Controlling the Supply of Hospital Beds: A Policy Statement (1976)

Pages
77

Size
8.5 x 10

ISBN
0309026105

Committee on Controlling the Supply of Short-term General Hospital Beds in the United States; Institute of Medicine

INSTITUTE OF MEDICINE

National Academy of Sciences

A Policy Statement

CONTROLLING THE SUPPLY OF HOSPITAL BEDS

October 1976

National Academy of Sciences

Washington, D.C.

NOTICE

The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the Councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the Committee responsible for the report were chosen for their special competences and with regard for appropriate balance.

This report has been reviewed by a group other than the authors according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

The Institute of Medicine was chartered in 1970 by the National Academy of Sciences to enlist distinguished members of the appropriate professions for the examination of policy matters pertaining to the health of the public. In this, the Institute acts under both the Academy's 1863 Congressional charter responsibility to be an advisor to the Federal Government, and its own initiative in identifying issues of medical care, research, and education.

2101 Constitution Avenue, N.W., Washington, D.C. 20418

Area (202) 389-6825

Publication IOM-76-03

INSTITUTE OF MEDICINE

Policy Statement by the

Committee on

Controlling the Supply of Short-Term General Hospital Beds

In the United States

Members

Robert M. Heyssel, M.D. (Chairman)
Executive Vice President and Director
The Johns Hopkins Hospital
Baltimore, Maryland

Harold D. Cross, M.D.
General Practitioner
Promis Clinic
Hampden Highlands, Maine

Victor R. Fuchs, Ph.D.*
Professor of Economics
Stanford University
Vice President, Research
National Bureau of Economic Research
Stanford, California

Clark C. Havighurst, J.D.
Professor of Law
Duke University School of Law
Durham, North Carolina

Judith R. Lave, Ph.D.
Associate Professor, Economics and Urban Affairs
Carnegie-Mellon University
Pittsburgh, Pennsylvania

Charles E. Lewis, M.D., Sc.D.
Professor of Medicine, Public Health and Nursing
School of Medicine
University of California at Los Angeles
Los Angeles, California

Irving J. Lewis, M.A.
Professor, Department of Community Health
Albert Einstein College of Medicine
Yeshiva University
Bronx, New York

Donald G. Shropshire
Administrator
Tucson Medical Center
Tucson, Arizona

*Resigned, December 1975

D. Eugene Sibery
Executive Vice President
Blue Cross Association
Chicago, Illinois

Peter Solomon
Health Policy Analyst
Division of Health Protection
Office of Policy Development and Planning
Office of Assistant Secretary for Health, Department of Health, Education and Welfare
Rockville, Maryland

John D. Thompson, M.S.
Professor and Chief
Division of Health Services Administration
Department of Epidemiology and Public Health
Yale University School of Medicine, and
Professor of Nursing Administration
Yale University School of Nursing
New Haven, Connecticut

Bryan Williams, M.D.
Associate Dean for Student Affairs
Professor of Medicine
University of Texas
Southwestern Medical School
Dallas, Texas

STAFF OFFICER

Richard L. Seggel

CONTROLLING THE SUPPLY OF HOSPITAL BEDS

CONTENTS

CONTROLLING THE SUPPLY OF HOSPITAL BEDS

CONCLUSIONS

An Excess Supply of Hospital Beds

Although the accuracy of various aggregate national estimates of hospital bed surpluses is debatable, the evidence clearly indicates

- that significant surpluses of short-term general hospital beds exist or are developing in many areas of the United States and that these are contributing significantly to rising hospital care costs;* and
- that, although shortages of such beds still exist in some areas, these have been rapidly diminishing in recent years.

Distorted Decision Making on Hospital Facilities

Decision-making processes in the health care industry virtually guarantee the widespread development of excess hospital bed capacity for short-term general care.

- The rapid growth of health insurance plans and government-financed health care has created a financing system under which the adverse consequences of over-expanded hospital bed supply are primarily felt not by the hospitals but by third-party payers, which are committed to reimburse costs incurred.

---

* See dissent by Donald G. Shropshire on p. 55.

- Reimbursement of most hospital costs by third-party payments makes physicians and patients less aware of the cost of treatment at the time it is delivered, and thus vitiates an economic deterrent to excessive use of hospitals and creates support for the development of excess hospital capacity.

- The current benefit structure of most health insurance provides inadequate coverage for costs of care outside the hospital and the availability of such care is generally deficient, thus creating a strong incentive for using more expensive short-term general hospital beds.

- Powerful community interests usually favor the building of a new hospital or expanding an existing one, and oppose the curtailment of services in an existing hospital regardless of occupancy rates or other measures of efficiency.

No single control mechanism alone can stand the weight of political and economic pressures that bear on decisions concerning the allocation of health care resources. The resolution of the problems and issues of hospital bed supply in this country will, therefore, require changed incentives for private decision-makers, as well as strengthened controls by public agencies. These will need to be combined in such a way that both market and regulatory mechanisms complement and reinforce each other.

RECOMMENDATIONS*

1. A national planning goal for reducing the hospital bed supply

The committee recommends that a national health planning goal be established under the provisions of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641) to achieve an overall reduction of at least 10 percent in the ratio of short-term general hospital beds to the population within the next five years and further significant reductions thereafter.

- This would mean a reduction from the current national average of approximately 4.4 non-federal short-term general hospital beds per 1,000 population to a national average of approximately 4.0 in five years and well below that in the years to follow; many states and health service areas should be below the national 4.0 average at the end of five years;**

- The national hospital bed goal should serve as an instrument for effectively guiding health planning at the area and state levels; planning at the area level, however, should also take into account such specific factors as utilization patterns related to individual services, the age structure of the population served, and norms of use and occupancy.

- The national goal should be applied flexibly to meet the varying conditions and circumstances in each state and in the health service areas within the state, paying particular attention to the differences between medical-surgical beds and obstetrical, pediatric, and other specialized care beds, and giving

---

* See general dissent by Harold D. Cross, pp. 56-57.

** As recommended on the following page, federal beds should be included in the national health planning system; however, they are not included in the above ratios because they are generally not considered in the data base and their contributions toward meeting community needs vary widely.

appropriate consideration to the requirements for maintaining and improving the quality of needed existing beds and the elimination of those that are unneeded.*

2. Inclusion of government hospitals in national planning

To make the health planning system under P.L. 93-641 truly "national" and to assist in achieving effective control of the nation's hospital bed supply, the committee recommends

- that health care facilities operated by the federal government, as well as those operated by state government, be effectively included in the system by appropriate action of those governments; and

- that short-term general hospital beds in these facilities be specifically included in planning to achieve the recommended national goal for reducing the overall supply of such beds.

3. A strengthened area/state structure

To achieve a health planning and regulatory structure that will, with appropriate national guidance, produce the kind of cost-benefit decisions necessary to cope effectively with such problems as the supply of short-term general hospital beds, the committee recommends

- that the federal government give high priority to the development and dissemination to the planning agencies of information on improved methods for determining hospital bed needs, on criteria for evaluating the appropriateness of institutional health services, and on the ways in which the planning agencies can assist in eliminating surplus hospital beds;

- that the states, which are major purchasers of medical care and therefore have an important stake in controlling costs, be encouraged to exercise independent judgment on the cost implications of the plans and proposals of the area health planning agencies within their boundaries;

---

* See dissent by Donald G. Shropshire, p. 55.

- that every effort be made by the communities, the states, and the federal government to assure that the consumer majorities on the governing boards of the area health planning agencies ("Health Systems Agencies") and the state-wide health coordinating councils, both required by P.L. 93-641, include a strong representation of interests for cost containment--employers, labor unions, and other major purchasers of health care--as well as consumers interested in the development and operation of health care alternatives to the use of hospitals; and

- that HEW provide the leadership necessary to assure the development of comparable health care data systems and the appropriate exchange of information between the Health Systems Agencies (HSAs) and the Professional Standards Review Organizations (PSROs) established pursuant to P.L. 92-603.

4. The elimination of excess hospital beds

To provide for effective action on findings by state health planning and development agencies of the need for closure, consolidation, or conversion of existing hospital facilities, the committee recommends

- vigorous efforts on the part of the area HSA to facilitate action appropriate to the findings by all parties concerned;

- government financial assistance when required to meet fixed or special costs of closure, consolidation or conversion that cannot be met through private financing; and

- changes in the third-party reimbursement policies of the government and other third-party payers to support, as necessary, appropriate action to carry out the findings of planning agencies for the elimination of unneeded hospital facilities.*

5. Incentives for the private sector to control bed supply

To create incentives for the private sector that will complement public controls of the hospital bed supply, the committee recommends

---

* See dissent to this recommendation by Donald G. Shropshire, p. 55.

CONTROLLING THE SUPPLY OF SHORT-TERM GENERAL HOSPITAL BEDS IN THE UNITED STATES

I. INTRODUCTION

Over the past ten years, more than $35 billion have been invested in health facilities in the United States, and such capital investment is continuing at the rate of $4.5 billion a year.[1] The great bulk of this is for hospital facilities.

The total number of *all* hospital beds in the United States peaked in the 1960s and has since declined. That reduction, however, is due to a decline in the numbers of beds for care of psychiatric and tuberculosis patients, beds for long-term care in general hospitals, and beds in federal hospitals. In contrast, beds for short-term care in general and other non-federal hospitals have been increasing at a rate greater than the growth of the population. Since 1960, the total of non-federal hospital beds for short-term and other care in general hospitals has increased more than 45 percent--from 640,000 to 931,000. During this period, the national ratio of such beds to the population increased from 3.6 beds per 1,000 population to 4.4, more than 20 percent (Table 1).*

In 1948, at the beginning of the Hill-Burton program of federal aid for hospital facilities construction, some states had as few as 2.0 beds per 1,000 population, while others had as many as 6.0. Today, states such as Mississippi, Alabama, Arkansas, Georgia, and Tennessee, which were at the lowest end of the scale in 1948, have ratios that equal or exceed the national average of 4.4.[2] National attention has shifted from shortages of hospital beds, which were the issue in 1948, to surpluses, and particularly surpluses of the most expensive hospital beds, those for short-term general care.

There is a growing concern that surpluses of hospital beds are contributing significantly to the recent rise in health care

---

* In addition to beds for short-term medical-surgical care, obstetrics and pediatric care, these data include some specialty beds in general hospitals. However, they exclude beds in those few hospitals not registered with the American Hospital Association.

TABLE 1

NUMBER OF HOSPITAL BEDS AND BEDS PER 1,000 POPULATION FOR FEDERAL AND NON-FEDERAL HOSPITALS: UNITED STATES, SELECTED YEARS, 1946-74

Year	Total	Federal hospitals	Non-Federal				
			Total	Psychiatric	Tuberculosis and other	Long-term general and other	Short-term general and other
			Number of beds in thousands				
1946	1,436	236	1,200	568	75	83	474
1950	1,456	189	1,267	620	72	70	505
1955	1,604	183	1,421	707	70	76	568
1960	1,658	177	1,481	722	52	67	640
1965	1,704	174	1,530	685	37	66	742
1970	1,616	161	1,455	527	20	60	848
1973	1,535	142	1,393	422	10	57	904
a/ 1974	1,513	136	1,376	383	8	54	931
			Beds per 1,000 population				
1946	10.3	1.7	8.6	4.1	0.5	0.6	3.4
1950	9.6	1.3	8.4	4.1	0.5	0.5	3.3
1955	9.8	1.1	8.6	4.3	0.4	0.5	3.5
1960	9.2	1.0	8.2	4.0	0.3	0.4	3.6
1965	8.8	0.9	7.9	3.5	0.2	0.3	3.8
1970	7.9	0.8	7.1	2.6	0.1	0.3	4.2
1973	7.3	0.7	6.6	2.0	0.05	0.3	4.3
b/ 1974	7.2	0.6	6.6	2.0	0.04	0.3	4.4

Source: Health: United States 1975, Table B.II. 1, p. 135.

a/ Hospital Statistics, 1975 Edition, 1974 data from the American Hospital Association annual survey.

b/ Computed from Bureau of the Census resident population figure for 1974.

costs at a rate well beyond the rate of general inflation. This concern has to do not only with the cost of maintaining unused hospital bed capacity, but also with the unnecessary and inappropriate uses of hospital beds, especially those in the short-term general category.

Recent Public Policy Developments

Recent heightened public interest in the supply of hospital beds for short-term general care has been translated into a variety of legislative and administrative actions at the federal, state, and local levels. In the past ten years, federal grants for hospital facilities construction through the Hill-Burton program have been largely redirected to projects for outpatient facilities and for modernization of existing hospital facilities, although major federal funding for the construction of new or expanded hospital facilities has continued to be available through federal loans and through Medicare and Medicaid reimbursement for depreciation costs. In 1966, federal legislation was enacted to provide grant support for the establishment of a network of state and area comprehensive health planning (CHP) agencies; one function of these agencies was to make nonbinding reviews of proposed capital expenditures. During the 1960s, individual Blue Cross plans began inserting "conformance clauses" in their contracts with provider institutions to impose financial penalties if the institution made capital expenditures without the approval of a health planning agency. A number of communities imposed moratoria on hospital facilities construction.

