THE HOSPITAL COST CONTAINMENT ACT OF 1977:

AN ANALYSIS

OF THE

ADMINISTRATION'S PROPOSAL

PREPARED FOR THE

SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH

OF THE

COMMITTEE ON HUMAN RESOURCES UNITED STATES SENATE



Printed for the use of the Committee on Human Resources

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1977

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FOREWORD

The costs of health care have risen by thirty-one percent in the last two years and it appears as though these costs will continue to escalate at similar rates in the future unless there is some intervention. In an effort to slow down the growth of hospital expenditures from both public and private sources, the Administration has proposed S. 1391, "The Hospital Cost Containment Act of 1977." The Congressional Budget Office has performed an indepth analysis of this Bill, and I am pleased to have their analysis, in its entirety, printed in this volume. Their perspectives and ideas will prove useful to the public debate of the issues and help pattern our Committee's future legislative activities in this important area.

HARRISON A. WILLIAMS, Jr., Chairman, Committee on Human Resources.

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LETTER OF TRANSMITTAL

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June 10, 1977

The Honorable Harrison A. Williams, Jr. Chairman Committee on Human Resources Room 4230 Dirksen

Dear Pete:

As you know, I introduced President Carter's Cost Control Bill, "The Hospital Cost Containment Act of 1977" (S. 1391), on April 26, 1977. The Administration has expended a great deal of effort developing this proposal, and many features in it would slow down the rising costs of health care.

Shortly after introducing the bill, I asked the Congressional Budget Office to prepare a detailed programmatic analysis of the bill including a detailed financial impact analysis. They have just completed this analysis. Overall their analysis is excellent and should prove to be an important adjunct to any debate on cost control legislation.

1 am hopeful that this important document could be printed in its entirety as a Committee Print.

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Edward M. Kennedy Chairman

Subcommittee on Health and Scientific Research

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THE HOSPITAL COST CONTAINMENT ACT OF 1977: AN ANALYSIS OF THE ADMINISTRATION'S PROPOSAL

PREPARED BY THE CONGRESSIONAL BUDGET OFFICE for the

SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH

June 1977

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PREFACE

This analysis of the Administration's proposed Hospital Cost Containment Act of 1977 (S. 1391 and H.R. 6575) was prepared by the Congressional Budget Office at the request of the Subcommittee on Health and Scientific Research of the Senate Committee on Human Resources. It was written by William L. Dunn and Bonnie Lefkowitz under the supervision of Stanley Wallack and Robert D. Reischauer. The cost estimates were prepared by Jeffrey C. Merrill. The authors wish to acknowledge the research assistance of Mark Chandler, the secretarial assistance of Toni Wright and Norma Leake, and the editorial assistance of Mary R. Boo.

A forthcoming CBO paper, <u>Federal Programs and Their Impact on</u>
<u>Health Expenditures</u>, examines the problem of rising health care costs in a larger context.

In accordance with the mandate of the Congressional Budget Office to provide objective and impartial analysis, this report contains no recommendations. Throughout the text the years referred to are fiscal years unless otherwise noted.

Alice M. Rivlin Director

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In the Hospital Cost Containment Act of 1977 (S. 1391 and H.R. 6575), the Administration has proposed to limit both the revenues and capital expenditures of nonfederal short term hospitals.

Hospitals have been singled out for strong regulation because the total amount paid for hospital care has grown steadily and because the cost per patient day has been increasing at double the rate of overall inflation. Under current policy, the amount paid for care in the hospitals covered by the Administration's proposal is expected to total \$61.3 billion in 1978 and \$104.0 billion by 1982.

Excessive increases in the amount paid for hospital care are thought to be caused by operating inefficiencies, unnecessary growth in the intensity of services provided each patient, and duplicative facilities. These problems result, in turn, from a lack of cost consciousness by physicians and patients and from the fact that the federal government and private insurance plans most often reimburse hospitals on a cost basis. There are no existing federal controls on the total amount paid for hospital care.

Capital spending by hospitals has been singled out along with total revenues because it increases the amount of care delivered and the cost per patient day. Under current policy, capital expenditures by the hospitals covered by the Administration's proposal are expected to total \$8.0 billion in 1978 and \$14.1 billion by 1982.

currently, the primary mechanism to control hospital capital expenditures is the National Health Planning and Resources Development Act of 1974, which requires that by 1980 each state establish a certificate of need program to ascertain the need for major new hospital investments. Of the 32 states that have so far passed certificate of need laws, only five seem to be operating programs that are at all effective.

THE ADMINISTRATION'S PROPOSAL TO LIMIT HOSPITAL REVENUES (TITLE I)

The temporary authority in Title I of the Hospital Cost Containment Act of 1977 would place a ceiling on total inpatient revenues of nonfederal short-term hospitals. Including expected adjustments in the ceiling for admission increases, wage pass throughs and exceptions, the growth in total revenues would be limited to 10.6 percent in 1978 and 8.9 percent by 1981. Revenues in excess of the limits would have to be returned or, in the case of commercial insurers and self paying patients, set aside for use in the following year; they would otherwise be subject to a 150 percent excise tax. Some states would be allowed to continue operating their own hospital cost control programs. The bill specifies that recommendations for permanent reform of hospital financing shall be made by the Secretary of the Department of Health, Education, and Welfare (HEW) by the beginning of March 1978.

Adjustments in the revenue ceiling could be made fairly automatically for small to moderate changes in the volume of admissions.

Those hospitals with substantial changes in admissions or major changes

in capacity or type of service approved by the state agencies that review capital spending, could apply to a federal board for exceptions to the ceiling. A hospital would have to show that the increase in its costs would, without an exception to the revenue ceiling, force it into the lowest 25 percent of all hospitals in terms of ability to pay current liabilities. Upon a hospital's request, increases in the wages of nonsupervisory employees could be passed on automatically to payers. In this case the limit would be calculated only for revenues attributable to other costs.

The Administration's proposed revenue controls offer a number of major advantages. First, and most important, they would produce substantial cost savings as early as 1978, when total anticipated spending would be reduced \$2.4 billion. These savings would grow rapidly in subsequent years, reaching \$18.8 billion by 1982. Federal expenditures for medicare and medicaid would be reduced \$1.0 billion in 1978 and \$8.2 billion by 1982.

Second, the majority of savings would come from greatly reducing the growth in services, which is thought by many to be excessive and the most important source of increases in the amount paid for hospital care. Third, growth in admissions would also tend to decline since the proposal's volume adjustments are structured to encourage hospitals to treat fewer patients. This might address the problem of unneeded hospitalization, another source of cost increases.

Among the other advantages of the Administration's proposal are that it would be simple to administer and could be implemented immediately. In many ways it is the proposal's lack of complexity that leads to some of its shortcomings. While much of the following discussion concentrates on describing these disadvantages, it should be noted that all but one could be addressed by modifications that need not delay the proposal's implementation. Moreover, an approach similar to that taken by the Administration, placing a growth ceiling on the amount spent for care, appears to be the only way of significantly reducing the rapid rise in hospital costs.

The first problem with the Administration's proposal is that, while the growth ceiling should force many hospitals to become more efficient, there would be few specific incentives for efficiency. The only way efficiency would be rewarded would be to let hospitals whose revenues were under the ceiling carry over the surplus to the next year's limit. Because the Administration's proposal would restrict relatively fast growing hospitals, whether or not they are efficient, efficient hospitals might find it more difficult to live within the limit than rapidly growing inefficient ones.

Second, while there would be protection against a hospital's "dumping" patients because their insurance pays less relative to other types of reimbursements, there is no provision to prevent adverse selection by type of diagnosis. A hospital hard pressed by the limit could be tempted to admit more short-term cases that are inexpensive to treat and to direct expensive cases to other hospitals.

Third, the exceptions process would be limited to few hospitals in order to simplify federal administrative procedures. Thus it would

be difficult to deal with problems specific to a particular hospital or with unanticipated price increases that are not systemwide. Faced with such a situation, a hospital might cut back on services, including those needed by the community, such as emergency rooms and outpatient clinics, rather than run down its reserves so as to be eligible for the exceptions process.

Fourth, with only nine months' notice of the imposition of a growth ceiling, some hospitals might experience difficulty early in the proposed program because they will have already committed themselves to expenditures they would have avoided with more notice.

Fifth, hospitals and unions could cooperate in evading the growth limit by alternating a high wage increase that would be passed through in one year with no increase the following year. The second year hospitals could apply the full growth allowance for all revenues to nonlabor purposes.

Alternatives to Title I

Incremental changes can be made in the Administration's proposal or more distinct alternatives could be considered.

Incremental changes in the Administration's proposal would not deal with the issue of efficiency incentives directly, but could address the four other problems discussed above. Such changes include:

- O Dividing hospitals into different classes based on their size and services provided and applying different growth ceilings to each. These changes would recognize the different roles of hospitals and help prevent adverse case selection.
- o Broadening the exceptions procedure to increase its accessibility and relative sensitivity among hospitals. If it were assumed that more hospitals would apply for and receive exceptions, it might be appropriate to adjust the legislated limit downward. For example, instead of an 8.7 percent growth limit and an estimate of less than 1 percent for exceptions, there could be a 6.5 percent growth limit and an estimated 3 percent for exceptions. A broader exceptions procedure would permit the specific needs of individual hospitals to be treated more judiciously.

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- o Combining allowable growth levels for the first two years. For example, using the proposed formula, the legislated limit would be 18.8 percent over two years rather than 8.7 percent in the first year. This would allow hospitals that have already made plans for expansion to better prepare for the revenue ceilings.
- o Making the wage pass through option mandatory for all hospitals. This would prevent hospitals and unions from cooperating to evade the growth ceiling. Alternatively, the pass through could be eliminated.

A major alternative to the Administration's approach is the Medicare-Medicaid Administrative and Reimbursement Reform Act of 1977 proposed by Senator Herman Talmadge (S. 1470 and H.R. 7079), which includes an attempt to improve basic hospital efficiency rather than to impose a growth ceiling on the industry. Only medicare and medicaid reimbursements would be affected, rather than all hospital revenues, and the proposal would focus only on routine costs — the 30 percent of total hospital costs attributable to room, board, and some salaries. An average for routine costs would be established for each type of hospital; hospitals would be paid bonuses if they were below the average, and any routine costs in excess of 120 percent of the average would be disallowed.

