for construction and certain other projects. Between 1964 and 1974, 24 states already had passed CON legislation to regulate hospital capital investment (see Table 2). Currently, all states except Louisiana have CON programs. In 1979, about 90 percent of all new construction, 25 percent of equipment purchases, and 60 percent of building modernization expenditures were subject to CON review.[7]

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7. ICF, Inc. An Analysis of Programs to Limit Hospital Capital Expenditures, Final Report (Washington, D.C., June 30, 1980), p. 26.

TABLE 2. STATES WITH CERTIFICATE OF NEED (CON) LAWS OR SECTION 1122 AGREEMENTS,[a] BY YEAR OF ENACTMENT

State	Year of CON Enactment	Year of Section 1122 Agreement
Alabama	1977[b]	1973-1980
Alaska	1976[b]	1974-1981
Arizona	1971[c]	---
Arkansas	1975[d]	1973-present
California	1969[c]	---
Colorado	1973[b]	1974-1979
Connecticut	1969[b]	---
Delaware	1978[b]	1973-present
Florida	1972[b]	1973-1978
Georgia	1974[c]	1974-present
Hawaii	1974[d]	1973-1977
Idaho	1980[c]	1974-1980
Illinois	1974[b]	---
Indiana	1980[c]	1973-present
Iowa	1977[b]	1973-present
Kansas	1972[d]	---
Kentucky	1972[d]	1974-present
Louisiana	no law	1973-present
Maine	1978[b]	1973-present
Maryland	1968[b]	1974-1978
Massachusetts	1971[b]	---
Michigan	1972[b]	1973-present
Minnesota	1971[b]	1974-present
Mississippi	1979[d]	1976-1981
Missouri	1979[c]	1979-1981
Montana	1975[b]	1974-1980
Nebraska	1979[b]	1973-present
Nevada	1971[b]	1974-1980
New Hampshire	1979[b]	1973-1979
New Jersey	1971[d]	1974-present
New Mexico	1978[d]	1973-present
New York	1964[b]	1974-1979
North Carolina	1978[b]	1973-1982
North Dakota	1971[b]	1974-1981
Ohio	1975[c]	1974-1978
Oklahoma	1971[d]	1974-present
Oregon	1971[c]	1974-1979

(Continued)

TABLE 2. (Continued)

State	Year of CON Enactment	Year of Section 1122 Agreement
Pennsylvania	1979[c]	1973-1981
Rhode Island	1968[d]	---
South Carolina	1971[b]	1974-1981
South Dakota	1972[b]	---
Tennessee	1973[b]	---
Texas	1975[b]	---
Utah	1979[d]	1975-1979
Vermont	1979[b]	1975-1979
Virginia	1973[b]	1973-1978
Washington	1971[d]	1974-1980
West Virginia	1977[d]	1974-present
Wisconsin	1977[b]	1973-1978
Wyoming	1977[b]	1974-1979

SOURCE: Department of Health and Human Services, Bureau of Health Planning, data supplied to CBO.

a. See text below for discussion of Section 1122 review.

b. In conformance with the 1974 act only.

c. Not in conformance with federal requirements under either the National Health Planning and Resources Development Act of 1974 or the 1979 amendments.

d. In conformance with both the 1974 act and the 1979 amendments.

The requirement for CON review followed enactment of a similar program for Medicare and Medicaid. Section 1122 of the Social Security Amendments of 1972 authorizes the Secretary of Health and Human Services to enter into voluntary agreements with states to review proposed hospital capital expenditures. Hospitals proceeding with disallowed projects are denied interest and depreciation reimbursement under Medicare, Medicaid, and the Maternal and Child Health programs.

Although these programs are similar, the constraint imposed by CON review is, in theory, stronger than that of Section 1122 review and most states currently operate only CON review (see Table 2). First, CON review requires prior approval for licensure whereas Section 1122 review disallows federal funds only when an application is disapproved; if no action is taken, reimbursement must be granted. Second, Section 1122 review is important only to those hospitals with a relatively large proportion of patients who receive federal health benefits, whereas licensure applies to all facilities. Finally, the sanction associated with Section 1122 review applies only to depreciation and interest reimbursement, while failure to comply with CON review can lead to loss of the facility's operating license.

Some states, however, preferred Section 1122 review to CON review. These states thought licensure denial was too drastic a measure to invoke against a hospital that proceeded with a disapproved project. Because of Section 1122's less stringent sanctions, boards might be more likely to disapprove projects under this program.

Federal Requirements for CON Review

The federal law requires that CON programs conform to federal regulations regarding the kinds of facilities covered, the types of projects subject to review, and the review process. CON approval is required for private, public, and psychiatric hospitals; nursing homes; ambulatory surgical centers; and rehabilitation facilities. Review is mandated for projects with capital expenditures over $600,000, equipment purchases over $400,000, and new services generating annual operating costs of $250,000 or more.[8] CON legislation must also apply to the acquistion of existing facilities if changes will be made in the number of beds or services.

Most states are not yet in compliance with all federal requirements, however, and the types of facilities and expenditures

8. These thresholds were raised in the Omnibus Budget Reconciliation Act of 1981 from $150,000 for equipment and capital and $75,000 for operating costs.

covered by CON laws vary among states.[9] There does not appear to be any single barrier to compliance. States differ in the threshold they set for projects requiring review and in the administrative process of review--for example, the number of agencies involved in review. In addition, most state laws include "grandfather" clauses, which exclude certain projects from review in the early years of enactment.

Finally, the 1974 planning act, as amended, designates a series of criteria to be applied by planning agencies in review of CON applications. These criteria are in keeping with the national health priorities and include the relationship of the proposal to the health plan, the availability of cost-effective alternatives, and the potential effects of the project on quality, access, costs, and competition. In order to promote competition, the 1979 amendments require that HMOs, which have been shown to use fewer hospital services, must be exempt from CON review under certain conditions.[10]

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9. As of October 1981 only 12 states were in full compliance. Another 28 states are in compliance with the 1974 act, but not the 1979 Amendments (see Table 2). For most states the deadline for compliance was January 1982, but the date for applying penalties was recently extended to January 1983. At that time, states not in compliance can lose funds for various health programs, including manpower training and mental health programs.

10. Inpatient facilities controlled or leased by an HMO are exempt if three-quarters of the facility users are enrollees.

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CHAPTER III. THE EFFECTIVENESS OF HEALTH PLANNING AND PROGRAM PROBLEMS

The first section of this chapter analyzes evidence of the effectiveness of the current health planning program by examining the results of studies of certificate of need (CON) review. The second section discusses problems with the health planning program. Some of these could be ameliorated through changes in the present program. Other, more general, problems would be more difficult to solve through program changes.

THE EFFECTIVENESS OF THE HEALTH PLANNING PROGRAM

Although the 1974 planning act specifies numerous goals, cost containment has been the focus of most health planning evaluations for three reasons. First, rising hospital costs have been an issue of major importance to the federal government in recent years, particularly concerning the level of Medicare and Medicaid outlays for hospital care. Second, the success of health planning in meeting the cost-containment goal is relatively easy to measure by statistics such as growth in the number of hospital beds, total hospital expenditures, and use of hospital services.[1] The effect of planning agencies on other goals, such as improving the quality of care and shifting investments toward needed services, usually cannot be determined, because the results themselves are difficult to measure and because the effects of planning are difficult to separate from those of other factors, such as improved insurance coverage and advances in medical treatment. Finally, because CON review--the major cost-containment tool available to planning agencies--existed in many states prior to passage of the 1974

1. The major evaluations of CON review have focused exclusively on short-term stay general hospitals. The effects of CON review on other health facilities has not been examined to the same degree. One study, however, presented some evidence from case studies that states have used CON review to limit growth in the supply of nursing home beds to contain Medicaid costs. See Judith Feder and William Scanlon, "Regulating the Bed Supply in Nursing Homes," Milbank Memorial Fund Quarterly (Winter 1980), pp. 54-88.

planning act, there has been more time for evaluation of this program than for other activities of planning agencies.

Econometric studies of CON review have attempted to measure differences in hospital investment and costs in states before and after enactment, and differences between states with and without such programs. The studies that examined interstate variations attempted to account for other differences that might affect hospital expenditures, including population, supply of physicians, construction costs, the number of health facilities, and other cost-containment programs, such as Section 1122 review and state rate regulation.

Effects of State CON Review on Cost-Containment Goals

Although available evidence does not support the hypothesis that CON review has limited growth in hospital costs, total investment, the number of hospital beds, or hospital use, these results must be interpreted with caution. First, the studies do not directly evaluate the federal program, because most of the CON experience studied reflects investment decisions made prior to its implementation. Funding for Health Systems Agencies (HSAs) and state agencies did not begin until fiscal year 1976, and in the first few years most resources were spent in staffing agencies, selecting governing boards, and developing the initial health plan. In addition, federal guidelines for CON review decisions were not final until April 1978. Furthermore, many projects completed in the early years of a CON program were not subject to review because of long lead times in hospital construction and grandfather clauses in many state laws which excluded certain projects from review.