Meanwhile, the states began to pass legislation requiring the issuance of a "certificate of need" before a new hospital could be constructed or an existing one expanded. The first of these certificate-of-need laws was passed in 1964. By 1976, 29 states has such laws. And, in 1972, the National Conference of State Legislatures urged all state legislatures to "examine and evaluate for possible adoption the various alternative legislative and administrative actions available for moderating the rapid increases in hospital costs, including controlling unnecessary construction, controlling hospital rate increases, providing incentives for efficiencies in operation, and changing insurance regulations to affect health care utilization."[3]

With the enactment of the Social Security Amendments of 1972, the federal government formally adopted the certificate-of-need concept. Under Section 1122 of those amendments, the Secretary of the Department of Health, Education, and Welfare (HEW) is required to seek contract agreements with states for their review of capital investments in hospital and other health care facilities that exceed $100,000, change the bed capacity, or substantially change the services in the facility. Under such contracts, HEW may deny Medicare and Medicaid reimbursement for the depreciation

or interest costs if they were incurred without prior state approval. Enactment of Section 1122 reflected growing concern at the rate of increase in health care costs and prices and the resulting increases in federal budget outlays for health services. The Senate and House committees identified excess capital expenditures as an important cause of these increases and cited the cost-based reimbursement policies of Medicare and Medicaid as a major factor in contributing to the construction of unnecessary health facilities. Section 1122 represented the first federal effort to forge a direct link between planning and resource allocation. Thirty-nine states have since contracted with HEW to conduct reviews under Section 1122, including 15 states that already had certificate-of-need programs. By 1975, all states but West Virginia had either a certificate-of-need law or a Section 1122 contract with HEW or both.[4] In addition, some commercial lenders and governmental loan programs have instituted the practice of requiring an "1122 approval" before agreeing to help finance a project.

The National Health Planning and Resources Development Act of 1974 (P.L. 93-641) contains provisions that significantly expand controls over hospital bed supply. These include requirements

- that every state have a certificate-of-need program "satisfactory to the Secretary" (HEW);

- that the "appropriateness" of existing institutional health services be reviewed by area health planning agencies within three years after the designation of the agency under the Act and at least every five years thereafter and that findings be made thereon and published by the state (but the Act makes no provision for any follow-up action on these findings);

- that decisions on these matters be based on a planning process which begins with the area health planning agency (designated a "Health Systems Agency" or "HSA"), is "consistent" with national guidelines to be issued under the law, and culminates in a state health plan; and

- that the certificate-of-need and Section 1122 programs be administered by the state health planning and development agency ("state agency"), unless it is placed in another agency upon request of the governor under an agreement with the state agency that is "satisfactory to the Secretary."

In addition, the Act limits federal grants, loans, loan guarantees, and interest subsidies for hospital construction to projects for modernization, outpatient facilities, inpatient

facilities in areas that have experienced recent rapid population growth, and conversion of existing facilities to provide new health services.

Questions on Current Policy

Although the enactment of P.L. 93-641 represents a major development of public policy in controlling the hospital bed supply in the United States, many questions on the efficacy of its planning and regulatory strategies remain. There is controversy over the extent of the hospital bed supply problem and, therefore, over the nature of the remedies needed to correct it.

The new legislation provides for a strengthened health planning process with links to regulatory decision on capital expenditures and services. However, methodological techniques for health planning are generally regarded as inadequate, and the incentives and capabilities of health planning agencies to reach cost-conscious decisions on such matters as the expansion of a hospital facility or closing part of one are open to considerable doubt. Certainly, the implementation of such decisions, in the face of strong countervailing interests in the community, will be very difficult.

Regulatory approaches, such as those involved in certificate-of-need programs, have had mixed results in the United States, raising doubts that the health industry should be controlled as public utilities are. On the other hand, market forces are currently inadequate for controlling costs in the health industry, and ideas for improving the forces of the market for this purpose are not yet generally accepted or have not been adequately tested.

Scope of the Institute's Project

The Institute of Medicine considered the issues outlined above to be of sufficient magnitude and importance to warrant the undertaking of a project to define and examine the issues and recommend policy directions that might be taken in resolving them. The project did not entail the development or collection of new information; a substantial amount of that kind of research is being conducted in other organizations. The Institute saw that its most useful contribution could be made by convening a committee of qualified individuals, representing a balanced combination of skills and perspectives, to review the current state of knowledge on the subject of hospital bed supply, assess current plans and policies, and develop a policy statement that would include recommendations on the direction of future policy.

Many factors, in addition to hospital bed supply, contribute to rising hospital care costs.* The committee, however, decided it would be appropriate to focus its inquiry on the supply of short-term general hospital beds, because major cost considerations are involved, the building and utilization of hospital beds have been a principal source of recent public policy concern, and the issues confronting decision-makers on the supply of hospital beds are typical of resource allocation problems in the health field.

Some recent findings suggest that control of beds alone might only divert inflationary pressures into other channels--for example, into increased technology.[5] An effective approach to controlling the bed supply, however, might at least signify the nation's will to bring its health care costs under some semblance of control.

The committee's conclusions and recommendations are developed in Sections II through VIII following.

---

* For example, a major contributor to rising capital costs of hospitals, in addition to the expansion of the hospital bed supply, is the accelerated pace at which high-cost technology is being introduced into the system.

II. THE EVIDENCE ON THE HOSPITAL BED SUPPLY

Published estimates of a national surplus of short-term general hospital beds range from 60,000 to 100,000.[6] The 1975 Hill-Burton report of state plans (Table 2) shows an increase in the projected net surplus of such beds (non-federal) from 20,000 in 1974 to 41,000 in 1975; the 1975 projected net surplus is about 4.5 percent of the reported 922,000 total beds existing and under construction in 1975.* However, these projections also indicate that, if the supply of short-term general hospital beds increases over the next five years at a rate no greater than the increase in population (it has been increasing at a somewhat faster rate), the surplus at the end of five years will be over 100,000 beds, or over 10 percent of the total beds which will then be available and under construction.

Aggregate estimates obscure a wide range of local conditions. There is general agreement that some localities have too many short-term general hospital beds, but disagreement exists over the extent of that problem, as well as the extent to which shortages of beds still exist in some areas.[7] A number of assessments of local area situations by comprehensive health planning agencies, Blue Cross plans and others have indicated significant current or emerging surpluses of short-term general hospital beds in widely scattered areas of the United States. These include Oklahoma City, Dade County in Florida, Minneapolis-St. Paul, Sacramento and part of Los Angeles in California, the metropolitan area of Washington, D.C., a seven-county health planning region in Georgia, and New York City.[8] Average hospital bed occupancy rates of 65 percent and below are cited in some localities.

The Hill-Burton report on state plans is the only source of projected hospital bed requirements for all parts of the country. The projections are based on a formula which, as required by law, has been developed and prescribed by the central authorities in HEW as a standardized basis for determing needs for medical facility beds and medical facilities and for allocating funds for modernization and construction of such beds and facilities in each state. Our analysis of the Hill-Burton table on state plans is shown on page 9.

---

* A provisional 1976 Hill-Burton tabulation (included in Table 2) indicates a further substantial increase over the 1975 net surplus figure.

TABLE 2

GENERAL HOSPITALS [1/]: CONDITION AND NUMBER OF BEDS, WITH PROJECTED GOALS, UNITED STATES AND TERRITORIES

Number of Beds

Year (as of January)	Existing		Projected Goals [3/]	Needed To Be Added and Modernized	Need To Be Added	Need To Be Modernized
	Total	Conforming [2/]				
1966	781,111	472,206	801,904	338,135	66,365	271,770
1967	796,140	503,934	833,931	338,493	75,505	262,988
1968	812,574	547,422	866,332	325,631	85,007	240,624
1969	826,791	579,969	889,944	319,024	91,342	227,662
1970	848,709	625,645	906,055	292,844	88,985	203,859
1971	868,786	650,218	906,079	268,873	73,190	195,683
1973	892,524	675,770	917,228	258,417	69,238	189,179
1974	912,441	704,546	893,421	214,473	47,110	167,363
1975	922,231	721,785	881,179	192,673	42,165	150,508
1976 Prov. [4/]	950,536 [5/]	769,316	872,366 [5/]	151,971	28,835	123,136

[1/] Excludes Federal facilities except a few Indian hospitals which also serve the community population; also excludes tuberculosis and mental hospitals.

[2/] Represents evaluation by Hill-Burton State Agencies as conforming or non-conforming to minimum Federal standards relating to construction and patient safety.

[3/] The projected goals are estimated on basis of population projected for five years and factors such as utilization experience, length of stay and occupancy rates.

[4/] The 1976 data are provisional. They are the "Current" approved State Plans on file as of January 1976. Four State Plans and plans for Virgin Islands and Territories are for 1973/ 1972/ 1971. Others approved in 1974 are being amended. Data for the latter as reported in January 1975 are continued as provisional 1976, pending amendments.

[5/] The ratio of existing beds to total U.S. population projected for July 1975 is approximately 4.4 beds per 1000 population (excluding Territories). The ratio of projected goals (based on population projection for 1930/81) is estimated at just under 4 beds per 1000.

Sources: Page 2 of Table 2, unpublished document, "Health Care Facilities: Existing and Needed," Hill-Burton state plan data as of January 1975 (statistical tables only), HEW, Bureau of Health Planning and Resources Development, Division of Facilities Development; and internal memorandum from Acting Director, Division of Facilities Development, "Selected Summary Statistics, Hill-Burton state plan as of January 1, 1976," May 18, 1976.

Number of Short-Term General Hospital Beds	
Total existing in 1975 (column 1 in Table 2)	922,231 a/
Projected goals for 1980 (column 3 in Table 2)	-881,179 b/
Projected net surplus based on 1975 supply	41,052 b/
Projected additional needs in shortage areas as of 1975 (column 5 in Table 2)	42,165
Projected gross surpluses in other areas based on 1975 supply	83,217

a/ Includes beds under construction or approved for construction.

b/ Reflects shortages in some areas (column 5 in Table 2) and surpluses in others (not shown in the Table).

The projected gross surpluses, totaling over 83,000 beds in various areas, amount to 9 percent of the beds now in existence, under construction, or approved for construction. The Hill-Burton table also shows that, of the total of approximately 200,000 existing beds in 1975 which are classified as "non-conforming" (to minimum federal standards relating to construction and patient safety), nearly 50,000 were not programmed for modernization and thus were considered surplus. A comparison of the 1975 Hill-Burton projections with those of previous years shows a steady trend in recent years of increasing surplus hospital capacity for short-term general care in many areas and a diminishing problem of hospital bed shortages in others.*

However, the Hill-Burton table presents some data-base problems. In addition, the formula on which the Hill-Burton projections are based involves some important methodological issues.

Data-Base Problems

The data in the Hill-Burton table for several states and territories are not current, because in recent years the central

---

* The provisional Hill-Burton tabulation for 1976 shows a continuance of these trends.

Hill-Burton authorities have not been requiring annual up-dating of the state plan data. However, as of January 1976, 46 states and the District of Columbia had submitted approved plans for 1974/1975, either in the form of a complete plan or as amendments to the state's latest complete plan.

The Hill-Burton statistics are not strictly comparable to those issued by the National Center for Health Statistics in HEW or by the American Hospital Association on general hospital beds. The Hill-Burton statistics include beds under construction and approved for construction, as well as those in place and, as noted, reflect reporting lags on the part of some of the states and the territories. They also include beds in a few Indian Health Service hospitals "serving the community population." The National Center's published statistics on general hospital beds include long-term mental health and tuberculosis bed units, whereas the Hill-Burton statistics exclude such units of ten beds or more. The American Hospital Association statistics exclude beds in those few hospitals not registered with the Association, and its state-by-state statistics lump "other specialty" beds with short-term general hospital beds. Although these differences present some problems for analysis of the data for some states, the differences at the national level are not significant for our purposes. This is indicated by the following comparisons:

	Reported Total Non-Federal Beds (in 1,000s)			Reported Non-Federal Beds per 1,000 Population		
	Hill-Burton[a/]	NCHS	AHA	Hill-Burton[a/]	NCHS	AHA[b/]
1973	882	924	904	4.41 [c/]	4.40	4.3
1974	902	943	931	4.48 [c/]	4.46	4.4
1975	913	--	--	4.51 [c/]	--	--

a/ U.S. only; excludes Virgin Islands and Territories.

b/ Computed in round figures from Bureau of Census resident population statistics.

c/ Obviously reflects use of lower population figures than those used by NCHS and AHA.

The committee hopes that over the next year the differences in the statistics of the National Center and the Hill-Burton organization will be ironed out and that the state plan data will be updated and kept current in the future. These steps will be

essential to the development of an effective national system of planning on hospital bed supply and evaluating the performance of the state and area planning agencies in controlling the hospital bed supply.

Methodological Issues

Some believe that the Hill-Burton formula understates the hospital bed excess problem, since it is based on current hospital utilization experience and does not take account of trends and prospective changes toward more efficient utilization of hospital beds. Others point to the difficulties of trying to apply a national standard to the wide variety of conditions which exist throughout the country.

The Hill-Burton criteria are those most generally used by the state comprehensive health planning (CHP) agencies, which for years have been major participants in deciding what hospital beds are needed.[9] Originally, the Hill-Burton legislation prescribed a ratio of beds to population, which was not to exceed 4.5 general beds per 1,000 population except in sparsely populated areas. In the 1960s, the criteria were revised to include factors relating to current bed use, target rates for hospital occupancy, and projected population growth (for 5 years). Initially, the target rate for hospital bed occupancy was set at 80 percent, with a 10-bed factor to be added for comparatively low bed occupancy rates in facilities with only a few beds. However, following a review of the formula by a group of outside consultants in 1972, the occupancy rate was raised to 85 percent and the "plus-ten" factor was made optional.*

A state may elect to develop its own formula, provided that it is approved by HEW and includes, as a minimum, area utilization experience, projected area population, and an occupancy factor not lower than the specified rate. States have the option of using a maximum rate in areas where there is reason to believe that the bed-need formula in the regulations reflects an unnecessary and excessive bed need and of using a minimum rate in areas where there is no previous record of hospital utilization experience.