Since the Talmadge proposal would require a uniform cost reporting system, it could not be implemented before 1981. Medicare and medicaid savings from these provisions of the Talmadge proposal would be between \$100 and \$400 million in 1982. Cost savings under this approach are low compared to the Administration's proposal but they could be increased by reducing the bonus payments or the 120 percent limit.

The Talmadge and Administration proposals could be integrated so as to retain the advantages of both. If the Administration's revenue controls or a similar program were implemented in 1978, immediate cost savings would result. As soon as there were sufficient data to differentiate among hospitals and types of costs, a method similar to that of the Talmadge proposal could be used to control routine costs of all payers. Routine costs are believed to be most susceptible to efficiency incentives because they are under the control of hospital administrators. A growth ceiling could then be applied to nonroutine costs, in which the greatest growth is occurring.

THE ADMINISTRATION'S PROPOSAL TO LIMIT HOSPITAL CAPITAL EXPENDITURES (TITLE II)

Title II of the Hospital Cost Containment Act of 1977 would provide permanent limits on both capital expenditures by hospitals and beds per 1000 population. Beginning in 1978, no more than \$2.5 billion could be approved nationwide each year for capital expenditures. For the first two years, this limit would be allocated among the states on the basis of population; in subsequent years, other factors could be considered. A standard of no more than 4.0 beds per 1000 persons and at least 80 percent aggregate bed occupancy would be established for each of the nation's 212 health service areas. In areas meeting both bed and occupancy criteria, no certificate of need could be issued for a project that would force the area out of compliance. In areas not meeting both criteria, a certificate of need resulting in additional beds could be issued only if twice as many existing beds were eliminated from the area as a whole.

In states without a certificate of need program, the limit would be enforced through Section 1122 of the Social Security Act. The federal government -- with the advice of states -- could disallow medicaid and medicare reimbursement for 10 times the amount attributable to depreciation and interest for a disapproved expenditure.

The Administration's proposal would address the overall problem of continued growth in capital spending by means of a substantial but delayed cut. Because previously approved construction projects will continue to affect capital outlays for up to three years, the ceiling would result in reducing the \$8.0 billion in 1978 capital spending anticipated under current policy to only \$6.5 billion. By 1982, however, a level of \$4.6 billion could be expected instead of the \$14.1 billion that would otherwise occur. Very roughly, these reductions in capital spending would translate into cost savings to hospitals of \$780 million in 1978 and \$15.1 billion by 1982.

While the Administration's capital expenditure controls would be quite successful in reducing future investment, five problems would remain.

First, the \$2.5 billion limit is not based on an evaluation of need and could restrict necessary and possibly cost saving improvements in future years. Similarly, distribution of the limit by population, though used only in the first two years, might not reflect states' relative need for spending.

Second, while only 17 of the nation's 212 health services areas could build additional hospital beds, the proposal would be less successful in addressing existing excess capacity -- estimated by some at close to 100,000 beds -- or maldistribution. The areas that could expand capacity would nearly all be in the east, primarily because of the effect of the occupancy standard. The other 195 areas that would have to eliminate two beds to add one might simply maintain the status quo. In that case, no shrinkage of the existing system would occur and it would be difficult to reallocate resources.

Third, with tight restrictions on new beds, nearly all new spending would be for plant modernization and equipment, for which it has been difficult to determine need and ultimate cost.

Fourth, strict controls on new services could force some inhospital procedures outside the hospital, where they could proliferate in volume.

Fifth, small investments under the review threshold of \$100,000 would not be controlled and, especially if revenue controls were not enacted, could begin to grow at a faster rate.

Alternatives to Title II

In view of the record of current efforts to control hospital capital expenditures, the Administration's proposal, or similar steps, may be the only way to substantially reduce and redirect the system.

However, such actions would entail many of the risks of regulation, including inflexibility and the elimination of new competition. The following incremental changes could minimize some of the unresolved problems.

- O If one believes that the dollar amount of the proposed ceiling is arbitrary and not related to need, it could be increased now or in the future. Alternatively, an exceptions system could be established that would allow any expenditures in excess of the \$2.5 billion ceiling to be targeted on needed renovation and investments that offer future cost savings.
- The imposition of any ceiling would be facilitated by establishing a multifactor distribution formula immediately, rather than relying on population alone in the first two years.
- O Excess capacity and maldistribution might be addressed more effectively by requiring a lower bed to population ratio in five years and penalizing hospitals and health service areas for any excess capacity. Direct payments could be provided to relieve hospitals of the costs of eliminating beds.

RELATIONSHIP OF REVENUE CONTROLS AND CAPITAL EXPENDITURE CONTROLS

Titles I and II are integrally related and reinforcing. Reductions in capital investment would result in lower operating costs, which should make it easier for hospitals to live within the revenue limit. Because of this interrelationship, the specific limits of the proposal must be consistent. The administration of Titles I and II must also be coordinated. Because states would be the primary administrators of the capital expenditure controls, it may be desirable for them to participate more actively in the federal revenue control program. Even if states did not operate their own cost control programs, they could administer an expanded exceptions process similar to that described as an incremental change in Title I.

The Administration's proposed Hospital Cost Containment Act of 1977 (S.1391 and H.R. 6575) would sharply reduce projected increases in the operating revenues and capital expansion of most short-term care hospitals. Title I of the bill would limit to about 10.6 percent the total increase in hospital operating revenues from inpatient care in 1978; Title II would reduce capital spending for the year to \$6.5 billion, with greater decreases in the future. Without these controls, hospital revenues are expected to rise by about 15 percent and capital spending to total about \$8.0 billion. While the provisions of Title I are labeled "transitional," Title II is intended to provide permanent amendments to existing regulatory efforts.

Short-term hospitals have been singled out for strong regulatory action because of sustained growth in the total amount paid for their services and because the annual increase in the cost of an inpatient hospital day continues to be double the rate of overall . inflation. The amount spent for hospital care has increased as a proportion of total health expenditures from about 30 percent in 1950 to almost 40 percent today. By 1981 hospital care costs are expected to account for over 43 percent of total health expenditures.

The amount spent for hospital care has risen because of increases in cost per patient day and in the number of hospital days. The former factor is much more important, accounting for about 90 percent of the increase. Over the past 25 years, the cost of the average day in a

hospital has gone up ten-fold. Nevertheless, the demand for hospital care has not abated. A major reason for this is the growth in health insurance payments, which now account for 91 percent of all hospital revenues. This high level of third party payments has created a situation in which none of the participants involved in determining the level and type of hospital care -- the patient, insuring agent, physician or hospital administrator -- has an overriding interest in or need to control either per unit costs or total expenditures.

The patient has limited ability to distinguish necessary from unnecessary care. Once in a hospital, he has a strong interest in receiving the best care available. The pervasiveness of insurance coverage has meant that the cost of treatment is of little concern. The insuring agent has usually chosen not to question the value of or need for the services provided. The physician, who acts on the patient's behalf, is inclined to use all the services that will improve his diagnosis and therapy or reduce the possibility of malpractice suits. The hospital administrator is concerned that the quality of care be of a high standard and that his facilities and equipment be such as to attract physicians to the hospital. The administrator is therefore willing to meet physicians' requests to expand the scope and complexity of the services that their institutions provide. This entails little financial risk for the administrator because the majority of hospital insurance payments are based on the costs incurred. If costs rise because of new or more intensive testing, more complex procedures, or more staff, higher reimbursements will be forthcoming.

This unique set of characteristics has encouraged the following hospital and communitywide inefficiencies in the use of resources:

- o <u>Uneconomic hospital operation</u>. Inefficiency occurs when the combination of resources used to provide hospital services is more costly than necessary.
- o <u>Uneconomic provision of services</u>. Inefficiency occurs when services are provided that cannot reasonably be expected to have a medical value that justifies their cost.
- o Excess community capacity to provide general care. Even a carefully operated hospital may be relatively uneconomical if demand is low relative to capacity.
- o Excess community capacity to provide various forms of specialpurpose care. An otherwise economically run hospital may have a special facility that is underutilized because other hospitals in the area have developed the same capability.
- O Excessive utilization resulting from the existence of excess hospital facilities or equipment. Unnecessary hospital admissions and utilization of procedures and equipment may be stimulated by the availability of capacity because no participant is motivated to be cost conscious.

To remedy these problems hospitals must be induced by statute, financial incentives, or public pressure to behave differently. In general, the first two problems show promise of responding to changes in the reimbursement system since both are internal to the hospital. On the other hand, reimbursement pressures on hospitals to correct for underutilization may induce an increase in unnecessary care; therefore, reimbursement practices need to be coordinated with communitywide planning and investment decisions if the last three problems are to be addressed.

The Administration's proposal would place a limit on the operating revenues of hospitals, with the effect that hospital administrators could no longer expect a level of revenues equivalent to costs. The extent to which hospitals would be able to keep their costs in line with the revenue limits would depend on the decisionmaking process within hospitals and on how effective administrators were in gaining the cooperation of physicians, who decide on the level and complexity of care. There is nothing in the Administration's proposal that would necessarily induce physicians to alter their current behavior in the utilization of resources. If physicians did not cooperate, hospital administrators might be forced to cut back on expenditures for community services, which they do control, to stay within the revenue limits.

The Administration's proposal would also impose two new types of capital controls -- a nationwide dollar limit on new capital expenditures and standards for the number of hospital beds and their rate of occupancy. The expenditure ceiling, which would be distributed among states for allocation to individual hospital projects, would significantly reduce hospital capital outlays and, thereby, could lower future hospital costs. The response of the state and local agencies that would allocate the ceiling among hospital projects would determine whether the types of investments made within the ceiling are beneficial.

This paper analyzes the two elements of the proposed Hospital Cost Containment Act of 1977. Chapter I describes Title I, the revenue limitation proposal, evaluates its major features and presents possible

alternatives to the Administration's approach. These alternatives include the approach proposed by Senator Herman Talmadge in the Medicare-Medicaid Administrative and Reimbursement Reform Act of 1977 (S. 1470 and H.R. 7079), which would deny federal reimbursements for unusually high routine hospital costs. 1/ Chapter II discusses Title II, the limitation on new investments, evaluates its major features and presents some alternative approaches. Chapter III discusses the reasons for considering Titles I and II together rather than as separate proposals.

^{1/} For a more thorough analysis of alternative reimbursement reforms and the growth of health expenditures, see Federal Programs and Their Impact on Health Expenditures, CBO Background Paper (forthcoming).