The federal planning program may have led to improvements in state CON programs that would not have been measured in these studies. Federal requirements and financial resources may have strengthened state CON review programs. For example, the data collection and technical assistance provided by state and local health plans may have improved CON decisionmaking and increased agency effectiveness.

Second, these results do not rule out the possibility that a few individual state programs have been effective. Because of difficulties in measuring differences among programs, any effects are averaged over all CON states, so that any successes in states

that were more active in attempting to contain costs could have been diluted by the absence of effects in other states.

Third, the studies also have technical limitations. One problem is that during the years covered by the studies many of the states that did not have CON review--the control group--had Section 1122 agreements. To the extent that Section 1122 programs were effective, the studies would have understated CON effectiveness. Many consider Section 1122 review to be a relatively weak program, however. Other problems relate to the measurement of hospital investment and costs. Finally, each study also has limitations specific to its own data and methodology that are discussed in Appendix B.

Of the numerous studies evaluating the effects of CON review on hospital investment and costs, two dominate discussion because of the time period covered, the quality of the data used, or the comprehensiveness of the analysis. They are the studies by Frank Sloan of Vanderbilt University, and Policy Analysis, Inc. and Urban Systems Engineering.[2] These studies are highlighted in the following discussion, but results from others are noted where appropriate. Appendix B presents more details of these studies.

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2. Frank A. Sloan, "Regulation and the Rising Cost of Hospital Care," Review of Economics and Statistics (November 1981), pp. 479-487; Policy Analysis, Inc., and Urban Systems Research and Engineering, Inc., Evaluation of the Effects of Certificate of Need Programs (prepared for the Bureau of Health Planning and Resources Development, August 1980). Although the study by Policy Analysis has been criticized, another study using essentially the same data had similar results. See Frank A. Sloan and Bruce Steinwald, "Effects of Regulation on Hospital Costs and Input Use," Journal of Law and Economics (April 1980), pp. 81-109. The Policy Analysis study is used here because it is more comprehensive and has an additional year of data. A study by David S. Salkever and Thomas A. Bice, Hospital Certificate-of-Need Controls: Impact on Investment, Costs, and Use (Washington, D.C.: American Enterprise Institute, 1979), is widely discussed elsewhere, but not in the body of this report, because the data used were for the very early years of CON review, 1968-1972. It is discussed in Appendix B.

Effects of CON Review on Hospital Costs. There is no evidence that CON review has limited the growth in hospital unit costs.[3] The hypothesis that CON review constrains hospital costs was tested in both of the major studies discussed above, as well as several others using various types of data and definitions of CON activity. These studies examined the effects of CON review on various measures of expenses per admission and expenses per patient day.

A problem with using unit cost measures is that the growth in costs associated with increased hospital beds would not be accounted for in these studies. Preventing the so-called "Roemer effect" of increased use resulting from additional beds is the primary means by which CON review attempts to control growth in hospital costs.[4]

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3. One study suggested that when CON approval was linked to Blue Cross reimbursement, costs per admission were slightly lower. The Blue Cross program in these areas is similar to Section 1122 review. See Frank A. Sloan and Bruce Steinwald, "Effects of Regulation on Hospital Costs and Input Use," p. 99.

   A study by Gerard Anderson, "Variations in Per Capita Community Hospital Expenditures, 1978" (unpublished) has been used as evidence that CON review has constrained costs. The CON variable was used only as a control variable, however, and the author did not intend his work to be a test of the effects of CON review. The data used were at the HSA level, but were only for one year, and therefore cannot show changes because of the implementation of CON.

4. A study that examined growth in hospital costs per capita, which is a better test of the effects of CON review than the unit cost variables used in other studies, had somewhat encouraging results, although the measure of CON review used makes them inconclusive. This study was primarily an analysis of state hospital rate-setting programs, but included measures of individual state CON review programs. The results varied widely, but, in general, CON review appeared more successful in restraining growth in costs per capita than costs adjusted for admissions or patient days. The individual state CON programs showing effects varied across

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Results from a recent study suggest that, although CON review does not appear effective in slowing the growth of hospital costs when measured alone, it may be effective in conjunction with other regulatory programs. This study found that those states with a strong commitment to cost containment have been successful in restraining growth of per diem hospital costs.[5] The study analyzed interaction effects in states with several stringent regulatory programs, including CON review, Section 1122 review, hospital rate review, and Blue Cross requirements for hospital conformance with CON or 1122 review.

Effects of CON Review on Hospital Use. Although CON review would be expected to limit the growth in hospital use by restricting the availability of beds and services, the one study that tested for such an effect did not find one.[6] An earlier study found that CON review had reduced hospital use, but because the data covered only very early years of CON review, the results are not conclusive.[7]

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4. (Continued)
equations, however, which makes the results difficult to interpret. See Craig Coelen and Daniel Sullivan, "An Analysis of the Effects of Prospective Reimbursement Programs on Hospital Expenditures" Health Care Financing Review (Winter 1981), pp. 1-40.

5. Nicole Urban and Thomas W. Bice, "Measuring Regulation and its Effects on Hospital Behavior" (University of Washington, September 1981, unpublished).

6. Frank A. Sloan, "Regulation and the Rising Cost of Hospital Care," p. 486. A study using data for the years 1975-1979 found CON review had no effect on growth in adjusted patient days. See Paul L. Joskow, Controlling Hospital Costs: The Role of Government Regulation (Cambridge, Massachusetts: MIT Press, 1981), p. 160.

7. This study found that from 1968 to 1972, CON review programs reduced patient days between 2.5 and 9 percent. Long lead times in hospital construction and grandfather clauses in many CON laws make these results from the early years of CON review questionable, however. See David S. Salkever and Thomas A. Bice, Hospital Certificate-of-Need Controls, p. 69.

Effects of CON Review on Capital Expenditures. CON review does not appear to have restrained growth in total hospital investment or the number of hospital beds.[8] The effect on hospital investment was examined in both of the major studies discussed earlier. Growth in total assets, net plant assets, and assets per bed were employed as measures of investment.[9]

Two problems result from the measures of investment used in these studies. First, using the change in assets as a measure of investment can underestimate or overestimate true investment. The inclusion of depreciation in asset data can underestimate hospital investment. If capital is written off at a rate faster than its true decline in usefulness, the total change in net plant assets will appear lower than it would if the level of operating capital were being measured. Donations and other increases in hospital assets can overestimate investment. If these funds are not used to increase operating capital, the increase in net plant assets overestimates the additional resources available for operating hospital services. A second problem in the measurement of investment is that widely acknowledged errors in the asset data used in these studies reduces the likelihood of finding small effects on investment, although the results would not be biased.

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8. Case studies have suggested that CON review has constrained hospital investments in some states. For example, a study of the Massachusetts program suggested that CON review had reduced the rate of hospital investment as measured by gross building and equipment assets per bed. The study found that those hospitals that had a relatively greater number of proposed investment expenditures denied by or withdrawn from CON review had relatively lower rates of actual investment, but the magnitude of the difference was small. The result is weak because it was based only on data measuring actual investment for one year, although the CON variable covered a four-year period. In addition, the study assumed that all project withdrawals were a direct result of CON review, which might not have been the case. See Alvin Eugene Headen, Jr., "Measuring the Effect of Economic Regulation: Certificate of Need Regulation of Hospitals in Massachusetts 1972-1978" (Ph.D. dissertation, Massachusetts Institute of Technology, 1981).

9. Policy Analysis, Inc. Evaluation of the Effects, vol. II, pp. 97-143; and Frank A. Sloan "Regulation and the Rising Costs of Hospital Care," unpublished version.

Some studies suggest that hospitals have increased capital investment in anticipation of imposition of CON review, but this conclusion is probably not warranted.[10] They have inferred that an increase in the ratio of total hospital assets to total beds in the year prior to adoption of CON review indicates anticipatory behavior. Given the lead times required for hospital construction and purchase of major pieces of equipment, however, anticipatory behavior is not likely to show up until well after the adoption of CON review. A more likely explanation would be the reverse--that a spurt in hospital capital spending led to passage of the legislation.

The conclusion that CON review has led to increased hospital investment for other equipment can also probably be discounted, although it has a strong analytical basis. One study concluded that CON review led to substitution of investment in other assets instead of hospital beds, but its result is questionable because it used data only for the early years of CON review.[11]

Some have pointed to recent declines in construction of health facilities and number of hospital beds as evidence that CON review is effective. Rates of growth for both hospital construction and hospital beds above the federal standard have declined in recent years. Expenditures for health facilities construction, after adjusting for inflation, declined by 36 percent between 1972 and 1980.[12] From 1965 to 1974, the average annual rate of growth in the number of general hospital beds was 2.6 percent. Between 1974 and 1980, this rate fell to 1.1 percent.