The major criticisms of this formula are discussed below.

Occupancy Rates The Hill-Burton average occupancy factor of 85 percent is challenged especially as it is applied to individual areas. Some observers consider it to be too high for application to areas with predominantly small hospitals. According to the statistics of the American Hospital Association

---

* This increase of the hospital bed occupancy rate is a major factor in the current Hill-Burton projections of increasing hospital bed surpluses.

on non-federal, short-term general hospitals and other special hospitals (Table 3), average occupancy percentages in 1974 ranged from approximately 48 percent in the smallest hospital category (6-24 beds) to approximately 82 percent in the largest category (500 beds or more). However, the average percentages in hospitals with 100 beds or more ranged from 72 to 82 percent. The nation-wide average occupancy percentage for all hospitals was 75.3 percent.

Areas in which small hospitals predominate would undoubtedly have difficulty in achieving an 85 percent occupancy rate. However, nearly 83 percent of all short-term general beds are in hospitals with 100 beds or more. Experience in several areas has shown that bed occupancy rates of 90 percent or more can be achieved for non-maternity beds in large hospitals without sacrificing the quality of care.[10]

The 1972 report of the consultants to the Hill-Burton program recommended the establishment of separate occupancy rates for medical-surgical beds (90 percent) and for obstetric and pediatric beds (75 percent each).[11] The recommendation was not adopted because of the data collection problems it raised. The criteria were issued on an advisory basis to those hospitals that calculated their requirements on the basis of those three service areas. Because obstetric and pediatric beds account for only about 15 percent of the daily patient population of community hospitals in the United States, it was considered that an occupancy rate of 85 percent represented a reasonable overall target for short-term general hospital beds.*

Utilization Rates Perhaps the most important criticism of the Hill-Burton formula is that it projects future need on the basis of current use. To the extent that current use is inappropriate, Hill-Burton projections of needs will be incorrect. A number of studies suggest that, by medical criteria, a substantial number of patients in hospitals at any given time do not "need" to be there. On this evidence, current utilization patterns probably exaggerate current needs and the Hill-Burton agencies have, therefore, overestimated the number of hospital beds needed.[12]

There are a number of current trends that point to lower per capita use of short-term general hospitals in the future. These include changes in medical practice toward requiring a shorter length of stay in hospitals, public policy measures to reduce hospitalization rates by tightening controls over hospital

---

* The Hill-Burton formula will again be reviewed in the course of developing regulations for implementing Title XVI of P.L. 93-641 which requires that HEW prescribe criteria for determining needs for medical facilities and for their modernization.

TABLE 3

SHORT-TERM GENERAL AND OTHER SPECIAL HOSPITAL BEDS (NON-FEDERAL)

Bed Capacity	No. of Hospitals	No. of Beds	Occupancy Percent
6-24	324	6,100	48.4
25-49	1,229	44,410	56.5
50-99	1,527	109,913	65.4
100-199	1,354	190,909	71.8
200-299	660	159,644	77.4
300-399	377	127,532	79.9
400-499	224	98,193	81.3
500 or more	282	194,471	81.8
Total	5,977	931,172	75.3

Source: Table 3, Hospital Statistics, 1975 Edition, 1974 Data from the American Hospital Association Annual Survey.

admissions and length of stay, and promotion of health maintenance organizations (HMOs), which provide comprehensive health services and operate within a prospectively fixed budget and thus have the means and the incentives to cut costs by using less expensive alternatives to hospitalization wherever possible.

The effects of the enactment of a comprehensive national health insurance plan on demand for hospital services is not easily predictable. Research on the possible effects of such a plan indicates that, because about 90 percent of inpatient bills are already being paid by third parties, the great bulk of the increased demand for health care will fall on ambulatory rather than inpatient facilities.[13] This had led to the assumption that the expected modest increase in demand for inpatient hospital services from a comprehensive national health insurance plan would, over the long run, be almost wholly offset by improved utilization of existing short-term general hospital beds as a consequence of changes now underway.[14] Given this assumption, the deficiency of the Hill-Burton formula in projecting the status quo on hospital utilization rates would not be as serious as it might seem--at least for purposes of making nationwide projections. However, evidence that HMOs have experienced hospital utilization rates 30 to 50 percent below those of the conventional fee-for-service arrangements persuades us that a well-designed national health insurance plan would provide incentives to reduce hospital utilization rates significantly below the current level.*

General Some of the state comprehensive health planning agencies (CHPs) use criteria and standards which are quite different from the Hill-Burton formula. These include relatively advanced methods of registering such factors as random fluctuations in the hospital's daily census, the size of hospital or service, the extent to which the setting is urban or rural, normative use rate projections relating to the appropriateness and efficiency of care rather than only the amount of care currently demanded, the demographic composition of the target population, the type of medical service, and such special circumstances as the predominance of an aged population or a hospital that serves a substantial population outside of the planning area. Some CHPs even try to project the effects of national health insurance and the growth of HMOs on hospitalization patterns.[15]

---

* The HMO experience is further discussed in Sections IV and VIII. Caution needs to be exercised in extrapolating from this experience to the rest of the health care system. Nevertheless, it does give an indication of the extent to which more efficient hospital utilization rates can be achieved through improvements in the health care delivery and financing systems.

These kinds of efforts should be strongly encouraged. Several studies, however, show that the results of more sophisticated projection techniques used to estimate future *overall* bed needs are not significantly different from those obtained by using the Hill-Burton formula. [16] However that may be, our analysis of the Hill-Burton formula makes us believe that it leads to under-estimates of the excess bed problem.

Cost Factors

Recent studies have contained estimates that the cost of an empty bed is at least 50 percent of the cost of an occupied bed.[17] These estimates are based on such fixed costs of a hospital bed (whether occupied or not) as the initial construction and financing expenses which have to be recovered through per diem charges and the continuing expenses of maintenance and non-patient services, including those involved in keeping an empty bed ready for use and the limited ability of a hospital administrator to reduce staff commensurately with declines in patient loads. These are only the most obvious cost factors associated with the building and maintenance of unneeded beds.

There are other less obvious ways in which surplus beds contribute to cost escalation. Unnecessary hospital facilities drain scarce manpower and generate scarcities of trained personnel, which drive up salaries and may even threaten the quality of care. Surpluses of empty beds and the availability of hospitalization insurance generate pressures to use high-cost hospital beds in preference to less expensive alternative forms of care.* An investment in unneeded hospital bed capacity diverts limited resources from the development of needed alternatives to inpatient hospitals, such as primary care and community home care programs. [18] It is not possible to aggregate all these factors for an accurate estimate of the costs of an unneeded bed. It is evident, however, that the costs are substantial.[19]

Overall Assessment

Taking the Hill-Burton projections together with the various studies that have been made of the hospital bed supply problem, both on a national scale and in a broad spectrum of local areas,

---

* For discussion of these incentives and pressures, see the discussion of decision making on hospital facilities in the next section.

the committee finds that, although the accuracy of various aggregate national estimates of hospital bed surpluses is debatable, the evidence clearly indicates:

- *that significant surpluses of short-term general hospital beds exist or are developing in many areas of the United States and that these are contributing significantly to rising hospital care costs;* and*

- *that, although shortages of such beds still exist in some areas, these have been rapidly diminishing in recent years.*

These conclusions are reinforced by the results of our examination of the decision-making process on hospital facilities, which are outlined in the next section.

---

* See dissent by Donald G. Shropshire, p. 55.

III. DECISION MAKING ON HOSPITAL FACILITIES

The natures of the health care industry and the community have pushed toward an oversupply of hospital beds. Economic incentives of the industry encourage both capital expansion and unnecessary use of hospital beds; community interests usually support construction of added hospital facilities and oppose the curtailment of existing hospital services.

The Economic Incentives

With the rapid growth of private health insurance coverage and of government financing of health care through Medicare and Medicaid, hospitals now receive more than 90 percent of their revenues from the government and other third-party payers. These revenues are provided primarily on the basis of costs incurred. Higher costs generate higher revenues which reduce incentives for cost-consciousness in making decisions on such matters as capital expansion or hospital bed utilization. The risks of capital investment decisions are largely transferred to the federal government and other third-party payers.

In addition, the federal, state and local governments over the years have subsidized a considerable amount of capital financing for health facilities through direct grants, low-cost loans, loan guarantees, and general obligation bonds. Thus, in many instances providers have not had to face the full discipline of the competitive capital market. Many of these institutions are not skilled in weighing investment risks; in a number of metropolitan areas, some hospitals have so over-expanded that financial failure is a very real prospect, notwithstanding the availability of third-party reimbursement.[20]

An important consequence of the fact that 90 percent of all hospital bills are reimbursed by third-party payers is that neither the physician nor the patient tends to be concerned with the cost of treatment at the time it is rendered. The physician is the primary decision-maker on the use of a hospital bed. However, the physician can make the decision in favor of using a short-term general hospital bed instead of possibly an out-of-hospital service without concern for the cost to the patient, because the patient usually is covered by hospital insurance. In fact, the patient is much more likely to be covered by insurance for the use of a hospital bed than for an out-of-hospital service. This creates

a strong incentive for using a short-term hospital bed in cases where care could as well be provided outside the hospital. The consumer, once the premium is paid (and to the extent that he or she does not have to pay additional co-payments at the time of service), has every incentive to receive benefits; the provider has every incentive to render them; and the third-party payer usually conceives of itself as being in no position to do anything but pay the bill.

In the late 1950s and early 1960s, Milton Roemer published research that supported a thesis that the mere availability of hospital beds tends to induce their use. This thesis has since been both supported and challenged by other research. It may have had more applicability to the period of rapid increase in demand for hospital services which followed shortly after the enactment of Medicare and Medicaid than to the current situation, in which the upward trend for demand of hospital services appears to be leveling off, as evidenced by low occupancy hospital rates in many areas. Nevertheless, the incentives for overusing and hence overbuilding hospital beds are clearly present in the existing system.

The Community Interests

Powerful influences exist within communities to build new hospitals or hospital additions and to keep existing institutions fully functioning regardless of their efficiency or even their financial viability. These influences include

- community pride in having a new hospital or hospital wing, a pride shared by both consumers and providers;
- desires of consumers and physicians to have the best possible facility conveniently nearby;
- interests of influential sponsors (civic, religious fraternal, or business) of a hospital or a hospital wing;
- competition among hospitals to have the latest in facilities and technology, which bolsters institutional prestige and helps to attract physicians to their staffs;
- the traditional focus of medical practice on the acute-care hospital and the lack of alternative facilities and services; and

- the basic political, economic, and social forces that militate against closing or reducing any community facilities, for instance, the loss of the facility's payroll to the local economy.

Under the present system of financing health care, these community interests are not offset or hampered by their cost consequences, because the consequences are not primarily felt at the community level.

The Structural Problems

Hospitals have perceived little risk in expanding their facilities and services but very real dangers in not doing so. The system encourages approval of proposals for expansion. There has been inadequate support for the development of alternative resources to hospitals, and the rewards for holding down costs have been few. With such a system, it is not surprising that the nation has a surplus of hospital beds. In fact, *the committee finds that the decision-making processes in the health care industry virtually guarantee the widespread development of excess hospital bed capacity for short-term general care.*

This situation cannot be effectively remedied without addressing some fundamental problems with the current structure of the health care industry. The committee undertakes this task in the following sections.

IV. A NATIONAL PLANNING GOAL

A Framework of Fiscal and Resource Constraints

P.L. 93-641 places major emphasis on area-wide planning for allocating health resources. The more than 200 "health systems agencies" (HSAs) that are being established throughout the country under this legislation can be either private non-profit corporations or public bodies. However, the legislation is heavily weighted in favor of the former. Their governing boards must have a consumer majority, with the remainder consisting of providers, and must include publicly elected officials as well as other government representatives who may be either consumers or providers. They are intended to reflect a kind of coalition of interests in the area, which no single interest is supposed to dominate.[21] This essentially means a consensus-building process.

The legislation includes among the purposes of the HSAs "the restraint of cost increases for health services" and "the prevention of unnecessary duplications of health care resources." In the case of hospital bed supply, this will require the making of difficult and potentially unpopular cost-benefit judgments. Such judgments, if they are to be constructive, will have to confront the realities of limited resources--to weigh the cost part of the equation in the balance with such benefits as quality and access. This involves the making of choices which, in many cases, will hurt some important interests in the community.

The community pressures that can be readily brought to bear on an area planning agency for expansion and against cutbacks of services and facilities are substantial. Given the current financing mechanism in which neither providers nor consumers are faced with financial constraints, it is difficult to resist such pressure.

In Section VI, the committee recommends certain measures for strengthening the area/state health planning system. Even if those were to be effectively implemented, the basic incentives and capabilities of the planning system will be insufficient to oppose successfully the powerful incentives and pressures that work against cost containment in the health industry.

Some of these incentives and pressures could, in the judgment of the committee, be moderated by the adoption and effective implementation of the recommendations for change in the financing system which are explained in Sections VII and VIII. However, their impact will be partial and long-term and they cannot be

truly effective if the planning system is not capable of making realistic and constructive decisions on the issue of health resource allocations.