THE ADMINISTRATION'S PROPOSAL

The Administration has proposed in Title I of the Hospital Cost Containment Act of 1977 to place a growth ceiling on the total inpatient revenues received by short-term care hospitals (those with an average length of stay of under 30 days) beginning October 1, 1977. Revenues of federal hospitals, hospitals that derive over 75 percent of their patient care revenue from health maintenance organizations (HMOs), and hospitals that are less than two years old would not be limited by the growth ceiling. The proposal is viewed as transitional and would require the Secretary of the Department of Health, Education, and Welfare (HEW) to submit his recommendations for a permanent remedy by March 1, 1978.

The revenue limit would be applied separately to each type of payer: cost payers such as Blue Cross, medicare, and medicaid; and, a single class known as charge payers that includes commercial insurers and self-paying patients. This would avoid disadvantaging patients of cost payers, who have traditionally negotiated a lower rate with hospitals. The proposal would also require that hospitals maintain their share of charity patient admissions.

Ceiling on the Rate of Growth of Total Revenues

For 1978 the growth ceiling for individual hospitals would be 8.7 percent. The growth ceiling for each year would be determined by a formula containing both an inflation component and a separate allowance for real growth. Because the proposal is intended to deter increases in the number of patients treated, this growth component is considered to be an allowance for increases in the intensity or real level of services provided per admission. The inflation component would be based on the annual percentage change of the Gross National Product (GNP) deflator over the 12 months prior to the end of June in the year in which the control period starts. The intensity component would be equal to one-third of the difference between the percentage increase in total hospital expenditures and the increase in the GNP deflator for the two calendar years prior to the year in which the control period begins. The computation for fiscal year 1978 is shown below:

	<u>Inflation Component</u>	Intensity Component
Growth Ceil 1978	ing = GNP deflator	+ 1/3 (Total hospital expenditures minus GNP deflator)
	(Percentage change 1976-III through 1977-II)	(Percentage change from Jan. 1975 through Dec. 1976)
8.73	= 5.52	+ 3.21

If the Secretary of HEW determined that the rate of increase in the GNP deflator during the control period would be more than 1 percent greater than that computed in the inflation component of the formula, the growth ceiling could be increased.

The limit on total revenues would not be a substitute for existing reimbursement systems; rather, it would be imposed on the existing structure. Hospitals would still be reimbursed on the basis of costs or charges depending upon the method used by the payer. However, both the hospital and intermediaries would be restricted from increasing total hospital revenues by more than the growth ceiling. For example, in the case of reimbursement from a cost payer, if a hospital's costs rose 7 percent, it would get 7 percent greater revenues from the payer but could carry forward the unused 1.7 percent from the 1978 revenue limit. If costs rose 11 percent, the hospital would receive only an 8.7 percent revenue increase from that payer and revenues in excess of the limit would have to be returned to the payer. In the case of charge payers, excess revenues would have to be set aside in an escrow account and applied against the following year's allowable level. Failure to follow these procedures could result in a 150 percent excise tax on the excess revenues.

Adjustments in the Growth Ceiling for Changes in Patient Volume

For increases up to 2 percent and decreases up to 6 percent in the number of patients admitted to a hospital during the year, there would be no change in the revenue limit. However, to allow for more substantial changes in the number of patients admitted, a volume adjustment to the total revenue limit is included in the proposal. For each increased admission between 2 and 15 percent, a hospital's total revenue could be raised by 50 percent of the base period's average revenue per

admission. $\underline{1}/$ Increases over 15 percent would not be reimbursed in large hospitals; in smaller hospitals, the allowance would continue without a cut off because admissions to such hospitals are subject to more variation. $\underline{2}/$

A similar type of volume adjustment would be applied to decreases in admissions. For each decreased admission between 6 and 15 percent, a hospital's total revenue would be reduced by 50 percent of the base period's average revenue per admission. In large hospitals, decreases beyond 15 percent would mean a reduction of the full average revenue per admission. The revenue limit for small hospitals would not be changed for decreases in admissions of less than 10 percent; beyond 10 percent, total revenue would be reduced by 50 percent of the average revenue per admission.

Optional Wage Pass Through

Hospitals could elect to have their limits on revenue increased to the sum of the actual percentage increase of nonsupervisory personnel wages weighted by this input's share of total costs, plus the formula-determined growth ceiling weighted by the remaining share of total costs. Therefore, for 1978 if nonsupervisory workers accounted for 25 percent of total costs and their wages rose by 16.0 percent, the revenue limit would be 10.5 percent (.25 x 16.0% + .75 x 8.7%) rather than 8.7 percent.

^{1/} Fifty percent of average revenue is believed by the Administration to be an adequate measure of the added cost per admission.

 $[\]underline{2}/$ Smaller hospitals are defined as those with fewer than 4,001 admissions annually in the base period.

Appeals for an Exception from the Growth Ceiling

In addition to the fairly automatic adjustments that have been described, a federal review board could increase a large hospital's revenue limit if admissions increased or decreased more than 15 percent, or if there were changes in hospital capacity or services that increased costs by more than the intensity component of the growth ceiling (3.2 percent in 1978). Changes in admissions, capacity, or services would have to have been approved by the state certificate of need or Section 1122 review agency. In order to appeal, the appellant hospital's ability to pay its current liabilities after the change (as measured by the ratio of its current assets to liabilities) would have to be in the lowest 25 percent of all hospitals included in the revenue limit. $\underline{3}$ / Financial distress alone would not be a sufficient basis for appeal.

A successful appeal based upon admission changes alone would result in treatment of the large hospital as a small hospital in calculating the volume adjustment. A successful appeal based on changes in service or capacity would result in raising the revenue limit, but only

^{3/} This ratio is the sum of cash notes and accounts receivable (less reserves for bad debts), marketable securities and inventories held by the hospital divided by the sum of its liabilities falling due in the accounting year for which the exception is requested. A preliminary estimate, derived by the Administration from American Hospital Association data, is that this ratio is higher than 2 to 1 for 75 percent of the hospitals subject to the revenue limit.

The Administration has not determined whether the standard would be a fixed ratio or a ratio that declines over time as the financial condition of hospitals worsens as a consequence of the revenue limit. In the latter case, the criterion would be increasingly stringent.

by the amount needed to increase the hospital's asset to liability ratio to a level where it is no longer in the lowest 25 percent of hospitals included in the revenue limit.

Nonfederal Rate Setting Under the Administration's Proposal

The proposal would not preclude states or payers from operating their own cost control programs concomitantly with the federal controls. However, nonfederal programs could be substituted for the federal program only in certain situations.

State cost containment programs could be substituted if the state's governor ensured that the federal revenue limit would be met and that procedures for recovering excess hospital revenues and returning them to the payers would be established. The state cost containment program would have to have been in operation for at least one year before the application for a waiver from the federal program and would have to have included 90 percent of the hospitals in the state and 50 percent of all hospital inpatient revenues. The state would have to include 100 percent of inpatient revenues once it received a waiver to substitute its own controls for the federal program. Hospitals in prospective reimbursement demonstrations approved by the federal government — whether or not all the hospitals in the state participate — could be exempted without meeting these conditions.

IMPACT OF THE ADMINISTRATION'S PROPOSAL

There are a number of major advantages to the Administration's proposal, the most important being that it would result in substantial savings in the amount paid for care in nonfederal short-term hospitals as early as 1978. These savings would grow rapidly in subsequent years,

with an increasing proportion coming from reduced growth in the intensity of services. Growth in hospital admissions would probably decline as well, because the proposal contains strong incentives for most hospitals to treat fewer patients.

The Administration's approach would be simple to administer and could be implemented immediately. In many ways it is the proposal's very simplicity that creates some of its shortcomings. While a great deal of the following discussion concentrates on describing these disadvantages it should be noted that most of them could be addressed through modifications in the Administration's proposal. In addition, an approach similar to that taken by the Administration, placing a growth ceiling on the amount paid for care, may be the only way of significantly reducing the rapid rise in hospital costs.

Among the proposal's disadvantages are the following: First, it would do little to reward efficiency, and in some cases, would penalize past efficiency. Second, the proposal would not distinguish well among types of hospitals and the mix of patients they serve. Third, the exceptions process would be quite restricted and its remedies fairly limited. Fourth, the ceiling could be applied too abruptly for hospitals to cut back on growth commitments. Fifth, the optional wage pass through may raise costs and may not be an effective way to protect hospital workers. Sixth, the measure chosen to reflect inflation in the growth ceiling formula is not a good index of the price increases facing hospitals. Both the advantages and disadvantages of the Administration's proposal are discussed in greater detail below.

Estimated Savings in Expenditures for Hospital Care

If existing policies continue, total expenditures for nonfederal short term hospitals are expected to be \$61.3 billion in 1978 and

\$104.0 billion by 1982 (see Table 1). If the Administration's proposal were implemented in 1978, including expected adjustments for admission increases, wage pass throughs, and exceptions, these expenditures would be limited to \$58.9 billion, a 10.6 percent increase over the 1977 level. The nation's hospital care bill would be \$2.4 billion lower than otherwise expected and federal payments for medicare and medicaid would be reduced by \$1.0 billion.

Table 1. ESTIMATED IMPACT OF THE ADMINISTRATION'S PROPOSED GROWTH CEILING ON NONFEDERAL SHORT-TERM CARE HOSPITAL REVENUES, FISCAL YEARS 1978-1982 (Dollars in Billions) $\underline{a}/$

Current Policy		Under Administration's Proposal				
Fiscal Year	1. Rate of Growth	2. Expendi- tures for Hospital Services <u>b</u> /	3. Growth Ceiling	. Growth Ceiling + Expected Increases <u>d</u> /	5. Expendi- tures for Hospital Services	6. Savings due to Growth Ceiling
1978	15.1%	\$61.3	8.7% c/	10.6%	\$ 58.9	\$2.4
1979	14.0	69.8	9.3	11.2	65.5	4.3
1980	14.1	79.7	7.6	9.5	71.8	7.9
1981	14.0	90.8	7.1	9.0	78.2	12.6
1982	14.5	104.0	7.0	8.9	85.2	18.8
1978 to						
1982	14.3%	\$405.1	7.9%	9.8%	\$359.6	\$46.0

 $[\]underline{a}/$ Congressional Budget Office estimates. Entries do not sum to totals because of rounding.

 $[\]underline{b}/$ These figures are for only those hospitals that would be covered by the Administration's proposal. Total expenditures for hospital care without any new cost containment initiatives are estimated at \$55.4 billion for 1976, \$64.3 billion for 1977, and \$73.9 billion for 1978.