Although these declines could be a result of successful CON review, there are other possible explanations, some of which may be more compelling. The decline could reflect an end to the period of rapid hospital expansion that occurred in response to the increased demand for services from the Medicare and Medicaid

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10. For example, see Fred Hellinger, "The Effect of Certificate of Need Review on Hospital Investment," Inquiry (June 1976), p. 187-193.

11. Salkever and Bice, Hospital Certificate-of-Need Controls, p. 45.

12. U.S. Department of Commerce, Bureau of the Census, Value of New Construction Put In Place, Series C-30.

programs. Low occupancy rates might indicate that hospitals have caught up with this extra demand. Also, hospitals might have less capital available for construction projects as a result of reduced federal grants and loans, slow growth in private grants, rising interest rates, and increased debt burdens. State rate setting could also have played a role. As is frequently the case, the lack of a control group makes it different to draw inferences from changes in trends over time.

The major studies found no evidence that CON review reduced the supply of hospital beds. On the other hand, another analysis suggests that, all else being equal, hospitals with the same level of use were found to have a 6 percent lower supply of hospital beds in states with CON review, rate regulation, or both, than in other states. This analysis found that CON review alone also reduced the supply of beds, although the extent of the reduction was not estimated.[13]

Because of the decline in the growth of the number of hospital beds in recent years, the ability of CON review to limit growth in the bed supply may not have been properly tested, however. The difference between the growth rate in states with and without CON review during a period of slow growth is likely to be smaller than during a time of rapid expansion in the bed supply. There is no way of knowing to what extent this factor affected the findings of these studies.

Effects of CON Review on the Proliferation of CT Scanners. Although studies of CON review alone have found no effects, the

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13. Paul L. Joskow, "The Effects of Competition and Regulation on Hospital Bed Supply and the Reservation Quality of the Hospital," Bell Journal of Economics (Autumn 1980), p. 440. The result held when the length of time the CON program was in effect was included as the regulatory variable but not for a dummy variable measure. The 6 percent reduction assumed an average daily census of 200 patients. Data were from a relatively small sample of hospitals in the year 1976. An earlier study, using state-level data from 1969 to 1972, estimated that CON review reduced the rate of growth in the supply of hospital beds between 5 and 9 percent. See Salkever and Bice, Hospital Certificate-of-Need Controls, p. 45. This study used data only from very early years of CON review, and its results must be regarded cautiously.

study that examined the interaction effects of various regulatory programs found that the use of computed tomography (CT) scanner technology was restrained in those states with relatively stringent programs.[14] Although the role of CON review cannot be separated from that of other regulatory programs in this type of analysis, the finding of less use of CT scanners may reflect the contribution of CON review to an overall state regulatory program. Although rate setting could restrain investment by limiting hospital revenues or by excluding unapproved projects from the rate base, CON review has explicit authority to restrict a particular type of investment, such as CT scanners. In many areas, CON review has focused on CT scanners because they are symbolic of the issues involved in the diffusion of costly medical technology, particularly the belief that there is an excess supply of expensive technology which contributes to rising hospital costs.

The evidence from this study and others, however, does not indicate that CON review alone has had an effect on the diffusion of CT scanners.[15] This suggests that the presence of other regulatory programs or a strong commitment to regulation is necessary for successful hospital cost containment.

In addition, although it may indicate a change in the mix of investments, evidence of effects on one type of equipment does not permit inferences to be drawn with regard to total investment. Hospitals may be shifting investments to other equipment rather than reducing overall investment.

Evaluations of the CON Review Process

Some studies have evaluated CON review by considering the results of the review process, but they are of limited use. These findings include the applications accepted, denied, discouraged, withdrawn, or modified.

Data indicate that a very high proportion of CON applications are approved--93 percent of applications and total expenditures--

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14. Urban and Bice, "Measuring Regulation and its Effects on Hospital Behavior."

15. Policy Analysis, Inc., Evaluation of the Effects, vol. III., p. 343-372.

although rates vary by state, type of facility, and type of applications.[16] Renovation expenditures are more likely to be approved than new construction, and applications from hospitals are approved more often than those from nursing homes.

Although information on the results of the CON review process may indicate what kinds of changes in the investment mix, if any, are encouraged by planning agencies, there are three problems with this approach. First, there is no way to measure the impact of planning on the content of the applications. A high approval rate may indicate that an agency does not affect hospital investment, but can also reflect the success of planners in communicating to hospitals which types of projects have a greater chance of approval. Second, applications can be altered or withdrawn for reasons unrelated to planning agency review. Third, relative approval rates may reflect the relationship between agencies and health facilities more than investment patterns. For example, nursing home approvals may be lower because there is not as much pre-application negotiation between nursing home operators and planning agencies as between hospitals and planning agencies.

As a result, there are serious flaws in techniques that use CON program approval rates or the total dollar value of investments denied to measure program success in controlling total investment and hospital costs. These techniques can overestimate the effects of CON review in two ways. First, applications may include a "fudge factor"--hospitals may not expect to get approval for the full amount they are requesting. Second, hospitals may resubmit project applications after having been turned down initially. On the other hand, because deterrent effects are not picked up in this type of analysis, the effects of CON review can be underestimated. Hospitals may not enter the review process or may withdraw their application if approval seems unlikely.

Evaluation of CON Review on the Distribution of Hospital Beds

The little available analysis of the effects of CON review on the distribution of hospital beds is weak. One analysis of county

16. Department of Health and Human Services, Bureau of Health Planning, unpublished data, including applications approved between July 1, 1979 and June 30, 1980, received as of June 1981.

data indicates that, in states with relatively long-term CON programs, the extent of variation in average bed/population ratios across counties declined over time, whereas this variation increased in the other states.[17]

In those states in which the variation was reduced, low-income counties tended to have relative gains in bed/population ratios. This equalizing of bed distribution did not correlate with agency emphasis on distribution, however. States whose agencies stressed better distribution did not show these improvements. Instead, those stressing cost containment achieved results in evening the distribution of beds.

The analysis is weak because it does not control for the effects of other factors. For example, it does not account for the potential effects of rate-setting programs or changes in the supply of physicians. In addition, it does not distinguish changes in the ratio caused by population shifts from those caused by differences in the number of hospital beds. The ratio could have been lowered in some areas because the population increased faster than the supply of beds, for example. Finally, the distribution of hospital beds is often affected by the presence of large urban areas within counties, which would not be picked up in this analysis.

Effects of CON Review on Competition

Hospitals compete for patients in a number of ways, including quality of care, amenities, number of active physicians on their staffs, and prices. Competing through quality care, amenities, or attracting physicians often translates into expenditures for new beds, specialized services, and advanced technology. Given the pervasiveness of third-party reimbursement for hospital care, capital expenditures are a more important means of hospital competition than are prices.

Price and nonprice competition differ in their impact on hospital costs. Price competition would be expected to lower costs, but nonprice competition involves investment that would tend to increase hospital expenses. CON review is intended to control

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17. Policy Analysis, Inc., Evaluation of the Effects, vol. II, pp. 251-259.

hospital costs by limiting capital expenditures, and as a result, to limit nonprice competition. In fact, reducing duplication of hospital services is an explicit goal of the health planning legislation. Health planners see a reduction in this type of competition as an important tool with which to contain costs.

No studies have focused on competition per se, but CON review does not appear to have impeded nonprice competition. Because investments in bed supplies, equipment, and total assets do not appear to have been affected by CON review, there is no reason to conclude that, in the aggregate, CON review has reduced hospital competition.

Some believe that CON review has prevented construction of new facilities and in so doing has stifled potential competition from proprietary hospitals and from alternative health service delivery systems, such as HMOs. Although there is some anecdotal evidence that CON review has favored nonprofit hospitals over proprietaries, it has not been carefully tested.[18] There is no evidence that CON review has impeded the development of HMOs.[19]

If changes were made in third-party reimbursement practices to encourage price competition among hospitals, however, CON review could be an obstacle to lower prices. Under conditions of price competition, if more hospitals offered a particular service, they would have an incentive to lower prices to attract patients. By limiting expansion of facilities and services, CON review could inhibit this type of price competition. Since there are currently few incentives for price competition, this is not a problem at present.

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18. One study found that growth in the number of proprietary hospital beds was on average greater in those states with CON review than those without it. However, this result held only when three states (New York, Massachusetts, and Rhode Island) with relatively stringent CON programs and hospital rate-setting were excluded. See Policy Analysis, Inc., Evaluation of the Effects, vol. II, p. 295.

19. Ibid., p. 330.

PROBLEMS WITH THE HEALTH PLANNING PROGRAM

Two types of problems may limit the success of the health planning program, particularly concerning cost containment:

- o Specific design and implementation problems that could be ameliorated through changes in the current health planning program; and
- o General problems that would be difficult to solve through program changes.