In our view, strong external policy guidance is essential to the success of area health planning. A group of experienced regional health planners put the point this way:

> In an area with an apparent over-abundance of hospitals and duplications in services, logical health planning leads to discussions about consolidation. Hospital mergers or sharing of services hold out the promises of greater efficiency, economy, and even improved quality. To implement such changes in a voluntary manner, however, is extremely difficult. Hospital interests, physician interests and even the general public often oppose such efforts in the fear of losing something in their own locale. A regional body appears to be less subject to inhibitory pressures than a local or single county body in such decisions. The decision-makers require as expert technical committees as possible, as well as the ability to call in consultants. Even thus armed, we cannot expect regional agencies to confront powerful interest groups without some backing in the form of broad state or national standards, guidelines, or legislative mandates. . . .[22]

As outlined in Section VI, the state can play an important part in providing policy guidance on the hospital bed supply. However, it cannot substitute for a strong federal role. The federal government is the largest single purchaser of health care and, therefore, has the greatest interest in and potential leverage for achieving cost control. Appropriately, it is the federal government on which P.L. 93-641 places the principal responsibility for issuing policy guidelines and establishing planning criteria.

Federal Policy to Date

P.L. 93-641 directs the Secretary of HEW to issue guidelines on national health policy and to provide priorities for health planning goals. These guidelines are to include standards on the "appropriate supply, distribution, and organization of health resources," and a statement of national health planning goals to be developed on the basis of priorities established in the legislation. Of particular relevance to the issue of hospital bed supply are the priorities to be assigned to the development of 1) multi-institutional systems for coordinating and consolidating institutional health services, 2) medical group practices (especially those whose services are appropriately coordinated or integrated

with institutional health care), and 3) health services institutions having the capacity to provide several levels of care (including intensive care, acute general care, and extended care) on a geographically integrated basis. The legislation requires that the health systems plans of the HSAs "take into account" and be "consistent" with the national guidelines on health planning policy. HEW is soliciting suggestions for these guidelines in preparation for implementing these provisions of the law later this year.

The HEW Secretary has issued notice that he intends to establish certain minimum procedures and criteria for the conduct by the HSAs of reviews of new institutional health services and for the making of decisions by the state agencies in issuing certificates of need. In this notice of proposed rulemaking, HEW states that "there is evidence to suggest there is an excess supply of hospital beds in some areas of the country" and that the procedures and criteria to be issued are intended to "confront the problem of overbuilding of inpatient facilities and to minimize or eliminate such overbuilding." These procedures and criteria would require that, in the case of any proposed, new institutional health service for inpatients, an HSA shall not recommend or make a finding that such a service is needed, or a state agency may not issue a certificate of need for such a proposal, unless the agency makes each of the following findings in writing:

a) that less costly, more efficient, or more appropriate alternatives to such inpatient services are not available and the development of such alternatives has been studied and found not practicable;

b) that existing inpatient facilities providing inpatient services similar to those proposed are being used in an appropriate and efficient manner;

c) that, in the case of new construction, alternatives to new construction (e.g., modernization or sharing arrangements) have been considered and have been implemented to the maximum extent practicable; and

d) that patients will experience serious problems in obtaining inpatient care of the type proposed in the absence of the proposed new service.[23]

The issuance and vigorous enforcement of such regulations would be helpful. It should, however, be recognized that verbal rationalizations to meet externally imposed criteria are often not difficult to make, unless they are tested against a specific quantitative goal. HEW is also considering other ways to help planning agencies make decisions on proposals for new institutional health services, including ways to encourage the use of ambulatory care when it can replace hospitalization.

Under Title XVI, authorizing federal assistance for medical facilities construction and modernization, P.L. 93-641 requires that the HEW Secretary prescribe 1) the general manner in which the state agency of each state shall determine for the state medical facilities plan the priority among projects as a basis for federal aid (by grant, loan, loan guarantee, or interest subsidy) and 2) the criteria for determining needs for medical facilities and for their modernization and for developing plans for distribution of such beds and facilities. The state medical facilities plan must be approved by the state-wide coordinating council as "consistent with the state health plan," and finally be approved by the HEW Secretary. Proposed rules on the implementation of this title have been delayed until the HSA system is in place.

A Quantitative Goal

P.L. 93-641 specifies that, to the maximum extent practicable, national health planning goals shall be expressed in "quantitative terms." The committee has concluded that, if a system-wide cost containment strategy is to be instituted, it will be necessary to issue a planning goal that is specific enough to provide an effective means for exerting leverage for cost containment on the state and area planning processes, and that this means the goal must indeed be stated in quantitative terms.

Conceptually, such a goal should be built on the foundation of the methodology used at the area planning level. The methodologies now in use are discussed in Section II. At a minimum, it seems to the committee that a reasonable local planning methodology for determining hospital bed needs should take into account utilization factors related to the various specific services, the age structure of the population being serviced, some norms of use and occupancy developed by comparative analyses of the hospitals in the area, the availability of alternate facilities, and some judgments made on utilization trends and the prospective effects of tightened controls over hospital admission and patient length of stay. In Section V of the statement, we urge the strongest kind of federal effort to promote the development and use of improved methodologies for determining hospital bed needs.

However, we have concluded that it would be fruitless to attempt now to translate such a methodology into a federal goal that could be used as a practicable means of giving federal guidance to area and state planning agencies. There are simply too many variations in the conditions across the nation to make such an attempt useful--e.g., a rural as compared with an urban area, a small hospital alone in a sparsely populated area as compared with a small hospital in a densely populated area with a number of hospitals, an area with a rapid inflow of aged people as compared with an area with a rapid outflow of such people. There is currently no national data base to support the administration of a goal based on such

factors, and there is no fundamental agreement on the weights to be given to some of the more or less subjective factors which would be involved, such as projections of improved utilization and the impact of a national health insurance plan.

The committee believes that at the present time the federal government should avoid the establishment of a goal for hospital utilization--i.e., a goal which is stated in terms of ratio of patient days to population. The circumstances dictate flexibility in the application of a national goal on the hospital bed supply. For this purpose we see no practical alternative to the use of a bed-population ratio. Such a ratio can be applied flexibly to provide freedom to the planning agencies to use the combinations of utilization and bed occupancy rates most appropriate to the conditions of the individual areas and administered in such a way as to encourage the employment of specific and sophisticated methodologies within its framework.

We considered the application of a national bed-population ratio to the individual health service areas. P.L. 93-641 seems to intend the direct application of federal guidelines to these areas. Such an application would have to be made with considerable flexibility. For example, HSAs might be required to provide special justification for exceeding a specified national threshold figure. There are two important difficulties with this approach. First, because of the wide variations in conditions--short-term, non-federal beds per 1,000 population range from less than 4.0 in some areas to more than 5.0 in others--increases above any reasonable national threshold figure would probably become more the rule than the exception. And second, in those areas below the national figure the pressure would lessen for better hospital bed planning and utilization. The data summarized below from 1973 AHA data illustrate these points.*

Beds per 1,000 Population	No. of Areas	Percentage
Less than 4.0	42	18%
4.0 - 4.4	37	17%
4.5 - 4.9	45	20%
More than 5.0	96	44%

We believe it is feasible to use a bed-population ratio for the purpose of guiding the nation in the desired policy direction, but not as a standard for local application. In our judgment, this

---

* Provided by the National Center for Health Statistics, Health Resources Administration, Public Health Service, HEW.

can be done by reaching a basic judgment on the direction the nation should move in the next five years with respect to the average ratio of short-term general hospital beds to the population, and then making allocations of target ratios to the states based on their current ratios and an assessment of the changes they can realistically be expected to make within the next five years. The states in turn would be asked to make flexible application of their target figures to the HSAs within their jurisdictions on the basis of their various circumstances and conditions. Although P.L. 93-641 provides no explicit authority to the states to issue guidelines within the framework of national policy, it would seem reasonable to assume that the states could at least give appropriate notice to the HSAs of the criteria they intend to use in reviewing HSA plans and recommendations and in making their decisions on certificates of need and on findings concerning the appropriateness of institutional health services.

The current data collection system could, with certain improvements, be used to evaluate progress toward the national goal and its subdivisions. The data-base problems discussed in Section II would have to be resolved, but this should not be difficult. In addition, measures will need to be taken to assure reasonably accurate classifications of hospital beds. It is well known, for example, that a number of hospital beds classified as short-term general hospital beds are occupied by long-term patients. Periodic state surveys should be encouraged.

In Canada, there is a general policy effort to reduce the ratios of its general hospital beds to the population. A number of the provinces have set goals for lowering their ratios from 6.0 to 7.5 beds per 1,000 population to about 4.0 to 4.5, depending in part upon their urban-rural composition.[24] The province of Ontario has declared that its goal is to reduce acute beds from the current rate of 5.0 to 4.0 per 1,000 population.[25]

In the United States, there is no such policy at present. As previously mentioned, the 1975 projections of the Hill-Burton state agencies of goals five years hence for non-federal short-term general hospital beds average slightly under 4.0 beds per 1,000 population, compared to the present average of 4.4. The distribution of these projections among the states is as follows:

	Number of States	
	Present	Hill-Burton Projections
Below 3.5	3	13
3.5 - 3.9	9	6
4.0 - 4.4	11	21
4.5 - 4.9	8	4*
5.0 & above	20	7*

Source: Table 5 in unpublished document prepared by Hill-Burton Program "Health Care Facilities: Existing and Needed." Hill-Burton State Plan Data as of January 1975.

These projections reflect the application of the Hill-Burton formula and not plans for their actual achievement. A recent evaluation of certificate of need and Section 1122 programs disclosed that 75 percent of the sampled states had approved hospital bed supply in excess of 105 percent of their published need projections five years hence.[26]

The national average ratio of non-federal short-term general hospital beds to the population has continued to increase (although at a slower rate) in recent years and reached over 4.4 per 1,000 population in 1975. In view of the evidence of increasing surpluses of such beds, the committee believes that a national policy goal should be established to reverse this trend and start it downward.

Studies of health maintenance organizations (HMOs) indicate that these organizations, in a number of cases, have achieved hospital utilization rates, which translate to ratios as low as 2.5 to 3.0 short-term beds per 1,000 population without jeopardizing the quality of care being rendered.[27] These low ratios have been attributed to a number of different factors--the comprehensive health care services which these organizations provide, their fixed incomes (through prepayment) which give them a direct incentive to cut costs, and their salaried physicians whose incomes are not dependent on the volume of service rendered. Caution must be exercised in extrapolating from the experience of completely organized forms of comprehensive health care with prepaid financing to the rest of the health care system. Nevertheless, these

---

* At the Hill-Burton bed occupancy target rate of 85 percent, the projected bed-population ratios indicate very high hospital utilization patterns.

studies can serve as useful reference points for local planning. The nation as a whole, however, at a current average of 4.4 beds per 1,000 population, is a long way from achieving a goal approaching 3.0.

The committee believes, however, that it is realistic to project a 10 percent reduction in the bed-population ratios for short-term general hospital care in the next five years--i.e., from about 4.4 to about 4.0 per 1,000 population.* This can be achieved by a combination of lowering utilization rates and raising occupancy rates. The following table shows the combinations of rates which are involved.

Patient Days/1000	Beds/1000 at Occupancy Rate of		
	75%	80%	85%
1400	5.1	4.8	4.5
1300	4.7	4.5	4.2
1200 a/	4.4 a/	4.1	3.9
1100	4.0	3.8	3.5
1000	3.6	3.4	3.2
900	3.3	3.1	2.9

a/ Approximate current level--based on 1974 data from AHA Annual Survey and Bureau of Census resident population figures for 1974.[28]

A 10 percent reduction in the nation's average bed-population ratio will not be easy. For one thing, it will require the elimination of unneeded existing hospital beds, with all of its attendant problems (which are discussed in Section VII). For another, it will require the effective implementation of measures to reduce the inappropriate use of short-term general hospital beds and to use less expensive forms of health care outside the hospital (which are discussed in Sections VI and VIII). At the

---

* Federal hospital beds should be included in the national health system but are not included in these ratios because they are generally not considered in the data base and their contributions toward meeting community needs vary widely.

same time, attention needs to be given the continuing need for the modernization of general hospital facilities. Nevertheless, we think the 4.0 five-year goal is well within reach. If new hospital construction can be slowed to a rate which is significantly less than the projected rate of population increase over the next five years, the percentage of existing hospital beds which would have to be eliminated to reach the national goal should be much closer to 5 percent of the present stock than 10 percent.

We emphasize that, in the application of an interim national goal of 4.0, state and local areas which are below that figure should be encouraged to remain below it and, if possible, make further reductions. Those slightly over 4.0 should go significantly below it; those well above it should make substantial progress toward it, and, in any case, aim to be no higher than 4.5 at the end of five years. In the long run, the committee believes that the nation can achieve an average ratio well below 4.0.

In summary, *the committee recommends that a national health planning goal be established under the provisions of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641) to achieve an overall reduction of at least 10 percent in the ratio of short-term general hospital beds to the population within the next five years and further significant reductions thereafter.*

- *This would mean a reduction from the current national average of approximately 4.4 non-federal short-term general hospital beds per 1,000 population to a national average of approximately 4.0 in five years and well below that in the years to follow; many states and health service areas should be below the national 4.0 average at the end of five years.**

- *The national goal should serve as an instrument for effectively guiding health planning at the area and state levels in a general policy direction; however, planning at the area level, within the framework of such a goal, should take into account such specific factors as utilization patterns related to individual services, the age structure of the population served, and norms of use and occupancy.*

- *It should be applied flexibly to meet the varying conditions and circumstances in each state and in the health service areas within the state, paying*

---

* As recommended in the following section, federal beds should be included in the national health planning system but are not included in these ratios because they are generally not considered in the data base and their contributions toward meeting community needs vary widely.

*particular attention to the differences between medical-surgical beds and obstetrical, pediatric and other specialized care beds, and giving appropriate consideration to the requirements for maintaining and improving the quality of needed existing beds and the elimination of those that are unneeded.**

---

* See dissents by Donald G. Shropshire, p. 55, and Harold D. Cross, pp. 56-57.