 $[\]underline{\text{c}}/$ The growth ceiling for 1978 differs from the Administration's 9% projection because, at the time the Administration made its estimate, figures for calendar year 1976 hospital expenditures were not available.

d/ Column 4 is column 3 plus a 1.0 percent allowance for increases in admissions plus a 0.9 percent allowance for revenue increases due to the pass through of wage increases and to the exceptions process.

By 1982, under the Administration's proposal, expenditures for nonfederal short term care hospitals would rise to \$85.2 billion, \$18.8 billion lower than otherwise expected. Federal payments for medicare and medicaid would be reduced by about \$8.2 billion. The total reduction in hospital revenues or savings expected from the Administration's proposal during the five year period 1978-1982 would be about \$46.0 billion.

Decrease in Real Growth of the Hospital Industry

The Administration's proposal would probably have its most profound impact on the real growth (increases net of inflation) in hospital revenues because the intensity component of the limit is designed to decrease over time. 4/ This component depends each year on the two prior years' increase in total hospital expenditures. Since such expenditures are expected to be reduced by the proposal, subsequent allowances for increased intensity will also be smaller.

Since 1965, real growth in expenditures by hospitals has occurred at an average rate of almost 8.4 percent annually. Approximately 2.3 percent of the growth has been attributable to additional admissions and 6.1 percent to increased intensity. Under the Administration's proposal, the noninflation component would be about 3.2 percent in 1978 and would be reduced to less than 2 percent by 1982 (see Table 2).

^{4/} If admissions did not decrease, or if the inflation component underestimated the rate of increase in prices hospitals must pay for goods and services, very little would actually be left of the limit for increased intensity or real growth per admission.

Table 2. ESTIMATED COMPONENTS OF ANNUAL GROWTH IN THE ADMINISTRATION'S PROPOSAL, FISCAL YEARS 1978-1982 a/

	Intensit (For Two Calendar			
Fiscal Year	l. Total Hospital Expenditures <u>b</u> /	2. GNP De- flator	3. Allowance for Intensity	4. GNP De- 5. Growth
1978 1979 1980 1981 1982	15.51 14.91 12.65 11.50 10.98	5.87 5.55 6.00 5.39 5.12	3.21 3.12 2.22 2.04 1.95	5.52 8.73 6.22 9.34 5.40 7.62 5.02 7.06 5.06 7.01

a/ Congressional Budget Office estimates.

Decrease in Admissions

Because revenue per admission increases as the volume of admissions is cut back, a strong incentive to treat fewer patients would be created by the Administration's proposal. If a large hospital reduced the volume of patients treated up to the threshold of 6 percent, total revenues allowed would remain the same and revenues per admission would be increased (see Table 3). If volume were reduced between 6 and 15

b/ Those hospitals not included in the cost containment program are assumed to increase their expenditures by 14.0 percent per year. While the proposal excludes new hospitals and those whose primary source of revenue is from HMOs, these estimates did not adjust for their exclusion because of their insignificant effect.

c/ Column 3 is one-third of the difference of Column 1 less Column 2.

d/ Column 5 is the sum of Columns 3 and 4.

percent, the hospital's income would be decreased by only 50 percent of the base period's average revenue per admission. Therefore, at 85 percent of the base year's volume, a hospital could receive 123 percent of the base period's revenue per admission. Even reductions in admissions beyond 15 percent would allow for an increase in revenues per admission.

Table 3. TOTAL REVENUES AND REVENUE PER ADMISSION UNDER THE ADMINISTRATION'S PROPOSAL, AT VARYING LEVELS OF ADMISSIONS (All Figures Expressed as a Percent of the Base Year)

Annual Admissions	Potential Total Revenue	Potential Revenue Per Admission
	Hospitals Over 4000 Admis	sions
60	79	132
85	104	123
94	109	116
100	109	109
102	109	107
115	115	100
150	115	77
	Hospitals Under 4001 Adm	issions
60	94	156
90	109	121
94	109	116
100	109	109
102	109	107
115	115	100
150	133	88

Small hospitals could reduce volume by 10 percent without lowering their total revenue limit, and further reductions in volume, no matter how great, would result in a decrease of 50 percent of the base period's average revenue per admission. Thus a small hospital would be eligible to receive up to 121 percent of revenue per admission when it is at 90 percent of the base period's volume and 156 percent of revenue per admission at 60 percent of the base period's volume.

These incentives would of course be limited not only by the hospital's operating costs, but by its desire to maintain its patient volume relative to other hospitals, its concept of service to the community, and the behavior of its physicians. Most hospitals would probably attempt to reduce admissions slightly or to avoid increases in admissions.

Lack of Rewards for Efficiency

A major problem with the Administration's approach is that it does not significantly recognize different levels of efficiency among hospitals. The only way the proposal would reward efficient behavior would be to let a hospital whose revenues were less than those allowed add the difference to its next year's limit. Other types of efficiency incentives would require more reliable and uniform reporting of hospital costs than is currently available.

The revenue ceiling should force many hospitals to operate more efficiently. However, without more specific incentives, hospital administrators might not be able to withstand pressure from physicians

to continue inefficient practices. Moreover, fast growing hospitals would be most affected by the Administration's proposal, whether or not they were efficient. Because efficient hospitals may have already sought the obvious economies, they could find it more difficult to reduce their growth rates than inefficient hospitals with a lot of slack in their operations.

Adverse Selection of Patients

The Administration's proposal could induce some hospitals to admit more patients that are inexpensive to treat, such as simple surgery cases and candidates for diagnostic testing, and to direct expensive cases elsewhere. Some expensive cases might be referred to teaching hospitals, and others might end up in county and municipal hospitals that have no choice in the patients they accept. While there would be some protection in the Administration's proposal against a hospital's "dumping" charity patients and patients whose insurance pays less relative to other types of payers, there is no provision to prevent adverse selection by type of diagnosis. $\underline{5}/$ Neither would the proposal recognize this tendency by allowing higher growth rates for the hospitals that must treat additional expensive cases.

^{5/} Approximately 200 Health Systems Agencies established nationwide by the Health Planning and Resources Development Act of 1974 would be responsible for enforcing the maintenance of the charity patient provision when complaints were received from hospitals, presumably mostly county and municipal, which would have to treat those refused by the others. However, the hospitals that might be expected to complain are those that pay less attention to the insurance status of their patients. Moreover, Health Systems Agencies have little experience in such enforcement.

The volume adjustment provided in the Administration's proposal could also affect patient mix under certain circumstances. While most hospitals would tend to decrease the number of admissions or maintain their current volume, some of those already at 102 percent of their base year's volume might attempt to increase admissions further. This would occur if they could find cases that cost less to treat than the amount by which their revenue limits would increase -- 50 percent of the base period's average revenue per admission. To the extent that volume was increased by patients who would not have otherwise been hospitalized, the Administration's proposal would encourage behavior that increases expenditures.

Limited Nature of Exceptions Process

Under the Administration's proposal, the exceptions process would be limited to those hospitals with substantial changes in admissions or services that can also demonstrate financial distress. The process would clearly simplify federal administrative procedures, but it would be difficult to deal with problems specific to a particular hospital or with unanticipated price increases that are not systemwide. The stringency of the exceptions process might also lead to undesirable behavior on the part of hospitals. For example, a hospital might choose to cut back on services needed by the community, such as an emergency room or an outpatient clinic, rather than using up most of its reserves, which it would have to do before applying for an exception.

In addition to the fact that only a limited number of hospitals could apply for an exception, the remedies available under the Administration's proposal are not likely to be attractive to hospitals. The remedy for an increase in admissions greater than 15 percent, without an increase in capacity, would be to allow the hospital to receive 50 percent of average revenue per admission. When a hospital is operating close to capacity, this is probably substantially less than it costs to care for an additional patient. The remedy for a change in capacity or a change in the character of services would be to increase the hospital's revenue limit just enough to bring its current ratio of assets to liabilities up to the level where it would be disqualified from applying for an exception. Such remedies may provide relief that is less than the added costs incurred by the hospital.

Abruptness of Revenue Limit

The Administration's proposal might impose a particular hardship on hospitals that have already committed themselves to growth in capacity or intensity of services. The lead time for such commitments is often as great as three years. With only nine months' notice of a growth ceiling, hospitals may not be able to extricate themselves from commitments they would have avoided with more notice.

Adverse Effect of Optional Wage Pass Through

The wage pass through option offered in the Administration's proposal could undermine hospitals' resistance to large wage increases

for nonsupervisory personnel in two ways. First, the existence of the growth ceiling could lead unions and workers to expect wage increases equal to the limit. This would be greater than most past raises for such workers, which averaged 7.2 percent annually between 1969 and 1976.

Second, hospitals and unions could collaborate to escape the growth ceiling by arranging to have large wage increases every second or third year. In the year in which the wage increase was given, the hospital could request a pass through, making it indifferent to an increase that might be as great as 15 or 20 percent. In the other year or two when no wage increase was given, the hospital could select the standard method for calculating its growth limit and could use its entire revenue increase for nonlabor purposes.

Inadequate Measure of Price Inflation

Under the Administration's proposal, hospitals may not be well protected from increases in the cost of the goods and services they need to maintain their existing level of care because these increases are not well measured by the GNP deflator. Moreover, the use of past rates of inflation in the Administration's formula does not reflect current price increases. An adjustment could be made only if the most recent annual rate of increase reported for the GNP deflator is more than 1 percentage point greater than the rate used in the formula.

ALTERNATIVES TO THE ADMINISTRATION'S PROPOSAL

Both incremental changes and more distinct alternatives to Title I of the Hospital Cost Containment Act of 1977 exist. Those that represent minor modifications of the Administration's proposal could address most of the problems that have been raised above without delaying implementation. However, they would do little to promote efficiency, since the proposal is structured to control growth rather than to affect present hospital operations.

A distinct alternative is the Medicare-Medicaid Administrative and Reimbursement Reform Act recently introduced by Senator Herman Talmadge. The Talmadge proposal is directed at eliminating operating inefficiencies rather than containing the growth of hospital services. It would take several years to implement and would result in much smaller savings than the Administration's proposal. Approaches that combine the advantages of the Administration's proposal and the Talmadge approach could also be formulated.

Possible Modifications in the Administration's Proposal

Modifications in the Administration's proposal include grouping hospitals as to size and case mix before applying growth ceilings, broadening the exceptions process, combining allowable increases over the first two years, either making the wage pass through mandatory or eliminating it entirely, and using a more precise indicator of hospital costs than the GNP deflator.