Problems Related to the Current Planning Program

Problems arising from the design and implementation of the current program include unclear goals, limited authority, conflicts with antitrust laws, uncovered projects, and limited benefits from process requirements.

Unclear Goals. It is widely thought that confusion about the mission of the health planning program has limited its effectiveness, or at least has hampered evaluation of its effects. Planning objectives vary across federal, state, and local agencies, among agencies at the same level, and within a single agency.

Statutory requirements and federal management have both contributed to this uncertainty. The planning act lists 17 wide-ranging priorities for the program, including cost control, improved access to services, quality of care, and efficiency in health-care delivery. Delays and changes in developing federal regulations and guidelines have also aggravated the situation. For example, federal guidelines for the development of standards were not final until 1978, although the act was passed in 1974.

An important facet of this confusion is that cost containment has been a much more important goal for the federal government than for most state and local agencies. Many state CON laws are intended to improve the distribution of health services rather than limit investment and total costs. HSAs often emphasize planning goals--developing preventive and primary services, for example--rather than the regulatory function of advising CON review decisions. On the average, less than 20 percent of HSA budgets are used for project review, including CON review. Over half

the budgets are allocated to plan development and implementation, data management, and public education.

Limited Authority. The limited authority of state and local planning agencies under the federal planning program is a serious obstacle to implementation of their health plans. HSAs and state planning agencies have no direct authority to enforce their health plans, but must rely on encouraging voluntary actions by health-care providers, state and local health agencies, and other community organizations. CON review is the only regulatory tool available, and it is a negative authority. Although planning agencies could sometimes influence the content of local grant requests because they were required, until recently, to review proposed use of federal funds for grant applications, they were not the decisionmakers. Similarly, HSAs were required to review the appropriateness of existing facilities, but had no authority to act on their findings unless a facility proposed to expand or replace its facilities or services. Planning agencies usually lack the authority to close unneeded facilities, and cannot require the development of needed ones.[20] They cannot take direct action to improve access to care for those who cannot afford it.

The inability to close facilities has particular implications for areas with declining populations. In urban areas that are losing population to nearby suburbs, excess capacity can result from the building of suburban facilities while the same level of operation in urban hospitals is maintained. At the national level, recent interstate population shifts imply that additional beds will be added in the growing southwestern states, while the Northeast will be left with increasing excess capacity.

Conflicts With Antitrust Laws. The potential application of antitrust action further limits opportunities for planning agencies to encourage voluntary cooperative actions by providers. Hospitals and planning agencies are less willing to participate in shared service arrangements because they fear legal action.

The activities in question include promotion of shared services, joint purchasing arrangements, and mergers, all of which

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20. The 1974 Planning Act authorized funding for area health resources development, which was meant to be seed money used by HSAs to start projects and attract further financial support. No funds were ever appropriated for this purpose.

could be used to restrain competition. Some argue that when these activities are encouraged by planning agencies, hospitals should be exempt from antitrust action. But because no specific exemption was declared in the health planning act, courts have been reluctant to grant them. In a recent decision, however, the United States Supreme Court ruled that such exemptions may be made in some cases.[21]

Antitrust action is traditionally used against agreements among competitors that would lead to higher prices, but cooperative activities by hospitals could lead to lower costs--and potentially lower prices. These arrangements could hold down costs by allowing hospitals to take advantage of discounts in purchasing and eliminating the costs from duplication of underused services.

Uncovered Projects. In some states, CON laws do not require review of equipment or services that have low capital investment, but high operating costs, such as electronic fetal monitors or open heart surgery. Because hospitals can shift investments to uncovered areas, or substitute for capital other inputs that can increase operating costs, such as nursing care, the effect of CON review on total investments and hospital costs is weakened. To the extent that these investments would probably not have the same potential for increasing hospital costs as the disallowed expenditures, they would not be expected to make CON review totally ineffective in restraining growth in costs, however.

Limited Benefits From Process Requirements. Federal process requirements concerning the make-up of HSA governing boards and the comprehensiveness of the health plans have limited potential to improve the success of health planning and may even have negative effects. Compliance with the requirements for a consumer majority that is broadly representative of the HSA population does not ensure that the board will be representative of the community's values in health care, because these are based on factors other than race and income status and because the board is not accountable to the public for its decisions. Even if a governing board mirrors the area's population, the process of planning,

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21. National Gerimedical Hospital and Gerontology Center v. Blue Cross of Kansas City, et al., No. 80-802, June 15, 1981. Although this particular decision appeared to rule against antitrust immunity for health planning, the decision states that such immunity may be granted in other cases.

which contains political elements, can still fail if participants lack commitment. Agency effectiveness may have suffered in some areas because community leaders with the potential to be effective in implementing agency goals have been excluded from participation because of federal requirements for a consumer majority. In addition, recruitment of board members who meet federal requirements absorbs agency staff resources and the time of the governing board.

Similarly, some local planners believe that federal requirements for developing a broad health plan absorb resources that could be used more effectively elsewhere. Although the content of the health plan is not a basis of federal approval, local agencies have felt the need to meet federal suggestions for content and format. This situation has been less true in recent years than it was in the early stages of health plan development, however.

General Problems With Health Planning

Problems that are related to the concept of health planning and would be difficult to solve by changing the structure or implementation of the current program include difficulties in developing and applying standards and with local planning, and costs of CON review.

Difficulties in Developing and Applying Standards. Unfortunately, much of the information necessary to define a population's need for health services is not available. First, detailed data on the health status of local populations often do not exist and would be very costly to collect. Second, little is known about the effects on people's health that changes in various health services would have. For example, the overall health benefits of establishing additional surgical facilities is unknown.

Although this problem exists for providers making independent decisions, it is not as serious for them as it is for planners. Unlike planners, providers are not attempting to coordinate services, and are not expected to present data publicly to justify their decisions.

Because of the lack of objective bases, development of standards is somewhat arbitrary. For example, federal guidelines set

a maximum standard of four general hospital beds per thousand population.[22] The origin of the standard is a 1976 study by the National Academy of Sciences. This study determined that the national bed/population ratio was 4.4 and, citing general agreement that this level was excessive, recommended a 10 percent reduction to four beds within five years, with further reductions later.

As a result of these problems in developing standards, the standard can become the issue during the CON review process rather than the merits of the project. A hospital can argue, for example, that its obstetrics unit is needed, even if it would serve fewer patients than the standard requires.

The applicability of the bed standard is further complicated by varying definitions of "a bed." Hospital beds are usually counted in one of two ways. "Set-up" beds refer to those that are ready to be used. "Licensed beds" often are based on the square footage in the hospital to measure hospital bed capacity rather than available beds.

In addition, minimum use standards can encourage overuse of certain medical technologies. Under these standards, a facility that does not perform the minimum number of radiation treatments or surgeries, for example, will be considered unnecessary. Thus, hospitals and their physicians have a clear incentive to meet the minimum target.

Difficulties With Local Planning. Two problems related to local planning could limit successful cost containment: the lack of local incentives for cost control, and the potential for providers to dominate the planning process. The conduct of CON review at the local level presents an incentive problem because the costs associated with overinvestment are shared by a larger area, including those who use the hospital but live elsewhere, those who share in the higher health insurance premiums resulting from increased hospital costs, and federal taxpayers. Premiums are based on a group's expected use of health services and the expected costs of those services. If hospital costs increase, premiums

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22. This standard can be adjusted upward if more than 12 percent of the population is elderly, if there are unusual and seasonal variations in hospital use, in rural areas, and within some parts of an HSA.

will rise as well. The federal budget absorbs a significant share of these costs through the Medicare and Medicaid programs and through the federal tax exemption for the employer-paid share of health insurance premiums. Because the benefits of additional services--such as perceived quality improvements, additional access, and community prestige--are concentrated in the local area and the costs are diffused, the tradeoff between new medical services and increased costs may not be clear to local reviewers. Although some decisions are made on the basis of cost containment, local planners could be expected to be better at directing resources toward additional services than at turning them down.

In addition to this lack of incentive, even well-intentioned consumer members of the CON review board can be susceptible to provider arguments for better quality care for their area. Hospital administrators and staff physicians are often respected members of the community, and have excellent credibility as a result. Consumer representatives on planning boards, who often have no prior experience with hospital issues, can find it difficult to judge arguments for approval by health care providers, especially when they are based on improving the quality of care. In some cases, hospitals may have advantages of information, expertise, and financial resources to expend in an application request that are not matched by the staffs of the planning agencies.

These problems are not as pervasive at state or national levels, because budgetary pressures provide an incentive for cost control. In 1980 the state government share of hospital expenditures for the Medicaid program was $4.3 billion and federal Medicare and Medicaid payments comprised about one-third of hospital revenue. Private health insurance rates are generally determined by state-wide hospital costs as well, with the exception of premiums for multistate employers.

Local political pressures to approve new projects could affect state decisions, however. Although final decisions are made at the state level, state agencies often rely on HSAs to provide staff work for CON review, and most HSA recommendations are accepted, with state agencies changing only about 4 percent.