V. GOVERNMENT HEALTH CARE FACILITIES

P.L. 93-641 is silent on the jurisdiction of the Health Systems Agencies and the state agencies with respect to federal health care facilities. Approximately 10 percent of all general medical-surgical beds in the United States are in the extensive hospital systems of the Veterans Administration and the Department of Defense and the smaller systems of the Public Health Service in HEW.

P.L. 93-641 does provide that, if an HSA services an area in which a health care facility of the Veterans Administration is located, its governing board shall include a designee of the Veterans Administration's Chief Medical Director as an *ex-officio* member. It also provides that, where two or more hospitals or other health care facilities of the Veterans Administration are located in a state, the Statewide Health Coordinating Council shall include a designee of the Veterans Administration's Chief Medical Director as a representative of those facilities. The Veterans Administration's Chief Medical Director and the Department of Defense's Assistant Secretary for Health and Environment, along with HEW's Assistant Secretary for Health, will be non-voting, *ex-officio* members of the National Council on Health Planning and Development, which will be established to advise the HEW Secretary on the development of national guidelines and on the administration of the legislation.

The House committee report on the bill that became P.L. 93-641 expressed the hope that review of proposed federal health activities "outside the jurisdiction of the committee" would be undertaken by those responsible for the activities; the report specifically mentioned the activities of the Veterans Administration. Long-standing Office of Management and Budget (OMB) requirements for clearance of federal construction projects with appropriate local and state agencies have been updated recently to "assure maximum feasible consistency of federal developments with state, areawide, and local plans and programs" and to require that comments of the area and state agencies be forwarded with budget requests to the Office of Management and Budget. These specifically include clearance with the HSAs and the state of plans for modernization, conversion, or expansion of existing federal hospital facilities or construction of new federal hospital facilities.[29]

The committee recognizes that federal health care facilities serve special missions and target populations that extend far beyond the confines of the health systems areas and states in which

they are located. Nevertheless, we foresee a growing interrelationship of federal and community health care services. The VA, for example, has been given authority to enter into arrangements with communities for sharing certain of its specialized facilities, and VA hospitals have been made eligible to receive reimbursement from the Social Security Administration in HEW for the provision of end-stage renal disease service to non-veterans. Over three million dependants of military personnel are now covered in an insurance program that purchases care in the private sector--the Department of Defense's Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The hospitals of the Public Health Service in HEW are providing a variety of services to the communities. The enactment of a national health insurance plan probably will accelerate this process.

In the past, the OMB clearance requirements have not generally resulted in effective coordination of plans for health care in federal installations with the area and state health planning agencies; in some cases the local agencies either didn't consider that their advice would be heeded or they simply didn't want to get involved. However, the new OMB requirements add some important new dimensions to the clearance process and appear to provide a mechanism for filling at least part of the gap left by the legislation. We would hope that this process will lead to serious review by the HSAs and the state agencies of plans for federal health care facilities and to meaningful consideration of their comments by the federal government. It should be aimed at avoiding an expansion of federal beds for general, short-term care and, in fact, at eliminating unnecessary federal beds for such care.

To this end, we suggest that the National Health Planning and Development Council, on which the agencies administering the major federal hospital systems are represented, keep the operation of the new OMB regulations under continuing review. New legislation may eventually be necessary to make the inclusion of federal hospitals in the national health planning system fully effective.

Hospitals operated by agencies of the local and state governments are included within the scope of P.L. 93-641. Some of the current state certificate-of-need programs, however, do not have jurisdiction over state-operated health care facilities; these will have to be revised. To date, HEW notices of proposed rulemaking have not specified that such facilities must be included in certificate-of-need programs to be "satisfactory" to the Secretary. We are informed by HEW, however, that such inclusion will be an item on the checklists it will use in reviewing state certificate-of-need programs.

To make the health planning system under P.L. 93-641 truly "national" and to assist in achieving effective control of the nation's hospital bed supply, the committee recommends

- *that health care facilities operated by the federal government, as well as those operated by state government, be effectively included in the system by appropriate action of those governments; and*

- *that short-term general hospital beds in those facilities be specifically included in planning to achieve the recommended national goal for reducing the overall supply of such beds.*

VI. THE AREA/STATE STRUCTURE

P.L. 93-641 endows the Health Systems Agencies (HSAs) and the state agencies with some important advantages over their predecessors, the Comprehensive Health Planning Agencies (CHPs) established under P.L. 89-749. HSAs will have review and approval authority over the proposed use of federal funds for certain health services within their jurisdictions. Its provisions for establishing strong professional staffs, including rates of pay at least equal to those prevailing in the area for similar positions, could (if adequately funded) result in greatly strengthened planning at the area level. In contrast to the CHPs, the HSAs will not be dependent on the providers for part of their funding, but a crucial question is whether federal funding will be adequate to support an effective planning operation.

With respect to capital expenditures and services, the planning agencies will be in a position to exercise major influence over the implementation of their recommendations. P.L. 93-641 requires that their operations be closely coordinated with the state certificate-of-need and 1122 programs. Also, an area health planning process which holds some real promise for containing costs may well get important support through the financing actions of non-governmental third-party payers and commercial lenders.

In the judgment of the committee, however, a number of steps need to be taken to help fulfill this promise.

Federal Technical Assistance

The issuance of target goals to the states on hospital bed supply, which are recommended in Section IV of this statement, should be accompanied by a major HEW effort to help the state agencies and the HSAs achieve the goals. P.L. 93-641 authorizes an extensive program of federal support for research and technical assistance to develop a strong methodological base for health planning. This should include support for the improvement of methods for determining and projecting hospital bed needs, the development of criteria for assessing the appropriateness of institutional health services, and the collection of information that will help hospitals improve their financial planning and management on such matters as capital investment.

As mentioned in Section II, some CHP agencies have made a start toward developing and applying criteria which go beyond the

Hill-Burton demand-based formula and incorporate a range of factors for considering future need for hospital services. A recent study done under contract to HEW recommends that it assemble and disseminate "exemplars" of need projections being used by CHP agencies and that its regulations define minimum standards for need projections, review criteria, data resources, and agency progress in meeting these standards.[30] The development of criteria for assessing the appropriateness of existing institutional health services is an entirely new field and will require major HEW attention.

The HSAs will need technical assistance from the federal government in carrying out their responsibilities for working with various elements of the private sector--providers, third-party payers, industry, and organized labor--to implement their health systems plans. P.L. 93-641 makes it clear that they will be expected to seek assistance from various parts of the community and, in the process, to furnish such technical assistance to individuals and public and private entities as may be necessary. Federal support of such a service is of utmost importance.

The committee recommends that the federal government give high priority to the development, and dissemination to the planning agencies, of information on improved methods for determining hospital bed needs, on criteria for evaluating the appropriateness of institutional health services, and on the ways in which the planning agencies can assist in eliminating excess hospital beds.

The State's Role

The states, as major purchasers of health care, generally have a greater stake in the containment of its costs than do the local areas. A recent survey, however, found that less than half of the state and area agencies that administer Section 1122 and certificate-of-need programs shared the federal commitment to cost containment.[31] Where this commitment has existed, it has often been directed primarily to the state share of the cost rather than the total cost. In many cases, the concern for cost containment in state governments has been confined to a single component of the government.

The provisions of P.L. 93-641 for a greatly strengthened health planning process with a close linkage to certificate-of-need and Section 1122 controls should broaden state commitments to health care cost containment. However, the legislation provides for strong direct links between the federal government and the HSAs and leaves the states in a somewhat ambiguous position between them. The Statewide Health Coordinating Councils (SHCCs) can adapt HSA health plans for state-wide purposes and review and comment to HEW on HSA budgets and applications for federal funds, but these councils will be strongly influenced by the HSAs, which, under the legislation, will furnish 60 percent of the council members.

The committee believes that the state interests in health care cost control should be invoked as an effective independent force in

the national health planning system. Under P.L. 93-641, the states make the final decisions on certificates of need and on findings concerning the appropriateness of institutional health services. The state agency should not hesitate to apply a brake on any HSA which may be too little concerned with costs. Indeed, an HSA should be overridden by the state agency unless its decisions reflect hard choices and real planning and are not simply politically legitimated deals. The state agency could greatly strengthen the hand of the HSA's planning staff by insisting on good performance. *The committee recommends that the states, which are major purchasers of medical care and therefore have an important stake in controlling costs, be encouraged to exercise independent judgment on the cost implications of the plans and proposals of the HSAs within their boundaries.*

Composition of Consumer Representation

P.L. 93-641 requires that a majority of the membership of a governing body or executive committee of an HSA shall be consumers of health care who are "broadly representative" of the social, economic, linguistic, and racial populations resident in the health service area, and of the major purchasers of health care. It also requires that the business meetings of the governing board be conducted in public.

In the past, consumer influence on the final decisions of health planning bodies has often proved to be illusory. Even when outnumbered, provider representatives have usually wielded the greater influence. They have a full-time professional interest; their institutions stand behind them, providing easy access and technical expertise, lending them the prestige of the institution in the community and the power of the institution in employment and economic influence. They can put forth arguments based on professional judgment about such matters as health care quality, which are exceedingly difficult for consumers to counter. In a good many cases, although the consumers have a nominal majority of representatives on the board or committee, the providers have had a majority present and voting.[32]

The average consumer of health care is often inclined to want more health services, not less. This inclination is accentuated under the present financing system by the lack of visibility at the local level of the costs of adding more services. Under these circumstances, the presence of a consumer majority on an HSA governing board or executive committee or the conduct of the board's deliberations in public view, *per se*, provide no guarantee that they will provide effective checks on the interests of providers in building a hospital facility or maintaining the status quo in a hospital facility.

The nature of the process of selecting the consumers for the HSA governing boards holds the key to their effectiveness. It is, of course, important to include consumers on the HSA governing

boards of differing socio-economic backgrounds who will be concerned with problems of access and quality of health services, as well as with those of cost. Representation of consumer interests in promoting health care alternatives to the use of hospitals--such as neighborhood health centers, maternal and child health centers, and the like--would help to balance interests on the boards. If adequate federal support for staffing the HSAs is made available and these agencies adhere to high professional recruiting standards (a big "if"), the planning staff can be of immeasurable assistance to the governing boards or executive committees in placing before them carefully prepared cost-benefit analyses of proposals on such matters as the building of a hospital facility; this could at least go part of the way toward offsetting the lack of consumer cost consciousness generated by the present financing system.*

However, there is, in our judgment, no substitute for including consumers who have a direct financial stake in the system. Accordingly, we consider it to be of the utmost importance that the P.L. 93-641 provisions calling for broad representation of the major purchasers of health care in the consumer majority on the HSA governing boards and executive committees be fully implemented. That means enlisting some "consumers" who have an especially strong stake in controlling health care costs--often because of commitments to expanded health care benefits arranged through negotiated agreements. They include the representatives of major labor unions and large industries who are becoming increasingly concerned with rising costs of their health insurance plans and are usually influential leaders in the community. Such consumers on an HSA governing board could exercise a major role in assuring that cost factors are balanced against benefits in reaching judgments on such matters as hospital facilities. This would be particularly enhanced under the pressure of a national planning goal such as that discussed in Section IV of this statement.

Similar considerations apply to the statewide councils. The SHCCs are required to have a membership made up of 60 percent of HSA representatives with consumers in the majority. HEW can exercise an important influence on the composition of the HSAs by means of its responsibility for prescribing performance standards covering the structure, operation, and performance of the HSAs and for reviewing in detail at least every three years the structure, operation and performance of the HSAs.

The committee recommends that every effort be made by the communities, the states, and the federal government to assure that the required consumer majorities on the HSA governing boards and the SHCCs include a strong representation of interests for cost-

---

* Section VIII discusses the committee's recommendation to change this system to promote more cost consciousness in decision making by providers.

containment--employers, labor unions, and other major purchasers of health care--as well as consumers interested in the development and operation of health care alternatives to the use of hospitals.

Comparable Data Systems of HSAs and PSROs

P.L. 93-641 requires the HSAs to make periodic reviews and the state agencies to make and publish findings on the "appropriateness" of existing institutional health services. P.L. 92-603, which establishes the system of Professional Standards Review Organizations(PSROs), requires these organizations to review hospital services to assure that those rendered under federally-financed programs are "medically necessary" and that treatment is both quantitatively and qualitatively reasonable. The former legislation requires that the HSAs shall coordinate their activities with the PSROs in their service areas. HSAs would, as appropriate, secure data from the PSROs for use in area planning activities, enter into agreements with them which will assure that actions taken by them will be "consistent" with the health systems plan and, to the extent practicable, provide technical assistance to them.

There is much current debate over whether or not self-regulation by physicians through the PSROs will be effective as a cost-control device. The most frequently expressed concern is that these organizations will be motivated primarily to emphasize high-quality care and not to consider the cost trade-offs involved.[33] Nevertheless, it is clear that HEW hopes the PSRO system will reduce unnecessary hospitalization.[34]

The federal regulations for the conduct by the planning agencies of reviews of the appropriateness of existing institutional health services have not yet been issued. The meaning of the term "appropriateness" is not clear, but evidently it is to be applied in a system-wide context--i.e., the appropriateness of making a service or a facility generally available to the population served by the HSA--in contrast with the PSRO focus on specific services actually rendered to individual patients. Both the Senate and House committees that developed this legislation clearly stated that the HSAs were to provide assistance to institutions so that they could bring their services into conformity with area-wide needs.