Varying the Growth Limit Among Hospital Types. The Administration's proposal would create incentives for further concentration of patients with illnesses that are expensive to treat in teaching hospitals and those operated by county and municipal governments. It might therefore be desirable to recognize that such hospitals may need to grow at a faster rate. Hospitals could be classified according to the services they provide and different growth limits applied to each class. A further modification would require a more refined classification system but might also provide some incentives for efficiency by allowing each member of a class the same dollar increment rather than the same percentage increase in revenues. For example, if the average revenue for a specific class were \$1000 per admission and the growth limit were set at 9 percent, all hospitals in that group would be permitted a \$90 increment per admission over their previous year's revenues. For a hospital whose revenues were only half that of the average, this would represent an 18 percent increment; for a hospital whose revenues were 50 percent greater than the group average, it would be only a 4.5 percent increase. This approach would require a sufficient number of hospital classes so that those in each class were reasonably alike. It might also be necessary to group hospitals by region of the country to avoid imposing hardships on hospitals in high cost regions.

<u>Broadening the Exceptions Process</u>. The proposed exceptions process would be accessible only to those institutions that are expanding admissions, services, or capacity and are, at the same time, in relatively poor financial shape. There may be ways of making the exceptions

process more flexible, although this would entail more staff, either at the state or federal level. A more flexible exceptions process could delete the present proposal's financial distress requirement. In addition to restricting access to the process, this requirement may not be an appropriate screening device for determining whether expanded services should be reimbursed.

Broadening the exceptions process would not necessarily decrease anticipated savings. Since a more flexible and accessible exceptions process could reduce the danger of imposing hardship on individual hospitals, a revenue ceiling lower than that arising from the proposal's current formula could be set. For example, the revenue ceiling could be set at the inflation rate plus 1 percent (6.5 percent for 1978). Three percent could be set aside for exceptions, rather than the less than 1 percent the Administration has estimated for its proposal. Such a procedure might be more acceptable to the hospital industry since it would be less arbitrary.

Combining Allowable Increases Over the First Two Years. The imposition of a growth ceiling would penalize all high rates of growth, whether sustained or temporary. This may not be undesirable if capital outlays that the cost containment proposal seeks to discourage are responsible for sudden spurts in expenditures. However, if the growth in hospital outlays expected in 1978 reflects obligations and decisions that have already been made, hospitals may have very little ability to control immediate growth. A modification would be to combine the

growth allowed in hospital revenues over the next two fiscal years, achieving the same savings but giving hospitals a longer period in which to adjust. 6/

Making the Wage Pass Through Mandatory or Eliminating It. The growth ceiling could be calculated for each hospital on the basis of its actual wage increases, thus making the wage pass through mandatory. With this modification, a hospital could not squeeze wage increases in order to maintain other spending as it could with the standard method of calculation in the Administration's proposal. Thus a mandatory pass through would be more likely to protect nonsupervisory hospital employees. It would also eliminate the possibility that hospitals might cooperate with unions to avoid the growth ceiling by alternating large wage increases in one year with none in the next. If annual wage increases continued to average less than the growth ceiling, anticipated savings would be greater with a mandatory wage pass through than under the Administration's proposal. However, if the pass through were mandatory, there would be little reason for hospitals to resist wage increases and there could be a danger of larger increases. Some concern about future hospital wage levels could be retained by making it clear to hospitals that permanent reforms of hospital reimbursement might use a wage index based on area wages or average hospital wages rather than the hospital's actual wage level. Since the Administration's proposal would allow the Secretary of HEW to consider eliminating the

^{6/} The compound rate of growth for the two year period that would be allowed under the present proposal is about 18.8 percent.

wage pass through after 18 months, statements to unions that wage increases would have to remain in line with those for comparable employees in other industries to preserve the pass through might encourage restraint.

Alternatively, the pass through could be made mandatory only for those hospitals that choose it initially. Those hospitals not selecting the wage pass through would not have to report labor and nonlabor costs separately, and, as with the first alternative, the possibility of union-hospital collaboration to evade the growth limit would be eliminated. However, nonsupervisory hospital employees would be no more protected than with the present proposal.

Finally, the wage pass through could be eliminated. This would not protect hospital employees, particularly in geographic areas where wages are still low. However, the elimination would recognize that the wages of hospital workers in other geographic areas may no longer be out of line with nonhospital workers.

Improving the Measure of Inflation. While the consumer price index (CPI) would seem to be a better indicator of prices that a hospital must pay than the GNP deflator, the best alternative would be the construction of a separate hospital cost index. Such an index could be designed to reflect most accurately the price changes for the types of goods and services purchased by hospitals. Rate setting commissions in some states currently use a hospital price index in determining allowable increases in revenues.

The problem of using past rather than current measures of inflation could be remedied by using projected rates, such as those used in the President's Budget. An adjustment could be made at the end of the year or could be added to the next year's ceiling to compensate for any difference between the projected and the actual rate.

The Talmadge Proposal

The proposal introduced by Senator Talmadge in May 1977 is a distinct alternative to the Administration's proposal to control hospital costs. It would apply limits only to medicare and medicaid reimbursements and only to the 30 percent of those reimbursements attributable to room and board and some salaries which the proposal labels as routine. Under the Talmadge proposal, hospitals would be grouped by number of beds and type (short term general, teaching, and specialty hospitals). The average routine operating cost for each hospital group would be determined, and reimbursements to any hospital would be limited to 120 percent of its group's average cost. Bonus payments of up to 5 percent of routine costs would be awarded to a hospital that is below the average cost for its group.

The changes in hospital reimbursement called for in the Talmadge proposal would not take effect until 1981, when a uniform cost reporting system would be in place. The total reduction in federal expenditures for hospital care under medicaid and medicare might range from \$0.1 to

\$0.4 billion in 1982. $\underline{7}/$ While the Talmadge proposal would reward operating efficiency quite well, it would not assure reduction in the growth rate of expenditures by hospitals, even for routine services. If all the hospitals in a class became less cost conscious, the group average for routine costs of operation and the reimbursement limit would increase together.

If the Talmadge approach were applied to total hospital costs rather than to routine costs, savings might be lower because bonuses might increase more than penalties.

The savings generated by the Talmadge proposal could be increased if the limit on unusual costs were moved closer to the average cost. For example, if reimbursements were disallowed for routine costs in excess of 110 percent of the group average, rather than 120 percent, the cost savings might range from \$0.2 to \$0.8 billion in 1982. A limit set this close to the average cost for the group might cause substantial losses for some hospitals unless it were phased in even more slowly than anticipated by the Talmadge proposal.

^{7/} The range is wide because hospitals would have three years to prepare for implementation and it is difficult to predict changes in their behavior. The data on hospital costs used to estimate the savings were collected in 1973 during the Economic Stabilization Program and thus may not represent 1982 hospital costs very well.

Another option that could increase savings using the Talmadge approach would be to reduce or eliminate the bonus payments. Alternatively, the bonuses could be retained for hospitals with below average costs and only a part (perhaps a third) of that portion of hospital costs above the average could be reimbursed. There would then always be an incentive for a hospital to cut its costs. Under the current proposal, hospitals above the group's average but below 120 percent have no such incentive.

Still another way of comparing hospitals' costs rather than limiting their growth would be to have hospitals submit bids in advance for providing care. The bids would include all costs, not just routine costs, and could be implemented fairly quickly without a uniform cost reporting system. The only information required from hospitals would be the hospital's past volume and its estimated operating costs for the next fiscal year. Hospitals would be grouped as under the Talmadge proposal but their bids, rather than their actual costs, would be averaged and compared. A hospital with a bid below the group average would receive more than 100 percent of its bid for its interim payment; in other words, it would receive a bonus payment. Conversely, a hospital with a bid above the norm would receive a reimbursement rate below its bid -- or be penalized.

As with the Talmadge approach, the savings from this alternative would be quite low but efficiency incentives would be introduced. To assure that bids reflected actual costs, a retrospective adjustment of

the reimbursement rate could be made at the end of the fiscal year. This adjustment could also be varied according to the extent to which the hospital's actual cost differed from its original bid. 8/

Integrating the Administration and Talmadge Approaches

The Administration and Talmadge proposals could be integrated to retain the advantages of both. If the Administration's revenue controls or a similar program were implemented in 1978, immediate savings would result. As soon as there were sufficient data to differentiate among types of costs, the Talmadge approach could be applied to routine costs for all payers, rather than just for medicare and medicaid. The efficiency incentives of the Talmadge proposal are best applied to routine hospital operations, over which the hospital administrator has the greatest authority. The Administration's approach, which is directed at reducing growth in the intensity of services, could continue to be applied to nonroutine costs, for which the hospital administrator shares authority with the hospital's medical staff. In general, expenditures

$$\frac{\text{Bid Adjustment}}{\text{Reimbursement}} = \text{Cost } \times \begin{bmatrix} 1 + (\frac{\text{Avg. Bid} - \text{Bid}}{\text{Avg. Bid}}) \end{bmatrix} \times \begin{bmatrix} 1 + (\frac{\text{Bid} - \text{Cost}}{\text{Bid}}) \end{bmatrix}$$

This option is discussed in more depth in <u>Federal Programs and Their Impact on Health Expenditures</u>, CBO Background Paper (forthcoming).

^{8/} The formula for determining the reimbursement rate could have two components, one which rewards hospitals for bidding low and penalizes high bids and another which rewards hospitals that hold their costs below their bid and penalizes those that do not.

by hospitals for nonroutine services are the principal source of growth in the industry. Thus, both problems of hospital operation — uneconomic hospital operation and uneconomic provision of services — would be addressed by a combined approach.

BACKGROUND

Rising capital expenditures are an important -- some believe the most important -- source of hospital cost increases. These expenditures comprise about 13 percent of all spending by nonfederal short-term hospitals. If there is no change in current policy, they are expected to reach \$8.0 billion in 1978 and \$14.1 billion by 1982. The annual increases in capital expenditures have been slightly higher than those of total hospital spending, averaging 15.5 percent between 1970 and 1975. Approximately half of this increase, or 8.2 percent, is attributable to rising prices; the remainder reflects real growth in capital spending.

Consequences of Capital Expenditures

Most new capital spending is not considered a cost in itself; rather, it raises hospital costs in two ways. First, more than 80 percent of capital expenditures are paid for by borrowing, which adds to the hospital's annual debt service burden. Second, and more important, capital spending affects operating costs. While the precise relationship is not known, in the aggregate every dollar invested is thought to raise annual operating costs very roughly by 50 cents in subsequent years.