Costs of CON Review

The potential of CON review to contain costs is offset by the costs imposed by the process on participating facilities, although

the extent of these costs is not known at present. They include both application costs and costs from project delay.

Costs associated with the application process probably vary considerably across states, hospitals, and individual projects. They include preparation of the application and associated documents and staff time expended in the review process. Hospitals sometimes hire outside consultants to prepare applications. Estimates of preparation costs are difficult to assess because the activities resulting solely from CON review often cannot be separated from those that would have been performed anyway by the hospital in the process of planning capital projects.

Some analysts argue that the delay imposed by preparing for the review process and awaiting CON approval adds to project costs, but these claims may be overstated. During this period, the costs of the project adjusted for inflation probably will not change. While the hospital will have to provide funds to pay for any increased costs, it (or its donors) can earn interest on the equity capital to be used for the project, and do not have to pay interest on the borrowed funds until construction is underway. Because interest rates generally exceed the inflation rate, there will usually be no cost associated with this delay. There may, however, be some cases in which the price increase for the project does exceed the return from investment.

CHAPTER IV. OPTIONS FOR CHANGING THE HEALTH PLANNING PROGRAM

Four broad options are available to change the federal health planning program:

- o End the federal requirement for health planning and eliminate funding for it (Administration proposal);
- o Continue the federal role, either by maintaining the current planning program with modifications to increase the focus on cost containment, or by providing grants to those states that chose to have planning programs;
- o Offer funding for health planning in the context of a broad program of incentives to the states to contain hospital costs and;
- o Limit hospital investment by eliminating tax-exempt bonds for private hospital construction.

END THE FEDERAL ROLE IN HEALTH PLANNING (ADMINISTRATION PROPOSAL)

The Administration's proposal would end federal participation in health planning, as part of an overall strategy to increase competition in the health-care system and to decrease federal spending. Although the Administration has not yet presented a detailed plan, the general approach would encourage price competition among health service providers by increasing the patient share of medical payments, and by encouraging the development of less costly alternative systems for health service delivery, such as Health Maintenance Organizations (HMOs).

The first phase of this strategy, already adopted by the Congress, reduced the fiscal year 1981 appropriation for Health Systems Agencies (HSAs) by $18.8 million from its previous level of $101.7 million. The Administration wanted to eliminate HSAs entirely in 1982, but, under the continuing resolution (Public Law 97-92), the Congress funded HSAs at $38 million. The Admin-

istration proposal for fiscal year 1983 would end the federal planning program, but allow states to continue certificate of need (CON) programs.[1]

Probable Effects on the Health Planning Process

Recent surveys indicate that even without a federal requirement to do so, most states are expected to continue funding CON review.[2] They may do so in order to contain Medicaid expenditures for hospital care, or because they perceive positive effects on the distribution of health-care resources. These states would have to replace federal funds in order to maintain the program at current levels. Other states would probably choose to discontinue CON review programs because they oppose the regulatory approach, because they believe the program does not work, or because replacing cuts in federal funding for other programs would take precedence.[3]

Some state planning activities, in particular gathering data and preparing a state health plan, would be cut back or discontinued in many states. This loss of data might weaken state CON programs. Some state planning agencies expect more court challenges to future CON decisions that are based on outdated health plans.

Of those states continuing CON review, most would not continue to fund local planning, but little is known about many of the effects of this loss of local participation. HSAs vary in their activities, and their effects on the outcome of the planning process have not been measured.

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1. In contrast, The National Health Care Reform Act of 1981 (H.R. 850), introduced by Representative Gephardt, would not allow state CON laws to continue.

2. Alpha Center for Health Planning, Alphawaves (October 1981); and Intergovernmental Health Policy Project, State Health Notes (George Washington University, December 1981).

3. Some states passed CON legislation only to be in compliance with the federal planning law. Alabama and Arkansas, for example, passed CON legislation in 1981 with provisions for automatic repeal if the federal requirement were withdrawn.

Although local input could come from voluntary organizations other than HSAs in some areas, limited resources and the threat of antitrust action could limit their effectiveness. Private initiatives, such as health coalitions funded by businesses and insurance companies, might replace HSA review in some areas. The effectiveness of voluntary planning could be limited since these organizations might not have the resources to fund professional staff and data collection comparable to those of HSAs. In addition, hospitals and other providers would be even more reluctant to engage in mergers or other shared service arrangements under voluntary planning than under the current program. Although there is no explicit exemption from antitrust action under current law, the act does offer some protection.

Effects of the Administration's Proposal on Hospital Investment and Costs

The Administration's proposal would probably not have significant effects on aggregate hospital investment and costs, but could affect the mix and location of projects undertaken. Most states are expected to continue CON review. In addition, there is no evidence that CON review restrains growth in total hospital investment and costs, although studies of state CON programs are limited because they do not incorporate the effects of the 1974 planning act and because of technical shortcomings.

Some informed observers have argued that an end to the federal role in health planning would lead to a surge in hospital investment. They claim that the presence of a federal planning program has signaled hospitals to be cautious in their investment activity, despite the fact that the incentives for investment--third party reimbursement, competition for physicians and the availability of tax-exempt financing--have remained. A survey by the American Hospital Association indicated that many hospitals have a backlog of planned expansions.[4] If the planning program were ended, these observers think that hospitals would carry out more of these projects.

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4. American Hospital Association, Preliminary Report on 1979 Reimbursement Survey (June 1980, unpublished). The report indicated that about 21 percent of hospitals had expansion plans that had been discontinued or postponed.

Two factors may prevent this type of investment boom from taking place, however. First, those states that have perceived some success with CON review--and in which the likelihood of deferred projects is greatest--would probably not abandon it. At the same time, in the states with less effective CON review that would eliminate their programs, there would probably not be a significant backlog of investment plans to be implemented when CON review was removed.

Second, many financial analysts predict limited availability of funds for hospital borrowing, which would dampen an investment boom. Factors contributing to this limited borrowing capacity are high interest rates, recent federal income tax reductions that have reduced both the interest rate advantage of the tax-free bonds that hospitals use and the tax benefits of donations to hospitals, and the fact that many hospitals' balance sheets preclude a major increase in debt.

On the other hand, although an expansion in hospital investment is the less likely scenario, it would be costly if it took place. Increased reimbursement for operating costs as well as interest and depreciation would contribute to higher hospital costs, and higher Medicare and Medicaid outlays.

This option could lead to changes in the types of investments made in those states that repeal CON review. Even if total investment has not been affected, some applications have been altered, withdrawn, or denied as a result of the review process. Consequently, in the absence of a CON program, some investments would be made that had not been made with CON review. Hospitals would no longer have to tailor their investments to match planning agency goals concerning project types and locations. The impact that these changes in the types of investments would have on quality and access to care is unknown.

Potential Effects on Competition

The Administration's proposal to end the federal role in health planning would not have significant effects on competition among hospitals in the short run. There is no evidence to indicate that CON review or other planning activities have impeded competition.

Competition from HMOs could be restrained, however. The 1979 Amendments to the Health Planning Act require that HMOs be exempt from CON review under certain circumstances. Some states are not in compliance with this requirement, however, and with the termination of the federal act, more states continuing CON review might eliminate this exemption for HMOs, thus lessening competition from these lower-cost alternative health service delivery systems.

Finally, it is important to note that some planning agency activities can be complementary to competition. Many HSAs have been involved in direct efforts to stimulate competition, such as assisting in developing HMOs in their areas or publishing physician fee information. Other nonregulatory planning activities, such as identifying needed services, improving access to care, and encouraging preventive health care, for example, would not conflict with efforts to foster price competition. In addition, the data collected by planning agencies could be useful in implementing a competitive strategy.

CONTINUE A FEDERAL ROLE IN HEALTH PLANNING

A second option would continue a federal role in health planning. This could be done by continuing the current program with modifications to increase the focus on cost containment, or by offering federal grants to those states that choose to maintain planning programs.

One reason for supporting this option is that the effectiveness of the federal health planning program in fostering cost containment has not been adequately evaluated. In addition to having technical flaws, evaluations of CON review have focused on the experience that either preceded the 1974 act, or occurred too soon after to have been influenced by it.

A second reason is that, because the federal government benefits from any successful planning efforts, it should share in the funding of these programs. Although studies have not found significant aggregate effects of CON review on reducing hospital costs, to the extent that some states are successful, the federal government benefits by reduced Medicare and Medicaid outlays--about 32 percent of any cost reduction.

It is not known, however, whether savings from continuing a federal role would exceed the costs of funding the program. Studies have not found evidence that CON review reduces costs, but because the planning program is relatively inexpensive, the effects necessary to achieve federal savings that cover the costs of the program are small--possibly too small to have been isolated in econometric studies. For example, in fiscal year 1981, the savings necessary to cover the federal costs of the health planning program amounted to less than 0.2 percent of total community hospital expenditures. This small an effect may fall within the range of statistical error in the analyses of CON review.