A crucial question is whether or not an effective working relationship can be developed between the PSROs and the HSAs. Regulations have been issued by HEW which require written PSRO/HSA agreements covering, at a minimum, the following elements:

- provision for sharing of data and information such as statistics on patterns of utilization and quality of care, subject to the PSRO confidentiality policy restrictions;

- provision for review and comment by the PSRO on the HSA's health system plan (HSP) and annual implementation plan (AIP) and the criteria adopted by the HSA for review of proposed health system changes, especially with respect to quality of care, utilization of services and facilities, and the need for new resources;

- provision for technical assistance to be made available by the HSA to the PSRO and vice versa; and

- provision to assure that actions of the PSRO that alter the area's health system will be taken in a manner which is consistent with the HSP and AIP in effect in the area (derived directly from the language of the statute).[35]

To provide for effective sharing of data and information, as contemplated in these regulations, it would also seem essential to develop data systems which would be comparable between the HSAs and the PSROs.

The potential for conflict between the professional-based PSRO and the community-based HSA is considerable. The practitioners are oriented to the individual patient, the "planners" to the entire community--the former are likely to emphasize quality, the latter the efficient use of community-wide resources. This potential for conflict would probably be increased if, as recommended by the committee, planning limitations are set for the supply of hospital beds. At issue will be definitions of quality of health care and the balance to be drawn between cost and quality.

A preliminary report on a study by the Health Policy Program of the University of California's School of Medicine at San Francisco on relationships between HSAs and PSROs concludes that these agencies can and should cooperate with each other in some instances, particularly in the sharing of data, but that their interests diverge too greatly to make such cooperation generally possible in a number of other respects.[36] Certainly, the development of the relationships between them will require especially close monitoring and evaluation by HEW. In particular, *the committee recommends that HEW provide the leadership necessary to assure the development of comparable health care data systems and the appropriate exchange of information between the HSAs and the PSROs.*

VII. THE ELIMINATION OF EXCESS HOSPITAL BEDS

We emphasize that the establishment and application of limitations on the supply of short-term general hospital beds, such as those recommended in Section IV, would require the HSAs to make rigorous judgments on the appropriateness of existing hospital services and would strengthen their defense of such judgments against strong opposing interests. Moreover, because excess beds encourage unnecessary use of beds, the application of such limits should lead eventually to tightened controls over hospital utilization.

The nation must confront the fact that hospital costs will not be effectively controlled unless it is prepared to take strong measures to force some priority judgments to be made in the use of hospital facilities. We would expect, for instance, that an effective control on hospital bed supply would lead to some waiting lists of patients for elective admissions to hospitals. We believe that manageable waiting lists for such patients are acceptable trade-offs for the economies to be realized by decreasing hospital beds to reasonable levels. Both the planning and utilization review systems need to make these kinds of decisions. The only way in which we visualize that this kind of decision making can be broadly promoted is through the establishment and application of national and state limitations on the supply of short-term general hospital beds.

Beyond the requirements for stringent decision making on plans for resource allocations is the need for developing and implementing practical measures for carrying them out. In the case of the existing hospital facilities, this involves some exceedingly complex and difficult problems.

During the course of the deliberations on the legislation which became P.L. 93-641, consideration was given to various ideas for phasing out hospital beds or other hospital facilities that were found to be unneeded through the planning process. These included proposals that state certificate-of-need programs provide for "decertification" of existing facilities, as well as certification of new facilities, and that some form of federal aid be provided to assist hospitals in meeting the special costs of phasing out unneeded beds or converting the space to other uses.

All of these proposals, however, involved some complex questions of law and equity which had not been thoroughly explored. These include such questions as

- whether the closing or conversion of an investor-owned hospital facility could be forced under the constitutional constraints against taking private property without compensation;

- whether less stringent constitutional guarantees might apply in the case of voluntary hospitals, whose assets are already dedicated in some sense to the public interest;

- what would be done with the unneeded facilities and how this would be accomplished;

- how such problems as liquidating outstanding indebtedness would be met; and

- how the problems posed by the termination of the staff privileges of physicians practicing in the hospital would be resolved (not to mention the problems of terminating other employment in the hospital).

As a consequence, the legislators left open the issue of sanctions. The report of the House committee on this legislation states that the issue of eliminating existing institutional health services found unneeded was left to the discretion of the various states in recognition that some of them may be able and ready to take on such a responsbility but many will not be willing or qualified to do so.[37] The report of the conference committee stressed that the purpose of the findings of the state agency is to inform the public and the provider as to the appropriateness of particular services and what, if any, "voluntary" remedial actions are advisable.[38]

The process of making and publishing findings on the appropriateness of existing institutional services can serve a useful purpose by exposing unneeded facilities to public criticism and pressure to conform. Follow-up action often will be needed, however, to accomplish the desired result. Findings that contemplate such follow-up action will be taken more seriously than those which are merely advisory.

There has been very little experience in the United States on reducing excess hospital capacity. The principal efforts have been in New York and Massachusetts, the former under extreme financial pressure, and these apparently have met with only limited success.[39] The Executive Branch of the federal government has on several recent occasions proposed to close the eight remaining Public Health Service hospitals, but Congress and other interests have strongly resisted such a move and so far prevented it. All the experience to date indicates that reducing hospital capacity is a very difficult

process, and, to have a chance of success, will require a joint public-private effort and public support.* In our judgment, the HSAs must play a key role in arranging such an effort and securing such support.

Action by the HSAs

The first step in the process of eliminating unnecessary hospital beds should be an attempt to work out arrangements with the interested parties. As envisioned in P.L. 93-641, the HSAs could play a major role in bringing these parties together and assisting them in reaching agreement on a plan which would benefit the entire community. For example, a planning agency might be able to persuade several hospitals to get together to work out some form of merger or an individual hospital to convert a portion of its short-term general inpatient care facility to needed ambulatory or long-term care uses or even to mothball it. Perhaps it could help in arranging a "bed banking plan"--a widely discussed approach under which third-party payers might be willing to buy a facility which involves unwarranted costs for them and resell it for a different use.

We see the HSA role in all of this as that of a catalyst. It would require skilled leadership on the part of the staff director of the planning agency and major technical support from the federal government and the states. Certainly the closure or conversion of a hospital facility would be an acid test of the "coalition-of-interest" concept of the HSAs. For this concept to have a chance of success, it must be supported with adequate funds for staffing and adequate salaries for attracting experienced professional talent.

The committee recommends that findings by state agencies of the need for closure, consolidation or conversion of existing hospital facilities be followed by vigorous efforts on the part of the appropriate HSA to facilitate action appropriate to the findings by all parties concerned.

Financial Assistance

Public policy must address the financial problems that will arise in closing a facility. The ability of the HSAs to work out a plan for this purpose would obviously be greatly enhanced if there were means available for meeting costs of closing or

---

* This experience is being analyzed in some detail in a study, done under contract to HEW, by Walter McClure of the private research organization, InterStudy, Excelsior, Minnesota. This study on "Reducing Excess Hospital Bed Capacity" will soon be published.

converting existing facilities that could not be met through private financing. The public expense of such financial aid would be far less than the cost of continued maintenance of excess short-term general hospital beds.

Proposed legislation has been introduced in Congress to provide financial aid for phasing out hospital facilities. It would modify the reimbursement system for Medicare and Medicaid to authorize a "transitional allowance" that could be included in the hospital's reasonable cost in recognition of a reimbursement detriment suffered by it because of "a qualified conversion." Such a conversion refers to a retirement, modification, or change in usage of underutilized hospital facilities to eliminate excess bed capacity or discontinue an underutilized service for which there was adequate alternative sources in the area.[40] Although P.L. 93-641 authorizes federal grants for conversion of inpatient hospital facilities to other health purposes, it does not appear that funding for medical facility construction will be sufficient to provide for much, if any, use of this provision through fiscal year 1977.

Without further study, we are not prepared to recommend specific guidelines for providing financial aid for eliminating hospital facilities, except to note that guidelines would have to include safeguards against the inappropriate making of profit by any party to the closure or conversion. However, it is our general view that the reimbursement system offers the most feasible means of providing government aid where necessary to help meet the costs of eliminating excess hospital bed capacity. *The committee recommends that government financial assistance be made available when required to meet fixed or special costs of closure, consolidation, or conversion that cannot be met through private financing.*

Linkage of Financing with Planning

We have considered a number of alternative courses for using sanctions to eliminate unnecessary hospital facilities. The state certificate-of-need program can, for example, refuse to certify the modernization of a facility found to be unneeded. Although such an action might eventually lead to the closure of a hospital, it would probably not stop continued maintenance of unneeded and substandard beds for a long period of time.

A comprehensive and direct regulatory approach would be the passage by the state legislature of an enabling statute giving the state agency the authority to reduce or revoke a hospital license if the agency makes a finding that such hospital capacity is unneeded. Experience shows that this kind of a regulatory approach has had little success. Certainly, it could not work unless the problems of equity and law are first worked out with the parties involved, in accordance with concepts of due process. Conceivably, broadened licensing power might be useful as an instrument of last

resort. However, we believe that, where the use of a sanction is necessary to insure that the necessary arrangements to eliminate excess hospital beds are developed and implemented, it would be more politically acceptable and generally more effective to exercise it through the financing system than through the direct regulatory power of the state.

One proposal for using the financing system to deal with the problem of unneeded hospital facilities would authorize the pooling of depreciation allowances for hospitals under the Medicare and Medicaid reimbursement systems for latter allocation through the HSAs rather than paying them automatically to the individual hospital. In the judgment of the committee, the provision to HSAs of this kind of power over the fate of all the hospitals in its area would be highly questionable--at least at this early stage in the HSA experience.

Some observers point to the difficulties of taking public action to close a hospital facility and suggest replacing the present retrospective "cost-plus" system of hospital reimbursement with a system that sets the rate of payment prospectively. They consider this to be the most effective and realistic long-run means of bringing about a closure of, or a reduction in, uneconomic facilities, because such a plan would put pressure primarily on the provider institution for making decisions within an established budget, which are cost effective on such matters as hospital bed utilization.[41] Reimbursement prospectively based on an assumed occupancy rate, for example, would encourage hospitals to get rid of underutilized beds. A Social Security Administration report to Congress stated that the "phase-out of underutilized services and beds could be encouraged by reimbursing on the basis of acceptable utilization levels."[42] Prospective rate-setting is further discussed in the next section of this statement.

Another suggestion is that third-party payers could simply refuse to pay for services rendered in any facility found to be unneeded. Modification of Medicare and Medicaid legislation would be necessary to enable the federal government to take such action. Such a sanction would raise many of the problems of law and equity that arise in overtly closing a hospital facility. The committee believes, however, that it would be appropriate to use the financing system where necessary to aid in carrying out the findings of the planning agencies for closure or conversion, provided those findings are backed up by a practical plan for taking care of the equities involved, such as liquidating outstanding indebtedness, or rearranging staff privileges for the physicians involved. The mere possibility of such third-party-payer action should promote voluntary efforts to work out a solution and thus diminish the need for using the sanction. It should be noted that, in the Social Security Admendments of 1972, Congress made payments for hospital services under Medicare and Medicaid conditional on PSRO approval of such services. We would hope that the Administration and Congress would be willing to forge a similar link between the financing and planning systems with provisos such as those

suggested above. *The committee recommends that the reimbursement policies of the government and other third-party payers be changed to support, as necessary, appropriate action to carry out the findings of the planning agencies for the elimination of unneeded hospital facilities.**

---

* See dissent by Donald G. Shropshire, p. 55.

VIII. INCENTIVES FOR THE PRIVATE SECTOR

The United States history of regulating capital expenditure and services in the health industry and of setting rates for the provision of hospital services has been too short to provide much evidence of efficacy. What evidence exists is mixed. For example, a recent comprehensive survey of public controls of capital expenditures in the health industry found that these controls, as presently administered, "do not perform effectively in preventing capital investment in health facilities and services and, thus, are not an effective means of containing health costs."[43] Phase II and III of the recent Economic Stabilization Program somewhat slowed the rate of increase in medical care prices, but what little effect such controls had wore off rather quickly.[44]

The major concerns about regulation, however, are based on the longer experience with it in other industries, such as transportation or electric power. Critics have said that regulation tends to maintain the inefficiencies of the status quo and protect the monopoly position of the regulated industry and thus free it from the need for making innovations to meet the competitive forces of the marketplace. They point out that the rewards and risks for the regulators are balanced in favor of the regulated and that the regulators are usually heavily dependent on the regulated industries for information--thus leading to the so-called "capture theory" of regulation. There is concern expressed about extending the "public utility" concept of regulation to the health industry, the argument being that it is better to make the health system work efficiently by using incentives to modify the behavior of health providers and patients than it is to impose external controls.[45]

Realistically, the challenge is not a choice between the market, with its emphasis on incentives, and regulation, with its emphasis on directions and sanctions. Rather, as former Social Security Commissioner Robert M. Ball has put it, the task in the immediate future will be to "strengthen incentives, competition, and choices and yet introduce direct regulation related to a number of major strategic points, seeking to avoid the rigidities that could develop in regulating the details of such a highly complicated system as health care delivery."[46]

If the area and state planning and regulatory provisions of P.L. 93-641 are to be effective in accomplishing their objectives, such market forces for encouraging cost containment as there are

in the health industry will need to be strengthened wherever possible. Those that have important applicability to the problems of hospital bed supply and use are discussed below.

An Incentive Reimbursement Plan

The means of paying for health care probably will have more to do with the effectiveness of HSAs and PSROs than any other factor.[47] The current financing system works against them rather than with them. The failure of the current retrospective cost-based reimbursement system to embody any incentives for cost consciousness by hospitals on such matters as capital expansion has led to widespread advocacy of a prospectively set payment rate for hospital services. Most of the comprehensive national health insurance plans now pending before Congress either explicitly or implicitly intend that hospital services be paid at a prospectively determined rate.