There are two types of capital expenditures -- those that change the type of service provided each patient, usually measured by plant assets per bed, and those that increase the capacity of the facility, usually measured by number of beds. Plant assets per bed in community hospitals increased from \$21,300 to \$34,500, or an average of 10.1 percent annually between 1970 and 1975. This first type of expenditure can either lower or raise operating costs. For example, better insulation could lead to lower fuel bills, or new laboratory apparatus could reduce the need for more costly manual analyses. On the other hand, new technology is often more expensive to operate than existing equipment and adds to the services provided each patient. A frequently cited example is the computerized axial tomography (CAT) scanner, a diagnostic device that costs roughly \$500,000 to buy and can be expected to cost a hospital another \$300,000 annually to run.

The second type of expenditure, an increase in bed capacity, almost always raises total operating costs. Nearly 100,000 community hospital beds were added between 1970 and 1975, increasing the total supply by an average of 2.2 percent annually and bringing the nationwide bed to population ratio to 4.4 beds per 1000 persons. Many health planners believe that a ratio of 4.0 beds, or less, per 1000 would be sufficient. If capacity is idle because it is greater than the demand for care, hospitals will operate inefficiently. This inefficiency is particularly pronounced in the hospital industry, where fixed costs represent approximately 60 percent of total costs.

Additional capacity can raise costs in another way because the number of days spent in the hospital and the volume of hospital-based procedures performed often increase with availability. This is related to the fact that physicians and their patients do not face the cost constraints found in most industries. Although individual hospitals may operate at a more efficient occupancy level in the presence of this induced demand factor, total hospital costs will be higher and the population may receive unnecessary care.

While additional costs to hospitals tend to be passed on in some form to consumers, hospitals may also use their assets or reduce their spending in an unrelated area to pay for a cost increase attributable to capital expenditures. Thus, a one-to-one relationship does not exist between capital expenditure-related cost increases and patient payments. A good case in point is debt service, which is not included directly in reimbursement rates. Reimbursements do include interest and depreciation, but the latter is often calculated on a larger base than that for which debt principal is owed, and it is figured over a longer period of time than the term of the debt.

The Effect of <u>Current Federal Programs on Hospital Capital Expenditures</u>

In the past, the federal government supported expansion of hospital capacity directly through construction grants (the Hill-Burton program). Expansion is still supported indirectly through guaranteed loans and the tax exempt nature of some bonds issued in behalf of nonprofit hospitals. Money raised through tax exempt bonds paid for more than 50 percent of all hospital construction outlays in 1976.

Only recently have steps been taken to control capital growth and reallocate resources. The primary regulatory mechanism is the National Health Planning and Resources Development Act of 1974, which requires every state to have a certificate of need program satisfactory to the Secretary of HEW no later than September 30, 1980, if the state is to continue to receive most federal health grants. Certificate of need agencies have approval power over proposals for new beds, services, and other capital expenditures in excess of \$150,000. Thirty-two of the 50 states now have certificate of need statutes. Only five of these, all initiated before 1969 by the states themselves, appear to be at all effective. That is, available evidence indicates that they may reduce capital expenditures 5 percent annually, at the most, from otherwise anticipated levels. 1/

Another mechanism for controlling hospital capital expenditures was established by a 1972 amendment to the Social Security Act (Section 1122). This amendment provided for a similar state review process but with a \$100,000 threshold and a federal sanction. If a capital expenditure is not approved, the amount attributable to depreciation and interest for that expenditure is disallowed from medicare and medicaid reimbursements. Seventeen of the 18 states that do not have certificate of need statutes have Section 1122 agreements.

 $[\]underline{1}/$ Congressional Budget Office: Federal Programs and Their Impact on Health Expenditures, forthcoming.

Despite current efforts to control hospital capital expenditures, the following five types of problems remain:

- o Growth is not being curbed rapidly or effectively enough because of the long lead time needed to establish a properly functioning review process and the political pressures on states to approve new projects.
- o Excess capacity and maldistribution of hospital resources persist, primarily because most current programs control only new projects and cannot close or reduce existing facilities. Only a few states have moved tentatively to eliminate existing unneeded beds.
- o In the absence of need and effectiveness criteria for new technology, state agencies have found it especially difficult to control non-bed expenditures.
- o Many expenditures are under the \$150,000 or \$100,000 threshold and are therefore too small to be reviewed by certificate of need or Section 1122 agencies. Only a complementary system of reimbursement controls could affect these expenditures, and such a system is not yet in place.
- Hospital-type procedures performed outside a hospital are not controlled.

THE ADMINISTRATION'S PROPOSAL

In an effort to deal with some of these remaining problems, the Administration has proposed in Title II of the Hospital Cost Containment Act of 1977 two new types of permanent federal controls: a capital expenditure limit and bed and occupancy standards. New sanctions would be provided to help insure implementation.

Capital Expenditure Limit

The Administration has proposed that no more than \$2.5 billion in new capital expenditures by nonfederal short term hospitals be approved by review agencies nationwide in any year beginning with 1978.

This limit would be allocated among the states on the basis of population during the first two years of the legislation. In subsequent years other factors, such as need for new facilities, construction costs, and condition of existing hospitals, might be considered in the allocation.

A state would specify the maximum expenditure by a hospital under each certificate of need issued and the total of these could not exceed the state's portion of the limit. Expenditures supported by charitable contributions and those made in non-hospital premises leased by the hospital would be included in the limit. Any part of a state's limit that was unused at the end of the year would be added to its limit in the subsequent year. A state's limit could be increased by the amount of unrealized depreciation on beds or facilities it closes. That is, if a hospital facility valued at \$10 million when new were to close down after it had received \$7 million in depreciation payments, the remainder, or \$3 million, would be added to the state's capital expenditure limit.

Bed and Occupancy Standards

The Administration's proposal would also establish a standard of no more than 4.0 beds per 1000 persons and at least 80 percent aggregate bed occupancy for each of the nation's 212 health service areas. $\underline{2}/$ For hospitals in areas meeting both criteria, a certificate of need resulting in additional beds could be issued only if the area would be in

The proposal does allow for the possibility that different ceilings and standards could be established for areas with special characteristics. Presumably places such as the health service area in Minnesota containing the Mayo Clinic would be included.

compliance with the criteria after the new project was completed. In areas not meeting both criteria, a certificate of need resulting in additional beds for an individual hospital could be issued only if twice as many existing beds were eliminated in the area as a whole. However, the two-for-one requirement would not apply to an individual hospital if no net increase resulted from its proposal to eliminate some beds and add others. 3/

New Sanctions

The Administration has proposed that in states without a certificate of need program, and in those where the certificate of need program does not yet include dollar limits on investment approvals, the limits would be enforced through Section 1122 of the Social Security Act, but with greatly expanded penalties. Unapproved capital expenditures would result in a penalty of ten times the amount attributable to depreciation and interest for those expenditures, applied against medicare and medicaid reimbursements. If the state has neither an acceptable certificate of need program nor a Section 1122 agreement, the Secretary of HEW would apply the Section 1122 sanctions directly. In all states, bonds would no longer be tax exempt if they supported bed increases that would force an area out of compliance with the standards, or for which a certificate of need had not been issued.

^{3/} It has not yet been determined whether the beds would have to be eliminated during the year that the certification is awarded, or at the time that the new beds were ready for occupancy.

IMPACT OF THE ADMINISTRATION'S PROPOSAL

The Administration's proposal would address the first and probably most pressing problem -- continued growth in capital spending -- with a substantial but partially delayed cut in allowable expenditures. The proposal would only partially address the problem of excess capacity and maldistribution, and it might exacerbate the third problem -- difficulty in reviewing non-bed expenditures. The proposed controls would not deal with the problem of hospital-type procedures performed outside the hospital. Neither would they cover small investments, although the revenue controls in Title I could do so.

Reduction in Capital Expenditures

If hospitals continued their current policies and the Administration's proposal were not adopted, capital expenditures requiring certificate of need or Section 1122 review would amount to \$6.8 billion in 1978 (see Table 4). Additional capital expenditures that are too small to require review would raise total capital spending in 1978 to roughly \$8.0 billion. If the Administration's proposal were adopted, the \$2.5 billion ceiling would be applied to certificate of need and Section 1122 applications in 1978. However, its full impact would not be felt until 1981, because much of the capital spending during the next few years will be related to construction projects that were approved before 1978 but are not yet completed and in use. Thus, actual 1978 capital expenditures would be about \$6.5 billion even with the Administration's limit in place. In 1981, when the full impact of the ceiling

Table 4. COMPONENTS OF HOSPITAL CAPITAL EXPENDITURES UNDER CURRENT POLICY AND THE ADMINISTRATION'S PROPOSAL, FISCAL YEARS 1978-1982 (Dollars in Billions)

New beds a/ \$1.2 \$1.8 \$2.1 \$2.4 \$2.8 \$3.2 Other construction and modernization b/ 2.6 4.0 4.6 5.3 6.1 7.0 Equipment c/ .6 1.0 1.2 1.3 1.5 1.8 Total requiring certificate of meed or 1122 review 4.4 6.8 7.9 9.0 10.4 12.0 Not requiring certificate of need or 1122 review .8 1.2 1.4 1.6 1.8 2.1 Otal capital expension ditures d/ \$55.2 \$8.0 \$9.3 \$10.6 \$12.2 \$14.1				Curre	Current Policy	ć		4	dminist	Administration's Proposal	s Propo	sai
\$1		1975	1978	1979	1980	1981	1982	1978	1979	1978 1979 1980 1981	1981	1982
2 4 2		\$1.2	\$1.8	\$2.1	\$2.4	\$2.8	\$3.2	\$1.8	\$1.8 \$2.1 \$2.4	\$2.4	:	;
4 \$5	construction dernization $\underline{b}/$	2.6	4.0	4.6	5.3	6.1	7.0	3.0	2.0	3.0 2.0 2.0 \$2.0 \$2.0	\$2.0	\$2.0
4 58	ıent <u>c</u> ∕	9.	1.0	1.2	1.3	1.5	1.8	3.	٠,	•5	.5 .5	ĉ.
\$\$	requiring Ficate of meed 22 review	4.4	8.9	7.9	0.6	10.4	12.0	5.3	4.6	5.3 4.6 4.9 2.5 2.5	2.5	2.5
tal expen-	quiring icate of need 2 review	∞.	1.2	1.4	1.6	1.8	2.1	1.2	1.4	1.2 1.4 1.6 1.8 2.1	1.8	2.1
	tal expen-	\$5.2	\$8.0	\$9.3	\$10.6	\$12.2	\$14.1	\$6.5	\$6.0	\$6.5 \$6.0 \$6.5 \$4.3 \$4.6	\$4.3	\$4.6

- a/ Spending attributable to new beds is assumed to have been approved and initiated three years previously; the total expenditure is recorded for the year the project is completed.
- b/ Spending for construction and modernization not attributable to new beds is assumed to take place as follows: one half of the projects are assumed to have been approved one year previously, with all of the expenditures for a particular project recorded the year the project is completed. The other half of the projects are assumed to have been approved in the same year that they are completed and recorded.
- $\underline{c}/$ Spending for equipment and technology is assumed to have been approved in the same year it is completed and recorded.
- d/ All components of capital expenditures are based on 1975 estimates compiled by the Office of Research and Statistics, Social Security Administration. All components under current policy, and those components not controlled by the provisions of the Administration's proposal are assumed to increase at the average annual rate of 15.5 percent that occurred between 1970 and 1975.

would be felt, capital spending would be \$4.3 billion, \$7.9 billion below the \$12.2 billion anticipated without such controls. In 1982 spending would be \$4.6 billion of an otherwise anticipated \$14.1 billion.