A third reason for maintaining a federal role in planning relates to the distribution of services rather than cost containment. Hospitals with the best financial situation would have the easiest access to funds, regardless of how well their investment projects reflected local priorities, a problem that could be exacerbated by the predicted tight credit market for hospitals. In addition, the cutbacks in data gathering and analysis expected without federal funds would weaken the information base used in CON review to determine which projects are most needed.

Continue Current Policy with Program Modifications to Emphasize Cost Containment

One option to continue a federal role in health planning would maintain the current health planning program, but make changes to focus agency activities on cost containment. This approach would attempt to strengthen the program by addressing directly the problems of unclear goals and burdensome federal requirements that might have limited the effectiveness of health planning in containing costs.

On the other hand, federal program changes might not increase the success of CON review in states that do not have a strong commitment to cost containment. In addition, some of the activities at which planning agencies have been successful would probably be abandoned if cost containment were the single focus.

Modifications that might increase the effectiveness of health planning in restraining growth in hospital investment and costs include:

- Make cost containment the major program goal;
- Change CON review requirements;
- Alter federal process requirements;
- Consolidate HSAs or planning functions; and
- Grant an antitrust exemption.

Make Cost Containment the Major Program Goal. Local agencies might be more effective in containing costs if the priorities stated in the planning act were altered to reflect an explicit federal emphasis on this goal. The current broad mandate has led many agencies to spend most of their resources on other activities.

Change CON Review Requirements. Some changes in the CON review requirements might make the process more effective by targeting review only on those projects that have potentially high costs. These changes could include raising the dollar thresholds for review of capital, equipment, and services spending, and excluding from review proposed projects that do not involve medical services, such as parking garages.

These changes--some of which are already being made in some states--would reduce the number of proposals reviewed, and allow for more careful consideration of those projects that would have the most potential to affect hospital costs. The staff resources needed for CON review might also be reduced, and hospitals would save by having to prepare fewer CON applications.

Alter Federal Process Requirements. Federal process requirements could be changed, including those to prepare comprehensive health plans and those to ensure representative membership on the planning board. The Congress recently took a step toward reducing federal requirements by allowing the Secretary of Health and Human Services to waive the requirements for proposed use of federal funds and appropriateness reviews (Public Law 97-35).

If the federal requirements for broad local health plans were changed, HSAs would be able to focus on cost-containment issues only. Some HSAs argue that staff resources devoted to developing plans to meet the broad requirements of the planning act could

have been better used to implement the agency's goals, such as recruiting physicians or reviewing CON applications. Health plan requirements could be altered by requiring development of a health plan focused only on goals and strategies to reduce costs, and to provide data and analysis directly applicable to CON review. Similarly, many planners believe that requirements to prepare annual implementation plans could be dropped without lessening the usefulness of the health plans.

Eliminating the requirement for broadly representative HSA governing boards could save staff resources currently used to recruit such boards, and might improve the effectiveness of some agencies. Compliance with this requirement does not ensure that the boards reflect community values in health care, because these are based on factors other than sex, race, and income status and because, whatever their composition, the boards are not accountable to the public for their decisions. Moreover, some health planners believe that this requirement has sometimes excluded community leaders able to implement health planning goals. In these cases, some HSAs might be more effective if the requirements were abandoned. On the other hand, some contend that abolishing this requirement might reduce the broad representation of interests and, particularly, consumer contributions to health planning--a key aspect of the planning process.

Consolidate HSAs or Planning Functions. In some states consolidating health systems areas would reduce the number of HSAs. This could be accomplished either by raising the maximum population level for an HSA from the current 3 million, or by raising the minimum above 500,000. This action would reduce costs and eliminate some duplication of effort caused by having many HSAs in one state.

This proposal might, however, reduce the effectiveness of HSAs. Larger health systems areas would contain populations with more diverse health needs, requiring more resources to assess needs and develop strategies for meeting them.

An alternative strategy would consolidate activities rather than agencies and would avoid the loss of local focus associated with combining HSAs. For example, a single statewide staff could serve all HSAs in CON review or in data gathering, but individual planning boards could carry out activities particular to local circumstances, such as encouraging development of mental health services in areas of need.

Grant Antitrust Exemption. An explicit exemption from antitrust action might be granted to those cooperative arrangements among health facilities approved by planning agencies. This might facilitate efforts by planning agencies to encourage mergers, shared service arrangements, and other cost-saving cooperative endeavors. This provision would also further discourage disapproved consolidations.

On the other hand, an exemption dependent on HSA approval would significantly enhance the power of agencies that are not directly politically accountable. If provider influence was particularly strong in some HSAs, such authority could be misused. Also, the Congress has rarely acted to grant blanket exemptions from antitrust law.

Provide Grants and Technical Assistance to State Planning Programs

A second way to maintain a modified federal role in health planning would be to provide grants and technical assistance to states choosing to continue their planning programs. Unlike the first approach, those states that are not interested in health planning would not have to maintain programs.

The advantage of this option is that it would provide financial assistance to states with relatively successful planning programs and a desire to retain them. Without such funding and faced with widespread federal budget cuts, these states might choose to use their limited resources to replace federal funds for other programs instead. Other states, which might prefer to end their current programs, might choose to initiate new planning programs if less restrictive federal grants were available.

On the other hand, federal grants might not change the number of states continuing health planning, or the effectiveness of the programs. In addition, difficulties in maintaining regional planning is a drawback to this proposal. The fifteen planning areas that cross state boundaries--often major metropolitan areas--could present a problem if the states involved did not all agree to maintain planning programs.

Federal grant money could be allocated to states in several ways. Grants could be awarded competitively, based on review of health plans and proposed activities. Alternatively, funds could be included in a block grant to be used for cost-containment pro-

grams of the states' choice, including health planning. Another means of awarding grants would be by formula, based on state population.

Health planning could also be partially funded by other payers of hospital costs. One way to implement such financing would be for state law to require hospitals to contribute to a fund for health planning. In this way, those who pay for hospital services and stand to benefit from successful cost containment would contribute proportionately to funding the planning program. The federal government could contribute by including its payments as allowable costs for reimbursement under Medicare and Medicaid.

ENCOURAGE STATE HOSPITAL COST-CONTAINMENT PROGRAMS

This option would focus on hospital cost containment by including federal funding in a broad performance contract to encourage state programs for this purpose. Under this option, states that held growth in hospital costs to a predetermined level would receive a share of the resulting federal Medicare and Medicaid savings. Each state would be free to select its preferred cost-containment method--rate setting, CON review, voluntary programs, or a combination of these.

In the aggregate, state cost-containment programs have successfully restrained growth in hospital costs. States with mandatory rate-setting programs experienced a 48 percent increase in per capita community hospital expenditures between 1976 and 1980, compared to a 68 percent increase for those without such programs. In some states, voluntary arrangements among providers or insurers have also limited growth in costs.

For states that chose CON review, this strategy could include federal requirements to encourage competition and comprehensive planning. To foster competition, for example, HMOs and other cost-saving systems for health-care delivery could continue to be exempted from review in state CON laws. To encourage comprehensive planning, CON review decisions could take place within the context of an overall plan setting forth state needs and priorities for hospital services.

The effects of this proposal would depend upon how states responded to the financial incentive. States that have substantial Medicaid hospital expenditures might not need federal encouragement to institute cost-containment programs, particularly with the

recent cuts in federal Medicaid funding. Other states might not respond to the incentive because they do not want to impose regulatory programs or do not have a hospital industry capable of operating a successful voluntary program. If more states are in the latter category, this option would simply replace state spending with federal spending, because federal payments would be made primarily to the states that had cost-containment programs before the incentive was instituted. In these circumstances, this strategy would have little or no effect on hospital costs.

ELIMINATE TAX-EXEMPT BONDS FOR PRIVATE HOSPITAL CONSTRUCTION

Although this option would not directly affect the health planning program, it would further the goal of reducing hospital costs by eliminating federal tax subsidies for private hospital construction. Currently, about half of all hospital construction is financed by tax-exempt bonds. Eliminating the tax exemption would increase federal revenues by about $1.8 billion between fiscal years 1983 and 1987, although roughly one-third of these savings could be offset by higher outlays for Medicare and Medicaid.[6]

Eliminating tax-exempt bonds would reduce total hospital investment. Some hospitals would not be willing or able to pay the higher interest rates needed to attract lenders if the tax-exemption was removed. Furthermore, the higher required repayments would reduce the amount of funds that hospitals could borrow.

Another reason for eliminating tax-exempt hospital bonds is that it is an inefficient way to subsidize hospital investment. The amount of tax benefits received by the lenders exceeds the interest savings to the hospitals by about 33 percent.