Although such a change is often advanced as an alternative to regulation, it leads to extension of some degree of control over hospitals by either the government or another third-party payer or both. At the present time, there are 26 prospective rate-setting plans of various kinds in operation in 22 states. Eight of those are operated through state review agencies, and 16 are sponsored by Blue Cross plans (two along with state rate review). In two other states, nonprofit corporations have been established under the sponsorship of state hospital associations to set prospective rates on a voluntary basis. These systems involve about 25 percent of the nation's hospitals but their application is limited. For example, Medicaid rates are determined prospectively in only five states; state-set rates apply to all purchasers in only one state; and participation is statewide and mandatory in only 15 of the 26 prospective reimbursement systems.[48]

Under 1967 amendments to the Social Security Act, the Secretary, HEW, received authority to conduct experiments in "incentive" reimbursement. Under 1972 amendments to this Act, Congress instructed HEW to undertake a program of support for experiments and demonstration projects on alternative methods of making payment on a "prospective basis" to hospitals, skilled nursing home facilities, and other providers, and authorized the Department to tie in such projects with state rate-setting mechanisms where they exist. This program, which is being carried out by the Social Security Administration (SSA), includes exploration of the establishment of rates by formula, by negotiation, by review and approval of a proposed budget, or a combination of these. In P.L. 93-641, Congress authorized financial assistance to a maximum of six states to demonstrate the effectiveness of mechanisms for regulating health care charges in their states. Under this Act, only a fully designated state health planning and development agency is eligible for such assistance and such an agency must obtain a recommendation from the appropriate HSAs before it conducts its review. Since this authority closely

parallels that previously enacted in the Social Security Act amendments, it also has been delegated to the Social Security Administration.

In a 1974 report to the Congress, SSA stated that its evaluations of experiments with incentive and prospective reimbursement were incomplete and that a number of organizational and methodological questions remain unresolved.[49] The questions of method are critical. A rate-setting process that involves judgments on the necessity and appropriateness of each service would require a large administrative apparatus and depend heavily on information from the provider, who would have no incentive to make such a system work. A process that substitutes the judgment of the regulator for the regulated on internal management problems will predictably fail. If, on the other hand, a simple but fair method can be developed and applied to exert pressure for management decisions that are cost-effective but permit the providers to exercise flexibility and initiative in making these decisions, then it has a chance of success. It must, in fact, work as a provider "incentive" system.

At the same time, the setting of an incentive reimbursement rate must be compatible with the decisions of the area and state health planning agencies, including those relating to certificates of need. Moreover, if rate-setting is based on efficiency norms relating to such factors as bed occupancy rates, it would provide a strong incentive for the unnecessary filling of beds unless there is an effective utilization review system. In other words, the financing system must work in harness with the planning and regulatory system.

If an incentive reimbursement plan were implemented for Medicare and Medicaid funds alone, it would have limited effect, since these funds rarely account for more than one-half of the revenue received by a hospital. If the hospital were subjected to several plans for funding its operations, it would unduly complicate its problems of financial planning and management. A single plan would be advantageous, but an incentive reimbursement mechanism that would place equal pressure on all hospitals and force them to face up to the risks of their investment decisions has yet to be developed.

Incentive reimbursement of the hospital has only very indirect impact on the physician, who not only controls the demand for hospital beds but also exerts a powerful influence on the supply of beds. Nevertheless, it puts the hospital administrator in a stronger position to resist demands for additional facilities and equipment, which would drive up costs beyond the prospectively determined budget within which he must plan and operate.

The SSA staff and others, in and out of government, have concluded that the theoretical advantages of the prospective reimbursement idea and the apparent success of some forms of it in certain areas of the country warrant continued support for experimentation with and development of the basic approach. SSA recently reported

to Congress that its preliminary findings indicate that prospective reimbursement "generally exerts a modest downward effect on hospital cost increases without sacrificing the quality of services rendered by the hospital."[50] We believe that HEW ought to be able to reach some conclusions on its experiments and evaluations in the near future. A reasonably designed prospective reimbursement system is bound to be an improvement over the present system. This issue will need to be directly confronted in considering national health insurance plans. *The committee recommends that the federal government replace the current retrospective cost-based reimbursement of hospitals for federally financed health care programs with a prospective rate-setting system that will assure more cost-effective decisions on such matters as capital expansion and the maintenance of beds and that other third-party payers adopt a similar course of action for the programs they finance.*

Incentives for Care Outside the Hospital

In P.L. 93-641, Congress made this finding:

> . . . Increases in the cost of health care, particularly of hospital care, have been uncontrollable and inflationary, and there are presently inadequate incentives for the use of appropriate alternative levels of health care, and for the substitution of ambulatory and intermediate care for inpatient hospital care.

In P.L. 92-603, providing for the establishment of the PSRO system, Congress set the following requirement:

> . . . payment for . . . services will be made . . . in the case of services provided by a hospital or other health care facility on an inpatient basis, only when . . . such services cannot, consistent with professionally recognized health care standards, effectively be provided on an outpatient basis or more economically in an inpatient health care facility of a different type . . . .

The two major "incentive" approaches for moving in this direction are: 1) the support of the HMO movement, which is assigned a high policy priority in P.L. 93-641, and 2) the extension of health insurance coverage to provide adequate protection for health services rendered outside the hospital.

Support of HMOs Recent legislation to support so-called health maintenance organizations (HMOs), embracing a wide variety of prepaid comprehensive care organizations competing with traditional providers, represents another approach for shifting the risk and control of health care expenses to the providers. HMOs must attract and care for their enrollees within a fixed, prospectively determined budget based on assessment of the market. Since these organizations accept, in exchange for a fixed advance capitation payment, contractual responsibility to ensure delivery of a stated range of health services, including ambulatory as well as inpatient care, they assume a degree of financial risk and have an incentive to avoid unnecessary costs and services while delivering the care agreed to under the contract. One important way of doing this is to provide preventive and ambulatory services which minimize dependence on the use of costly hospital beds. A number of utilization studies of matched populations have indicated that, even after adusting the data for age, sex, and other factors, HMOs use 30 to 50 percent less hospital days and cost 10 to 30 percent less per capita than do traditional fee-for-service providers.[51] A recent study comparing 10 HMOs and 10 matched populations showed that hospital use in group practice plans was two-and-a-half times lower than in the fee-for-service systems and that there were no discernible differences between them on factors relating to quality and access.[52]

However, HMOs have not yet made a major penetration of the health care marketplace. The development of these kinds of organizations in various parts of the country has encountered the following major obstacles:

- The federal legislation enacted in 1973 for support of HMOs required that they offer a more comprehensive benefit package than is provided by traditional health care insurers and thus has placed them at a competitive disadvantage.

- Implementation of the requirement that employers offering health insurance include an HMO option where such a plan exists was delayed because of differing interpretations of the 1973 Act. (This issue has now been resolved.)

- Many HMOs have encountered difficulties in attracting physicians and much of the general public is as yet uncertain about the advantages of HMO membership.

Congress recently enacted amendments to the 1973 Act which should overcome many of the problems of that Act. The committee subscribes to the principal conclusions and recommendations in a policy statement issued by the Institute of Medicine in 1974 under

the title of "HMOs: Toward a Fair Market Test."[53] It also favors the development of various types of primary health care centers that will reduce the need for using an expensive short-term general hospital bed. *The committee recommends vigorous public policy support, from the community to the federal level, for a fair market test of HMOs and appropriate encouragement of other organizations that meet needs for accessible and acceptable out-of-hospital health care services and have objectives and incentives to reduce unnecessary hospitalization.**

Insurance for Non-Hospital Costs Although some private insurers are beginning to cover home health care, nursing home care, ambulatory surgery, and pre-admission testing[54], many health insurance plans still only adequately cover hospitalization costs. Moreover, Medicare and Medicaid do not adequately cover costs of care received other than as a hospital inpatient. In the final analysis, the issues related to the hospital bed supply in the United States will not be fully resolved until the incentives of the present system to use a hospital bed rather than less costly forms of health care are reversed. This will require the extension of health insurance to provide ressonable coverage for a broad range of health care services outside of the hospital. This applies not only to various types of ambulatory services, including maternal and child health care centers, surgi-centers, etc., but to home care and institutional services outside the hospitals as well.

Of course, to be effective, such broadened health insurance would need to be supported by programs to assure that such services will actually be available and acceptable. In this context, *the committee recommends a public policy that will consistently promote the development of adequate insurance coverage for out-of-hospital health services--for care in the home, intermediate facilities and skilled nursing homes, and for various forms of ambulatory care.*

Another Competitive Approach to Cost and Quality Control

Private health insurers, reflecting the interests of their customers, have a major stake in cost containment. Leaders in the insurance industry have expressed increasing concern over the escalation of health care costs, calling for action by industry members to help contain these costs.[55] In addition to extending

---

* We assume that, in accordance with the priority assigned to HMOs in P.L. 93-641, HEW will closely monitor the treatment afforded HMOs and other forms of group practice by the planning agencies and certificate-of-need programs.

their coverage to include care outside the hospital, some insurers are undertaking such cost-containment activities as using computer profiles to spot unnecessary treatment or excessive fees or charges and covering the cost of securing a second opinion on elective surgery. It has also been suggested by one industry leader that coverage for hospital confinement for particular diagnoses be restricted to specific periods of time unless it can be demonstrated that longer confinement is medically necessary.[56]

Private insurers could be encouraged to establish cost and quality review programs of their own, similar to but separate from the officially established PSRO review program. This might be most readily and effectively done by creating closed-panel individual practice associations (IPAs) under the provisions of the HMO Act. This kind of competition could, in our judgment, be quite helpful in turn in stimulating others to introduce effective cost and quality controls.*

In sum, the Committee recommends that private health insurers be encouraged and supported in their efforts to serve their customers by competitively experimenting with new approaches to cost problems.

---

* See dissent to this paragraph by Irving J. Lewis, pp. 57-58.

Dissent by Donald G. Shropshire to the conclusions and recommendations in the statement, as noted on pages vii, x, xi, 16, 30 and 46.

The statement appears to take some questionable research at face value and makes a critical assumption that there are substantial savings in bed reductions. Too much of the blame for costs is being put on beds. Is this another example where we are looking for a scapegoat or a convenient "red herring" in order to avoid addressing such other factors as, costs from excess regulation, unrestrained hospital services generated by private practice, society's infinite demands and inability to cope with "who shall live," government's generous promises and arbitrary payment system, CAT scanners, open-heart surgery, and other significant clinical program developments? It avoids the whole question of the major impact that intensification of hospital services has had on the inflation rate in the hospital industry.

The recommended arbitrary formula, or target, has no real basis in fact or rationality. Beds are not equivalent, the Hill-Burton formula is highly questionable, and, perhaps most important, this simplistic approach would be counter-productive in gaining provider and community acceptance for addressing such capacity problems as do exist. An arbitrary formula is not a good incentive; it may well end up "turning off" the people who have to work out the details and make the tough decisions at the community level. It is too early for this statement to assume that P.L. 93-641 will be a failure in making the tough cost-benefit decisions through the planning process. Focus on bed ratios will give the Health Systems Agencies a simple way to avoid doing any true planning for the community and probably will not have much impact on cost inflation.

In addition to my concerns about the assumptions made in the statement and the inadequacy of a simple formula approach to a very complex matter, the statement appears to have lost an opportunity to be of material help to both providers and consumers who are committed to making P.L. 93-641 work. The field now needs a more rational validation of the definition and the extent of the bed issue. Further, the communities are now begging for more scientific methodologies for determining what facilities and services are needed. Adequate opportunity has not yet been given either P.L. 92-603 or P.L. 93-641 to prove their value in containing costs. The statement could have been of greater value by giving detailed attention to the planning process itself for making decisions affecting services and costs.

Too much faith is placed in the process established by P.L. 93-641 for reviewing the appropriateness of institutional health services. A basic problem with linking "appropriateness" findings with regulatory decisions is the fact that the whole appropriateness process does not provide for the application of standards and due process protections.

Dissent by Harold D. Cross to the recommendations in the statement, as noted on pages ix and 30.

The increasing cost of medical care as reflected in hospital costs resulted in the formation of this committee to define this problem and make recommendations. It is our finding that there are excessive beds in most areas of the country and it is likely that this fact contributes to excessive use of these beds and increases costs. Independent of cost there is excessive use of hospital beds as reflected in marked variations in hospitalization rates, duration of hospital stay and surgical procedures.

There are many philosophical, conceptual, local, and private factors that contribute to that state of affairs. Some thought to be most fundamental include the following.

- In this country we have no defined health priorities. Our non-system allows and subsidizes the treatment of problems for which there is not a generally effective treatment, such as obesity; it permits one physician to decide on elective, potentially harmful procedures such as back or knee surgery; and it allows free choice of treatment for breast cancer, with marked differences in hospital stay and costs, but not in outcome.

- Without specified minimal health care guidelines and with no ongoing quality of care process in the day-to-day care delivery, each physician is forced to make up his own rules. He decides to
  - -- hospitalize a patient or not, and when to discharge;
  - -- manage a problem surgically and/or non-surgically;
  - -- prescribe or not prescribe drugs or other treatment;
  - -- utilize other personnel, expensive or inexpensive, dependent on his goals.

- Consumers receive distorted medical information via the news media in the form of advertising that they may perceive as factual. There is no systematic way for them to gain up-to-date information about their problems prior to physician intervention. Their demand or request for hospitalization is sometimes their request for a thorough health evaluation.

Reducing hospital bed construction and costs will only act as a temporary restraint against those three powerful factors. Any long-range solution to the overall cost of care, unnecessary hospitalizations, operations and their attendant costs in dollars, death, and disability will require a major change in the practice of medicine, specifically in the behavior of the physicians and the consumers.