One criticism that might be leveled against the Administration's proposal is that the magnitude of the cut is rather arbitrary, since it is not based on an evaluation of need for new capital expenditures. Once few or no new beds are being added, there may be an unmet need for modernization of outmoded facilities that exceeds the capital spending limit.

A second criticism that might be leveled is that allocation of the \$2.5 billion ceiling among states on the basis of population is arbitrary, bearing little relation to differences in costs or to the states' relative need for replacing or improving facilities. Nationwide, the \$2.5 billion would represent a reduction of about 70 percent from an anticipated level of \$8.1 billion that would have been approved by state review agencies in 1978. With a distribution based on population, the amounts that could be approved by individual states would be very uneven in relation to anticipated levels. One state would be allowed to increase approved spending slightly despite the nationwide cut of 70 percent (see Table 5). Several others would be forced to cut back on approved spending by over 80 percent. While the population distribution might be replaced by a more judicious formula after two years, the shifts in levels resulting from changing formulas might pose a further problem to state agencies.

Table 5. HOSPITAL CAPITAL EXPENDITURES EXPECTED TO BE APPROVED BY CERTIFICATE OF NEED AND SECTION 1122 AGENCIES UNDER CURRENT POLICY AND ACMINISTRATION'S PROPOSAL, FISCAL YEAR 1978, BY STATE (Dollars in Millions)

	Current Policy a/	Administration's Proposal b/	Percentage Change	
Total U.S.	\$8,100.0	\$2,500.0	-69%	:
Alabama	136.7	42.3	-69	•
Alaska	55.0	4.1	-93	
Arizona	67.6	26.0	-62	
Arkansas	53.4	24.8	-54	
California	570.3	247.9	-57	
Colorado	103.7	29.7	-3/ -71	
			-71 -78	
Connecticut	165.0	36.2		•
Delaware	34.5	6.8	-80	
District of				
Columbia	99.0	8.4	-92	
Florida	355.0	97.8	- 73	
Georgia	212.1	57.7	-73	
Hawaii	23.6	10.1	-57	
Idaho	14.1	9.6	-32	
Illinois	535.7	130.4	-76	
Indiana	92.7	62.2	-33	
Iowa	92.7	33.6	-64	
Kansas	94.3	26.5	-72	
Kentucky	56.6	39.7	-30	
Louisiana	158.7	44.4	-12	
Maine	37.7	12.4	-67	
Maryl and	44.0	48.0	+9	
Massachusetts	259.2	68.2	-74	
Michigan	446.2	107.2	- 76	
Minneso ta	132.0	45.9	-65	
Mississippi	67.6	27.5	-59	
Missouri	333.0	55.7	-83	
Montana	40.8	8.8	-78	
Nebraska	81.7	18.1	-78	
Nevada	12.6	6.9	-45	
New Hampshire	15.7	9.6	-39	
New Jersey	237.2	85.6	-64	
		13.4	-47	
New Mexico	25.1			
New York	923.7	212.1	-77	
North Carolina	80.1	63.8	-20	
North Dakota	70.7	7.4	-90	
Ohio	487.0	125.9	-74	
Oklahoma	265.5	21.7	-88	
Oregon	75.4	26.8	-65	
Pennsyl vani a	419.5	138.4	-67	
Rhode Island	28.3	10.8	-62	
South Carolina	34.6	33.0	-5	
South Oakota	23.5	8.0	-66	
Tennessee	125.7	49.0	-61	
Texas	328.3	143.2	-56	
Utah	15.7	14.1	-10	
Vermont	15.7	5.5	-10 -65	
	15.7			
Virginia	165.0	58.1	-65	
Washing ton	138.2	41.5	-70	
West Virginia	78.5	21.1	-73	
Wisconsin Wyoming	166.5 11.0	53.9	-68	
		4.4	-60	

a/ Includes only those expenditures requiring certificate of need or 1122 review. The total of \$8.1 billion is for sums expected to be approved in 1978 rather than those expected to be spent, and was derived from the current policy figures in Table 4 as follows: \$2.8 billion for new peds is expected to be spent in 1981 and therefore would have been approved in 1978. One-nalf the spending for construction and modernization expected to occur in 1979, or \$2.3 billion, would have been approved in 1978. One half the spending for construction and modernization expected to occur in 1978, or \$2.3 billion, would have been approved the same year. All the spending for equipment expected in 1978, or \$1.0 billion, would have been approved the same year.

Oistribution among states is based on each state's proportion of estimated capital expenditures in 1975 (data from American Hospital Association, doubled Statistics, 1975 and 1975 euitions).

Assumes imposition of \$2.5 billion ceiling on sums approved by certificate of need or Section 1122 agencies. Distribution based on relative booulation of states, July 1975.

Effects on Excess Capacity and Maldistribution

A ceiling of 4.0 beds per 1000 persons used alone would permit a total of 72 health service areas to expand capacity. 4/ These areas would be distributed fairly widely around the nation. The concomitant use of the 80 percent occupancy standard would curtail the number of areas allowed to expand capacity to only 17. The use of the occupancy standard could also have the effect of maintaining existing geographic disparities in supply and utilization. The 17 areas would be in nine eastern and two midwestern states, where occupancy rates are relatively high (see Table 6). While high occupancy rates are a measure of individual hospital efficiency, high rates for an area may also mean excess hospitalization for the population as a whole. Some indication of this may be found in the fact that the number of hospital days per 1000 persons also tends to be higher in eastern states.

Table 6. STATES AND NUMBER OF AREAS PERMITTED EXPANSION OF HOSPITAL BEDS

Using bed ceiling of 4.0 beds per 1000 plus 80% occupancy standard Connecticut North Carolina ίij Delaware (1)Ohio Illinois (1) Pennsylvania (1) Maryland (3) Rhode Island Virginia New Jersey (2) New York

^{4/ 1974} data on number of beds and occupancy rates in health service areas from HEW, Health Resources Administration. The number of areas affected by the standards could change if more recent data were available.

The use of an occupancy standard would be a greater problem if the capital expenditure title were approved by the Congress and the revenue control title defeated. If this occurred, there would be no countervailing pressure to decrease admissions, and areas with excess hospitalization would be encouraged to maintain current levels. There would be less tendency to actually increase admissions, since incentives to do so would exist at the level of the health service area rather than for individual hospitals.

A total of 195 health service areas would be held to the requirement of eliminating two beds before approving construction of, or actually adding, one new bed. If states intended to eliminate beds, they would probably have to establish decertification statutes and procedures and criteria by which to choose the targets for elimination. It would be especially difficult in a political sense to close hospitals or parts of hospitals if such institutions served not only a geographically defined area but particular religious, ethnic, or racial groups.

The two-for-one approach would assure control of expansion and, assuming that any new construction is to take place, savings would result fairly quickly from the closings. However, there is no assurance that beds would be eliminated. States might simply be unable to eliminate a sufficient number of beds, and do nothing. If no beds were eliminated, no additional cost savings or needed reallocations of resources would occur. A second problem with the two-for-one approach is that no allowance is made for areas that do not now meet the criteria but might in the future because of population growth. For example, a

rapidly growing area might have 4.1 beds per 1000 persons now, but by the time an approved expansion of capacity is in operation, the area would have 3.8 beds per 1000.

Shift in Type of Expenditure to Nonbed Investments

Because only 17 of the nation's 212 health service areas would be allowed to expand bed capacity, nearly all of the newly allocated capital limit would be spent on modernization and equipment. State agencies would be required to make decisions of the kind they have found most difficult in the past: choices between improvements needed to maintain an adequate level of service and increases in intensity that raise costs. An example of such a choice would be an inner city hospital's proposed modernization, on the one hand, and a suburban hospital's purchase of a CAT scanner, on the other.

Effect on Small Capital Expenditures

Under the Administration's proposal, the revenue controls of Title I would be relied upon to limit small capital expenditures. If these revenue controls were not enacted, reimbursements, including depreciation and interest payments in excess of debt service, could continue to generate slack in hospital budgets. In the presence of capital expenditure controls alone, hospitals could not spend this slack on major investments. Thus there would be strong incentives to increase smaller expenditures which, taken individually, are not large enough for certificate of need or Section 1122 review. It could be especially difficult to identify larger equipment purchases that were split into parts to keep them below the review threshold.

Effect on Nonhospital Procedures

Strict controls on new services within hospitals could force some services (for example, diagnostic procedures and simple surgery) outside the hospital. To the extent that a particular service could be provided more economically in a nonhospital setting, this would be a positive development. However, the absence of volume controls outside the hospital might lead to a proliferation of unneeded services. It would be more difficult to control the quantity of such services if they were performed in the offices of 250,000 physicians rather than in 6,000 hospitals.

ESTIMATED SAVINGS IN COSTS TO HOSPITALS FROM THE ADMINISTRATION'S PROPOSAL

The costs incurred by hospitals would be reduced in a number of ways by the Administration's proposal. First, the amount they spend from their own assets or on debt service for capital expenditures would be lower. Second, subsequent operating costs attributable to capital expenditures would also be decreased. It is important to note that these cost savings would not necessarily be passed on to consumers on a one-to-one basis. A third type of savings can result from decreases in the bed-to-population ratio, but this is not very likely to occur under the Administration's proposal.