This option is not a substitute for CON review, however, because of its lack of targeting. While total investment would be reduced, projects that might have been rejected by CON review could be carried out. At the same time, hospitals would have difficulty financing needed investments. The hospitals most affected would be nonprofit institutions that have little access to other financing, in particular, those with a relatively high proportion of Medicare and Medicaid patients. Proprietary hospitals, which are already restricted in their use of tax-exempt bonds, would be least affected by this proposal.

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6. Decreased investment caused by higher interest rates could reduce this offset somewhat.

APPENDIXES

APPENDIX A. DEVELOPMENT OF THE FEDERAL ROLE IN HEALTH PLANNING

Federal participation in health planning evolved over the past 35 years from encouraging voluntary efforts to develop health facilities to planning for a broad range of health resources with controls on investments by health facilities. The most significant predecessors to the current planning program were programs initiated under the Hospital Construction and Survey Act of 1946, known as Hill-Burton, and the Comprehensive Health Planning (CHP) Act of 1966. These were both ended as separate programs in 1974.[1]

Hill-Burton

The Hill-Burton program, which provided funds for hospital construction in underserved (primarily rural) areas, set up a planning process to assist in the allocation of funds. States were awarded grants first to organize planning councils to survey the need for hospital beds and then to carry out construction in accordance with the plan.

Between 1946 and 1965, planning under Hill-Burton essentially involved the application of a formula based on population

1. In addition to CHP and Hill-Burton, the Regional Medical Program (RMP) and Experimental Health Services Delivery Systems (EHSDS) programs were consolidated into the 1974 Act. The RMP, enacted in 1965, set up regional planning centers to coordinate research and treatment for heart disease, cancer, stroke, and kidney disease. The program funded continuing education, development of emergency medical services, and aimed to improve access to treatment in underserved areas. The EHSDS program, begun in 1971, was intended to fund efforts by community coalitions of providers, insurers, and consumers to reorganize local health systems. The program received little funding, however. At its peak, only 19 grants were made, and there was often overlap with CHP and RMP agencies.

density.[2] Other factors influencing demand for hospital care, such as the size of the elderly population and the extent of third-party coverage, were not considered. In 1965, a new formula was adopted, incorporating projected population levels, rates of hospital use, and target occupancy rates--80 percent for general hospitals and 90 percent for long-term care facilities.

The Hill-Burton program has been credited with increasing the availability of hospital beds, particularly in low-income states. Between 1946 and 1974, Hill-Burton funded about 496,000 inpatient hospital beds and 3,450 outpatient units. The $4.4 billion spent between 1947 and 1975 comprised about 15 percent of total hospital investment.[3]

In the 1964 amendments, Congress expanded Hill-Burton planning efforts by authorizing funds for voluntary local planning boards in addition to state planning activities. These boards, composed of community leaders and health-care providers, were generally active in major metropolitan areas. They focused on encouraging the development of health facilities needed by their communities. Hill-Burton grants were still awarded through the states, however. The 1974 health planning act replaced the Hill-Burton program with one that ended the emphasis on building new inpatient beds.

Comprehensive Health Planning

Voluntary local planning efforts were furthered in 1966 with passage of the Comprehensive Health Planning (CHP) Act, which funded both state and local planning councils.[4] Formula grants were awarded to states; local councils were given federal grants after approval by the state agencies. By 1974, there were 56 state and 218 local CHP agencies.

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2. In relatively densely populated areas, 4.5 beds per thousand were considered necessary, and as many as 5.5 in less densely populated areas.

3. National Academy of Sciences, Health Planning in the United States: Issues in Guideline Development (1980), p. 13.

4. State agencies were known as 314(a) agencies and local agencies as 314(b) agencies.

Both state and local planning councils were required to have representatives of health-care providers and consumers, with the latter constituting a majority, although there were no requirements for selection procedures. The consumer majority was intended to prevent providers from controlling the agency's decisions.

Under CHP, the scope of planning was expanded to include health manpower and services as well as health facilities, which were the exclusive focus of Hill-Burton planning. Planning agencies were directed to assess the health needs of their area and plan for the coordination and development of new services and facilities.

The CHP agencies varied greatly in their activities and success. Some local areas never had agencies; others had very active ones. Only about 79 percent of the population was ever covered by local agencies. Several states made notable efforts to develop a comprehensive health-care plan after a great deal of citizen participation. Some CHP agencies became involved in activities such as developing emergency medical services and encouraging a moratorium on hospital construction until a community plan was prepared. The agencies also commented on proposals for federal health facilities development grants, although they had no authority to approve or deny the grants.

Federal funding for CHP averaged about $22 million over the eight years of its existence, from 1967 through 1974. Local planning agencies received about half the funds and state agencies one-third. The remaining funds were used to train health planners and provide research.

Two serious limitations to CHP were lack of authority and a low level of funding. CHP agencies had no authority to change the health-care system, and had to rely on persuading providers to make the changes they desired. In addition, there was little federal guidance on agency goals and activities, and many agencies never developed health plans.

Limited funding affected the work of both state and local CHP agencies. Funding for state CHP agencies was so low that, for many years of the program, the average state agency had a staff of fewer than five people. Local agencies could afford larger staffs, but federal funding required matching local contributions --which came most often from hospitals. Despite the presence of a

consumer majority on the boards, this dependence on provider contributions probably weakened the ability of the planning agency to make changes that would be undesirable to hospitals.

The National Health Planning and Resources Development Act of 1974

The National Health Planning and Resources Development Act of 1974 and its 1979 amendments consolidated and expanded the federal role in health planning. As in CHP, state and local area agencies were designated to carry out planning tasks. In requiring that all states pass certificate of need legislation in which decisions were based on health plans, the act granted planning agencies authority that was lacking in the CHP program. Also the new program received more substantial federal funding than had CHP. In addition, federal standards and process guidelines gave more direction to planning agencies in the development of health plans than did previous programs.

APPENDIX B. REVIEW OF THE MAJOR EVALUATIONS OF CERTIFICATE OF NEED PROGRAMS

This appendix presents more detail on the evaluations of the effects of certificate of need (CON) review that were cited in Chapter III, including the studies that were highlighted and others. Each study is discussed individually with respect to the data used, the outcomes measured and the problems specific to its analysis.

Sloan Study

A study by Frank A. Sloan stands out because it uses a well-specified model to measure the effects of CON review on several outcomes using recent data and covers a longer time period than many other studies.[1] Regression analysis was performed on state-level data covering the years 1963-1978 to determine the effects of CON review on the growth in hospital expenditures, net plant assets, beds, and hospital use.

Drawbacks include the use of data aggregated at the state level and the absence of data on variation in state CON programs. Data at the hospital level reveals more variation in the factors considered and, therefore, provides more information to the analysis. In this study, CON was measured only as a dummy variable. Mature programs were defined as those over two years old. This is probably too short a period because most observers believe it takes at least five years to staff and establish a program. Sloan reports that attempts to include measures of program strictness based on case studies were not useful, however.

Policy Analysis, Inc.

The study by Policy Analysis, Inc., and Urban Systems Research and Engineering, Inc., is the most comprehensive review of

1. Frank A. Sloan, "Regulation and the Rising Cost of Hospital Care", Review of Economics and Statistics (November 1981), pp. 479-487.

CON programs to date.[2] It includes regression analysis of the impact of CON review on hospital investment, hospital expenses, the distribution of hospital resources, and other outcomes, as well as special studies of CON review processes and case studies of particular technologies. Data used in the study were at the hospital, county, and state levels, for various portions of the period 1963-1976.

The most ambitious aspect of the Policy Analysis study is the development of variables to account for program variation across states. Factor analysis was used to develop variables to measure program "toughness," based on onsite observations of four variables: program objectives, such as cost containment, distribution, or some other goal; whether review decisionmaking was centralized or decentralized; the stringency of CON review standards; and whether there were legislative exemptions from CON review for some projects.

For the most part, program characteristics did not seem to influence estimates of the effects of CON review on hospital investment or costs. One exception to this result was that programs characterized as relatively constraining were found to have relatively high rates of hospital expenditure growth--a result opposite to what would be expected--when using county-level data for the years 1972-1976. This could be, however, because initial state conditions were not taken into account; many of these states had CON programs implemented before 1972, and may have had relatively higher rates of hospital expenditure growth before the program was adopted.

Another exception to the lack of findings for program characteristic variables was that states in which the state planning agencies played a more significant role in CON review than local agencies were found to have a restraining effect on hospital costs at the county level. This result held only for equations measuring hospital expenses per admission and not for hospital expenses per patient day, however.

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2. Policy Analysis, Inc., and Urban Systems Research and Engineering, Inc., Evaluation of the Effects of Certificate of Need Programs (prepared for the Bureau of Health Planning and Resources Development, August 1980).

Program characteristics were also relevant in the distribution of hospital beds (discussed in Chapter III), but the results again were not in the expected direction. States with programs classified for the study as having cost containment as their major goal were found to have more of an impact on equalizing the bed-to-population ratio across counties than states with distribution as their major goal.

There are reasons to doubt the usefulness of the program classification variables. First, the program characteristic assessments were made subsequent to the period to which the data apply. Changes in the programs in the intervening years would have made these variables incorrect. Second, in one equation, programs in the "other" category were found to have a constraining effect on the growth in hospital costs per patient day. This implies that the variables may not have accounted for the characteristics that determine program success.

Although the Policy Analysis study is the only one to attempt to measure variation in CON review programs, it has been criticized on a number of counts which fall into two general categories. First, the data are from relatively early years of CON review. Second, multicollinearity may have led to an underestimate of the effects of CON review.

Problems With Early Data. Much of the data used in the Policy Analysis study cover only the early years of many CON programs, making it difficult to draw inferences about current programs for two reasons. First, investments resulting from decisions made prior to the implementation of CON review may be included in early data, making the results a less relevant measure of current program effectiveness.[3] Second, because programs have

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3. A case study of Massachusetts found that, for the first two years following enactment of CON review, almost none of the hospital capital expenditures were subject to review because they were for projects already underway when the legislation was enacted. In addition, for three years beyond that, most expenditures were for projects approved in the first two years of program operation, when the review process and standards were still being developed. See Julienne R. Howell, Regulating Hospital Capital Investment: The Experience in Massachusetts (National Center for Health Services Research, March 1981), p. 14-15.

changed over time, in some cases early data are essentially describing programs that no longer exist. Programs may have improved because of changes in the CON law, procedures, staffing, or experience producing successful programs.

The major limitation resulting from a short time frame is that lagged effects cannot be considered. Capital expenditures in a given year often reflect decisions made in previous years. Therefore, many investments made in the first few years of a CON program's existence had not been subject to review. In addition, a recent case study of Massachusetts indicates that hospital investment in that state has followed a 14-year cycle.[4] If this is generally true, using a short time period for analysis would make it difficult to separate changes in investment because of CON review from the investment cycle, although this would not bias the results.

Possible Underestimate of CON Review Effects. A further limitation to the usefulness of the Policy Analysis study is the possibility that the effects of CON review were underestimated. It appears that multicollinearity may have been introduced by the inclusion of several CON variables in the same equation. For example, the bed growth equation included the percentage of the time period in which CON review was in effect; a dummy for the year in which it was passed; and the proportion of time the program had particular characteristics, such as bed standards and exemption of certain projects. The authors report that alternative specifications attempting to reduce this problem did not change the outcome with respect to CON review, however.

Other Studies

Results from several studies other than the three highlighted in the text were reported in Chapter III. These studies are discussed in this section.

Sloan and Steinwald. An analysis by Sloan and Steinwald tested the effects of CON review on a number of variables,

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4. Julienne R. Howell, Regulating Hospital Capital Investment, p. 5.

including growth in hospital costs, investment, and beds.[5] Because it used virtually the same data as the Policy Analysis study (minus the program variation variables and data for 1976), and because the results were not substantially different, it was not one of the studies discussed prominently in Chapter III.

The study found no restraining effects related to CON review from costs, assets, or beds. It did find increases in total costs per adjusted patient day and total beds in the year prior to CON implementation. Because of lags in hospital investment, it is unlikely that this resulted from a deliberate attempt to avoid review.

This study also found that states with relatively new CON programs, defined as those one or two years old, experienced an increase in total costs per admission. Hospitals in states with more comprehensive CON review (review of services and equipment as well as capital) had less of an increase. Again, these increases could result from projects initiated before CON. The study also has potential underestimates of CON effects because of multicollinearity that may have resulted from introducing several CON variables in the same equation.

Coelen and Sullivan. Although a study by Craig Coelen and Daniel Sullivan is primarily an analysis of prospective rate reimbursement programs, it included a control variable to measure CON effects on hospital expenditures.[6] It uses the most recent hospital-level data covering the years 1969-1978. In addition, it is the only recent study to measure effects on per capita hospital costs, that was done at the county level.

The definition of CON review used in the study and the limited range of outcomes considered are drawbacks, however. CON appears only as a dummy variable for individual states, and no measures of program age or other variations were included.

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5. Frank A. Sloan and Bruce Steinwald, "Effects of Regulation on Hospital Costs and Input Use," Journal of Law and Economics (April 1980), pp. 81-109.

6. Craig Coelen and Daniel Sullivan, "An Analysis of the Effects of Prospective Reimbursement Programs on Hospital Expenditures," Health Care Financing Review (Winter 1981), pp. 1-40.

Effects on bed supply or investment were not tested in this study. In addition, the data do not include pre-CON years for those states that began programs prior to 1969.

Salkever and Bice. A study by Salkever and Bice used state-level data for the years 1968-1972 to test the effects of CON review on total hospital investment, beds, assets per bed, hospital use, and costs, including per capita costs.[7] The study found that, although CON review did not limit total investment, it did lead to a decrease in growth in hospital beds and an increase in assets per bed. This study has been widely discussed, and although it provides a careful, comprehensive analysis of CON review, it is less useful than other more recent studies.

The study's major drawback is that the data covered years in which there were few CON programs in effect and all were very young. Consequently, the results must be viewed with a great deal of caution. The impact of CON review may not be felt for years after review begins because of lead times for capital projects, the exemptions granted to certain projects, and the process of staffing and developing a working program.

The study also has some analytical shortcomings.[8] First, the data begin in 1968, and do not include pre-CON review years for a few states. Second, the effects of other regulatory programs were not considered. Several states had rate-review programs during this period.

Joskow Studies. Paul Joskow has prepared two separate analyses of CON review.[9] One study found that CON review and rate

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7. David S. Salkever and Thomas A. Bice, Hospital Certificate-of-Need Controls: Impact on Investment, Costs, and Use (Washington, D.C.: American Enterprise Institute, 1979).

8. For more a detailed critique of the Salkever and Bice study, see Urban Systems Research and Engineering, Inc., and Policy Analysis, Inc., Certificate of Need Programs: A Review, Analysis, and Annotated Bibliography of the Research Literature (prepared for the Bureau of Health Planning, November 1978).

9. Paul L. Joskow, "The Effects of Competition and Regulation on Hospital Bed Supply and the Reservation Quality of the (Continued)

review programs have been successful in limiting growth in hospital bed supply. A second study indicated that overall investment and total hospital expenditures have been unaffected by CON review.

The first study by Joskow is an analysis of hospital bed supply. Using a simple queuing model and data from a small sample of hospitals for 1976, Joskow estimated the effects of CON review and rate regulation on hospital reserve margins. This is defined as the difference between the number of beds and the average daily census of the hospital.

Drawbacks to this study are the small sample size and the potential sensitivity of the outcome to assumptions made in the queuing model. The sample of 346 hospitals is small relative to other studies using hospital-level data. As the author reports, the assumptions used may have over- or underestimated hospital reserve margins. If states with regulatory programs tended to start with higher reserve margins than other states, the results could be biased upward. These assumptions are that hospital use is random over the year; that all types of hospital beds are substitutable; and that there is only one queue for all patients--that is, emergency patients are not treated differently.

The second study, using regression analysis, found no evidence that CON affected the growth of hospital expenditures, personnel per bed, inpatient days, or hospital wages. The data used were for the years 1975-1979 and are aggregated at the state level.

The study is weakened by failure to include pre-experimental data for those states with CON review. The equations contained a lagged dependent variable, which would account for pre-CON conditions, but the data did not cover years without CON review for most states. Twenty-six states had CON programs in place before 1975, when this data began.

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9. (Continued).
Hospital," Bell Journal of Economics (Autumn 1980), pp. 421-447; and Controlling Hospital Costs: The Role of Government Regulation (Cambridge, Massachusetts: MIT Press, 1981).

Urban and Bice. Recent analyses by Nicole Urban and Thomas Bice examined the interaction effects of a number of regulatory programs over the years 1974-1979 on costs, bed supply, and the adoption of computed tomography (CT) scanner technology.[10] The regulatory programs considered were hospital rate setting, CON review, Section 1122 review, Professional Standards Review Organizations, and Blue Cross conformance clauses. The data was aggregated at the level of the health systems area.

The analysis indicated that health systems areas in those states with relatively stringent regulatory activity on some combination of prices and investment or utilization experienced a slower rate of increase in per diem hospital costs than HSAs in other states. These effects were not found on this data using the regression methodology commonly used in other studies. No significant effects were found on growth in inpatient beds, but states with relatively stringent regulatory programs were found to have slower growth in the adoption of CT scanner technology.

The study found that states with tough CON programs tended to be those with rate-setting programs as well. Factor analysis methodology was used to identify those states with relatively stringent regulations in the late 1970s. For CON review, stringency was measured using the variables developed by Policy Analysis, Inc., in their study.

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10. Nicole Urban and Thomas W. Bice "Measuring Regulation and Its Effects on Hospital Behavior" (University of Washington, September 1981, unpublished).