Estimated Savings in Capital Spending

Cost savings to hospitals would occur to the extent that they did not spend their own assets on investments. Such assets are the source

of roughly 8 percent of all capital spending. Cost savings would also occur to the extent that hospitals' debt burden is reduced in future years. These savings could be substantial because debt financing is the source of roughly 80 percent of capital spending. $\underline{5}$ / The combined savings in capital spending would be approximately \$410 million in 1978 and would increase to \$4.35 billion by 1982 (see Table 7).

Estimated Savings from Reduced Operating Costs

It is more difficult to predict accurately the savings in operating costs that would result from reducing capital expenditures, especially since so little is known about the types of nonbed investments that would be made. If one assumes that the aggregate average ratio of hospital capital expenditures to annual operating costs remains at roughly 2 to 1, savings would be approximately \$370 million in 1978 and \$10.77 billion by 1982 (see Table 7). Total savings from reduced capital spending and operating costs would amount to \$780 million in 1978 and \$15.1 billion by 1982.

Estimated Savings If Enough Beds Are Eliminated

Further savings, in addition to those already estimated from reduced capital expenditures and operating costs, would result if enough beds were eliminated. If no beds were eliminated but a minimal number of new beds were approved, there would be no reduction in the bed to

^{5/} Estimates of the savings from capital spending do not include the 12 percent of such spending that originates outside the hospital but is not debt financed -- primarily philanthropy. However, estimates of savings from reduced operating costs do include this 12 percent because all capital spending, whatever its source, can be expected to influence the subsequent level of operation.

Table 7. ESTIMATED COST SAVINGS TO HOSPITALS RESULTING FROM ADMINISTRATION'S PROPOSAL TO CONTROL HOSPITAL CAPITAL EXPENDITURES, FISCAL YEARS 1978-1982 (Dollars in Billions)

	1978	1979	1980	1981	1982
Savings in capital expenditures $\underline{a}/$	\$.41	\$1.11	\$1.84	\$3.04	\$4.35
Savings from reduced operating costs $\underline{b}/$.37	1.57	3.42	6.42	10.77
Total Anticipated Savings	\$.78	\$2.68	\$5.26	\$9.46	\$15.12
Additional savings if bed to population ratio were reduced 2 percent each year $\underline{c}/$	\$.83	\$1.89	\$3.22	\$4.88	\$ 6.95

Assumes that debt financing accounted for 80 percent of capital expenditures and was amortized as follows: new beds, 25 years @ 8.5 percent interest; other construction, 10 years @ 10 percent interest; equipment, 3 years @ 12 percent interest.

Assumes that hospitals' own assets accounted for 8 percent of capital expenditures that would have been spent in the year the project was completed.

Assumes that outside but not debt financed sources, primarily philanthrophy, accounted for 12 percent of capital expenditures and were not part of the hospital's costs.

- b/ Assumes that for each dollar of decrease in total capital expenditures for a particular year, hospital operating costs in subsequent years would be reduced 50 cents. Also assumes that half the capital expenditures in a particular year would result in savings in operating costs that same year.
- <u>c</u>/ Assumes increases in occupancy rate with resulting decrease in cost per patient day; also assumes reduction in hospital utilization from more taut supply. Estimates from W. McClure, <u>Reducing Excess Hospital Capacity</u> (Excelsior, Minnesota: InterStudy, October 1976).

population ratio before 1985 and no additional savings would occur before that time. However, if beds were eliminated, and the bed to population ratio were reduced to 4.0 per 1000 in all areas by 1982, additional savings of roughly 6.95 billion would result (see Table 7). 6/

ALTERNATIVES TO THE ADMINISTRATION'S PROPOSAL

The Administration's hospital capital expenditure proposal is a major step toward a highly controlled system that could run many of the risks of regulation, such as inflexibility and the freezing out of new competition. However, such an approach may be the only way to substantially reduce and redirect new capital investment. There are a number of possible incremental changes in the Administration's proposal that might deal with some of the unresolved problems.

Expenditure Limits

If one believes that the proposed limit of \$2.5 billion on capital expenditures is arbitrary, a ceiling related to some measure of need could be devised. One method for doing this would be to assume that current commitments reflect need more accurately and therefore to freeze nonbed capital expenditures at their 1977 level with adjustments

^{6/} The beds already under construction will bring total beds to approximately 1,050,000 in 1980. If there were no elimination of beds but minimal new beds after that, population growth would not begin to lower the bed to population ratio until 1985 or 1986.

To reduce the bed to population ratio to 4.0 per 1000 by 1982, it would be necessary to eliminate roughly 130,000 beds, bringing the total number down to 920,000.

for expected price increases. If this approach were applied in 1978, the ceiling would be \$4.6 billion instead of \$2.5 billion; construction projects already in the pipeline would bring actual capital expenditures to nearly \$8.0 billion, the level anticipated without a limit.

Another method might be to impose a ceiling of \$2.5 billion in 1978 but to let the limit grow over time. The full impact of the Administration's capital expenditure limit is expected to be felt in 1981 when, for the first time, there would be almost no new beds under construction. Thus an increase in the 1980 ceiling would let nonbed expenditures rise at a time when replacement and modernization may be most needed.

Neither an inflation nor a time-based method of adjustment would reflect specific needs for additional investment. A third method might be to establish an exception system for proposals in excess of the \$2.5 billion ceiling. States could be granted permission to raise their limits only to the extent that they could demonstrate a pressing unmet need to modernize existing capacity. Other justifications for exceptions might include proposed use of federal energy funds to improve insulation, or other improvements that would clearly save money in future years. The exception system would require more information and staff to administer but would control types of spending and could be used to indicate federal priorities.

State review under the conditions of a ceiling could also be facilitated by establishing a multifactor formula for distribution

among states immediately, rather than relying on population alone. While it would be difficult to establish quickly a formula reflecting health care needs, some simple measures of construction cost and need for renovations such as lack of compliance with life safety codes, could be included. The average of several years' hospital capital expenditures in each state might also be considered as one of the factors if it were believed to have some relationship to need.

Excess Capacity and Maldistribution

Problems arising from the use of an occupancy standard could be dealt with by eliminating it, thus allowing the 72 areas that meet the bed to population standard to expand capacity. If fewer new beds are desired, this could be achieved by a more restrictive bed to population ratio without adding a second criterion such as an occupancy standard. For example, the use of a 3.5 beds per 1000 persons ratio, without an occupancy standard, would permit 29 areas to expand capacity. These areas would be distributed slightly more widely across the nation than the 17 areas that could expand under the Administration's proposal.

Certain changes in the Administration's proposal would make decreases in the number of beds more likely and facilitate the reallocation of resources. For example, each area could be required to establish a year by year plan to reach a target bed to population ratio in five years. Population growth rates could be considered and penalties imposed on hospitals and areas whose bed numbers were out of compliance with the plan.

Additionally, a plan for decreasing the number of beds could be implemented more easily if incentives were provided to individual hospitals for eliminating or converting beds. The Administration's proposal would allow a state to increase its capital expenditure limit when beds are eliminated. However, no incentive would be provided a hospital to eliminate beds in the capital expenditures title. In the revenue controls title, a slight incentive to hospitals would be provided by allowing revenue from unneeded facilities that are closed to be included in the base year calculation. This would have the effect of maintaining a higher level of revenue for a smaller number of beds. The Talmadge proposal would provide direct payments for eliminating beds, but only on a limited experimental basis to not more than 50 hospitals.

Nonbed Investments

The problems involved in reviewing proposals for nonbed expenditures suggest the need for additional staffing and technical assistance for state agencies. Additionally, accurate projections of savings or increases in future operating costs attributable to a proposed capital expenditure could be required as a condition for certificate of need or Section 1122 approval. Incentives could also be provided or priority required for modernization as opposed to technology-intensive changes. This would be complemented by the type of targeted exception system suggested above.

Small Capital Expenditures

If controls were not placed on revenues, increased small capital expenditures might be substituted for fewer large ones. Consequently, there might be a need for legislation that would require reporting of smaller expenditures in the aggregate and penalties for amounts that are judged excessive. It would be desirable to avoid a time consuming line item review of the small expenditures.

Hospital-Type Procedures Performed Outside the Hospital

The problem of hospital-type procedures performed outside the hospital is not easily dealt with. Certain procedures may be less expensive to provide in a hospital than in a physician's office because hospitals are capable of operating at higher volume levels. Such procedures might be confined to hospitals by denying reimbursement if they are performed in nonhospital settings. Other procedures that are much more economically performed outside a hospital may simply bear watching for excessive volume. In addition, certificate of need coverage could be extended to large purchases of equipment not under hospitals' control, such as those in doctors' offices, group practices, and laboratories.

The Administration's proposal would assure substantial reductions in hospital revenues in 1978 and beyond. Because of the compounding effect of the annual growth ceilings in hospital revenues and the lowering of the ceiling over time, the amount that the nation spends for hospital care could be almost \$19 billion lower than currently projected for 1982 if the proposal were enacted. This estimate represents a minimum savings from the proposal. The capital controls and restrictions on the construction of new beds included in Title II could add significantly to these long-run savings under certain conditions. The reduction in capital expenditures should bring more hospitals' costs below the revenue ceiling. To the extent that savings attributable to reduced capital expenditures are not spent elsewhere, costs, and therefore revenues, would be reduced below the level specified in Title I. However, even if the capital restrictions did not add to the total savings generated by the revenue ceiling, the restrictions on new investments would make it easier to maintain the revenue limits over time by lowering operating costs and thus reducing some of the pressure to raise the revenue limit.

The approaches included under Titles I and II of the Administration's proposal for constraining future hospital costs are, therefore, integrally related. This fact should be taken into account in working out changes in the specifics of the proposals as well as in their administration. In establishing the level of new investments permitted, care must be taken to assure its consistency with future allowable increases in operating revenue. States, which will administer the capital restrictions, should know the current asset to liability ratio of the hospitals that seek permission to make investments, as well as how capital purchases will affect hospital operating costs.

Moreover, the ability of states to eliminate excess capacity and reallocate resources would be much greater if they were allowed to determine the level of revenues received by hospitals. One way to involve states in a federal revenue control program would be to require state approval of exceptions.

There is some danger in accepting only one of the titles of the Administration's proposal. Controls on large capital purchases without a revenue ceiling could result in an increase in the purchase of less expensive capital equipment, thus maintaining growth in/hospital costs. Conversely, a ceiling on revenues without capital controls might allow hospitals to cut back on services needed by the community rather than on duplicative capacity that adds to their prestige.