To "cap" the process at some arbitrary bed limit before assuring minimal care is irresponsible and gives the appearance of having provided a solution. What needs to be done is to get agreement on what problems require hospital care, and then arbitrarily arrive at a figure above that for experimental/fringe care, and combine these in an approximation for the number of beds/thousand.

Goals for specific health problems of our population should be set. Then guidelines for implementing these on a local level can be developed. Should this concept of setting health goals for the country, based on specific problems, be agreed upon, then the Institute of Medicine or other groups can begin itemizing problems for which hospital care is appropriate, those for which it is of questionable value, and those for which it has been shown to be of no definite value.

Dissent by Irving J. Lewis to the paragraph noted on page 53.

I have to disagree with the recommendation to encourage private insurers to undertake their own cost and quality control programs. While it may be salutary to encourage experiments and new techniques to test incentives, such as in respect to second opinions for elective surgery, it is quite another matter under the banner of competition to stimulate the proliferation of control programs.

Our experience with Blue Cross, Medicare, and Medicaid reimbursement adequately demonstrates that variety in reimbursement formulas does not advance the public interest in cost or quality control. The third-party payer is basically interested only in its own financial outlays, not the overall cost or quality of care. As a consequence of the diversity of hospitals and the diversity of reimbursement formulas, the typical hospital administrator manipulates the system to serve the special interests of the hospital--whatever they may be. The same outcome can be anticipated with multiple cost and quality control programs.

It is time that we developed a method to pay all hospitals on behalf of all major third-party payers. This will require legislation. It should be paralleled by a unified cost and quality control program, which ought to be built upon the PSRO mechanism now limited only to the major federal programs.

Extending the PSRO to privately insured care will also require legislation, including action at the state level.

REFERENCES AND NOTES

1. U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Facilities Utilization, "Health Facility Construction: By Type of Funds (1920-1975)," May 1975, based on special reports prepared by the U.S. Department of Commerce, Bureau of the Census (mimeographed).

2. U.S. Department of Health, Education, and Welfare, Public Health Service, Forward Plan for Health: FY 1977-81, DHEW Pubn. No. (OS) 76-50024 (August 1975), p. 7.

3. The Council of State Governments, Health Cost Containment: The Connecticut,Maryland, and New Jersey Responses, Innovations Transfer: New Approaches by the States (Lexington, Kentucky: The Council of State Governments, March 1976), p. v.

4. Lewin and Associates, Inc., Evaluation of the Efficiency and Effectiveness of the Section 1122 Review Process (Washington, D.C.: Lewin and Associates, Inc., September, 1975), Chapter One, pp. 1-2.

5. David S. Salkever and Thomas W. Bice, "The Impact of the Certificate-of-Need Controls on Hospital Investment," Health and Society: Milbank Memorial Fund Quarterly 54 (Spring 1976): 185-214.

6. See, for example, U.S. Congress, House Committee on Interstate and Foreign Commerce, Report on the National Health Policy, Planning and Resources Development Act of 1974, HR Report No. 93-1382, 93rd Congress, 2d sess., 1974, p. 31; Fredric Sattler and Max D. Bennett, A Statistical Profile of Short-Term Hospitals in the United States as of 1973 (Minneapolis: InterStudy, 1975), pp. 46-47; Barry Ensminger, The $8 Billion Hospital Bed Overrun: A Consumer Guide to Stopping Wasteful Construction (Washington, D.C.: Public Citizens Health Research Group, 1975), p. 1.

7. Editorial: "Are There Too Many Hospital Beds?" Hospitals, JAHA 49 (April 1, 1975): 17-18; "Empty Beds: An Issue that Has Been Blown Out of Proportion," Federation of American Hospitals Review 8 (April-May 1975): 7-15.

8. See, for example, statement by Barry P. Wilson, Vice President, Public Affairs, Group Hospitalization, Inc., at a hearing held by the District of Columbia Appropriations Subcommittee of the United States Senate Committee on Appropriations, August 10, 1976; "The Oklahoma Illness Care System: 'Run Amuck'," Oklahoma Consumer Protection Agency, Interim Report II, November 21, 1974; article on Dade County, Florida, by Richard L. Johnson, "The Specter of Bankruptcy," Hospitals, JAHA 48 (March 16, 1974): 39-42; article projecting surplus in Sacramento, California, by Katherine G. Bauer, Containing Costs of Health Services Through Incentive Reimbursement (Harvard Center for Community Health and Medical Care, December 1973); Atlanta Regional Commission, Hospital Development Guide, Vol. I, July,1973 and Hospital Development Guide, update, 1974, adopted, February 26, 1975; "Bed Demand Projections for General Hospitals in Seven County Twin Cities Metropolitan Area" by Metropolitan Health Board, Minneapolis-St. Paul, January 1976 (mimeographed); Irving Leveson, "Some Implications of National Health Insurance of the New York City's Health System," a paper prepared for the Task Force on the Impact of National Health Insurance of the New York Metropolitan Regional Medical Program, December, 1975; article on Los Angeles by Harry Nelson, "Giant Hospital Complex to Open but Many Question Need for It," Los Angeles Times, 21 March 1976.

9. Martha Melum, Assessing the Need for Hospital Beds: A Review of Current Criteria (Minneapolis: InterStudy, December 1975), p. 2.

10. John D. Thompson, "Certificate of Need Legislation--Working Paper No. 1," (unpublished) Memorandum to Acute Care Task Force, State of Connecticut Commission on Hospitals and Health Care, May 21, 1975; experience in Boston hospitals and others.

11. U.S. Department of Health, Education, and Welfare, Health Services and Mental Health Administration, Health Care Facilities Service, Evaluation of the Hill-Burton Bed Need Formula: Short-Term General Hospital Beds, Report of the Committee on Consultants, HCFS Evaluation Project 71-4, August 1972.

12. Judith R. Lave and Lester B. Lave, The Hospital Construction Act: An Evaluation of the Hill-Burton Program, 1948-1973 (Washington, D.C.; American Enterprise Institute for Policy Research, 1974), p. 26.

13. Statement by Gerald Rosenthal, Director, National Center for Health Services Research, Health Resources Administration, Department of Health, Education, and Welfare, before Subcommittee on Public Health and Environment, Committee on Interstate and Foreign Commerce, U.S. House of Representatives, February 10, 1976, pp. 3-4; and article by Joseph Newhouse, Charles E. Phelps, and William B. Schwartz, "Policy Options and the Impact of National Health Insurance," The New England Journal of Medicine 290 (June 13, 1974): 1345-1359.

14. Newhouse, Phelps, and Schwartz, op. cit., p. 1359.

15. Melum, op. cit., pp. 7-8, 11.

16. Greggory J. Harmon, "State Planning by Defining the Community, Its Future Needs," Hospitals 50 (June 16, 1976): 108.

17. Fredric Sattler and Max D. Bennett, op. cit., p. 47; and Atlanta Regional Commission, Hospital Development Guide, Vol. I, op. cit., p. 47.

18. William J. Bicknell and Diana Chapman Walsh, "Critical Experiences in Organizing and Administering a State Certificate of Need Program," Public Health Reports 91 (January-February, 1976): 34.

19. The statistical profile by Sattler and Bennett (1974) uses an estimate of $18,250 as the per annum cost of an unneeded bed. However, Barry Wilson, Vice President, Group Hospitalization, Inc., for the Washington metropolitan region, in his August 10, 1976, testimony before Congress, states that the region's expected 1,700 excess hospital beds will require expenditures of at least $120 million to be built, and about $70 million a year, or $40,000 per bed, to maintain.

20. Lewin and Associates, Inc., op. cit., Chapter Two, p. 5.

21. Congressional Record, September 11, 1975, Insertion by The Honorable James F. Hastings of remarks made by the House Interstate and Foreign Commerce Health Subcommittee Chairman, Paul G. Rogers, at the American Hospital Association Annual Convention on August 18, 1975, p. E4700.

22. Peter D. Mott, M.D., et al., "Different Issues in Health Planning, Development, and Review," American Journal of Public Health 66 (August 1976): 746.

23. U.S. Department of Health, Education, and Welfare, Public Health Service, Health Resources Planning and Development, Federal Register 41, No. 55, Part II, 19 March 1976, 11690, 11694, and 11704.

24. Maurice Le Clair, Deputy Minister of Health, Department of Health and Welfare, Canada, "Overview of the Canadian Health Care System," a paper presented at the Sun Valley Symposium on National Health, August 1974, pp. 128-132 (mimeographed).

25. Lewin and Associates, Inc., "Government Controls on the Health Care System: The Canadian Experience" (Washington, D.C.: Lewin and Associates, Inc., January 31, 1976), Chapter Four, p. 7.

26. Lewin and Associates, Inc.,"Evaluation of Section 1122 Review Process,"op. cit., Chapter One, p. 13.

27. See, for example, Avedis Donabedian, "An Evaluation of Prepaid Group Practice," Inquiry VI (September 1963): 3-27; M. Roemer and W. Shonick, "HMO Performance: The Recent Evidence," Health and Society: Milbank Memorial Fund Quarterly 51 (Summer 1973): 271-317; M. Corbin and A. Krute, "Some Aspects of Medicare Experience with Group Practice Plans," Social Security Bulletin 38 (March 1975): 3-11; and paper by Clifton R. Gaus, Barbara S. Cooper, and Constance G. Hirschman on "Contrasts in HMO and Fee-for-Service Performance," presented at the American Economic Association meetings, Dallas, Texas, December 30, 1975.

28. American Hospital Association, Hospital Statistics, 1975 edition, 1974 data from American Hospital Association Annual Survey, Tables 1, 2A, 3, and 4A.

29. U.S. Office of Management and Budget, "Evaluation Review and Coordination of Federal and Federally Assisted Programs and Projects," Federal Register 41, No. 8, 13 January 1976, 2056.

30. Lewin and Associates, Inc., "Evaluation of Section 1122 Review Process," op. cit., Chapter One, p. 30.

31. Ibid, Chapter One, p. 3.

32. Bicknell and Walsh, op. cit., p. 33.

33. See, for example, Clark C. Havighurst and James F. Blumstein, "Coping with Quality/Cost Trade-offs in Medical Care: The Role of PSROs," Northwestern University Law Review 70 (March-April 1975): 60-68.

34. "HEW Pushes PSRO Implementation," PSRO Letter 4, McGraw-Hill, Washington, D.C. (February 1, 1976) 2.

35. U.S. Department of Health, Education, and Welfare, Health Services Administration, Bureau of Quality Assurance, PSRO Transmittal No. 33 on Health Systems Agencies (HSAs) and Proposed Revision of Chapter II of the PSRO Program Manual on PSRO Area Designation, April 5, 1976 (mimeographed).

36. Lewis H. Butler et al., Cooperation Between Health Systems Agencies and Professional Standards Review Organizations: An Analysis of Possibilities and Limitations (San Francisco: Health Policy Program, University of California, January 23, 1976), p. 5.

37. U.S. Congress, House Report by Committee on Interstate and Foreign Commerce, op. cit., p. 42.

38. U.S. Congress, House Report 93-1640, National Health Planning and Resources Development Act of 1974, December 19, 1974, Joint Explanation Statement of the Committee of Conference, p. 77.

39. Medical World News, McGraw-Hill, New York, "New York Forced to Close Hospitals," 17 (May 17, 1976): 76.

40. S 3205, introduced by Senator Herman E. Talmadge, Chairman of the Health Subcommittee of the U.S. Senate Committee on Finance, on March 25, 1976.

41. Lewin and Associates, Inc., "Evaluation of the Section 1122 Review Process," op. cit., Chapter One, p. 28.

42. U.S. Department of Health, Education, and Welfare, Social Security Administration, Prospective Reimbursement Studies, Experiments and Demonstrations: Report to the Congress of the United States, August, 1974, p. 6 (mimeographed).

43. Lewin and Associates, Inc., "Evaluation of the Section 1122 Review Process," op. cit., Chapter One, p. 25.

44. Walter McClure, "The Medical Care System under National Health Insurance: Four Models that Might Work and Their Prospects," Minneapolis, InterStudy, January 23, 1976 (a paper originally presented to the Panel on National Health Insurance, American Political Science Association, San Francisco, California, September 1975).

45. See, for example, Victor Fuchs, Who Shall Live: Health, Economics and Social Choice (New York: Basic Books, Inc., 1974), pp. 100-104; Clark C. Havighurst, "Regulation of Health Facilities and Services by Certificate of Need," Virginia Law Review 59 (October 1973): 1143-1232; Roger C. Noll, "The Consequences of Public Utility Regulation of Hospitals," in Controls on Health Care (Washington, D.C.: Institute of Medicine, National Academy of Sciences, 1975), pp. 25-48; Paul M. Ellwood, "Alternatives to Regulation: Improving the Market," in Controls on Health Care, op. cit., pp. 46-49.

46. Robert M. Ball, "Background of Regulation in Health Care," in Controls on Health Care, op. cit., p. 22.

47. Butler et al., op. cit., p. 55.

48. U.S. Department of Health, Education, and Welfare, Public Health Service, Health Resources Administration, Health Resources Studies: An Analysis of State and Regional Health Regulations (Washington, D.C.: Government Printing Office, 1975), p. 2.

49. U.S. Department of Health, Education, and Welfare, Social Security Administration, Report to Congress, op. cit., p. 8.

50. Statement of James B. Cardwell, Commissioner of Social Security, before the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives, Monday, May 17, 1976, p. 9.

51. See, for example, previously cited articles by Donabedian; Roemer and Shonick; and Corbin and Krute.

52. See Gaus, et al., op. cit., pp. 11-12, 19.

53. Institute of Medicine, HMOs: Toward a Fair Market Test. A Policy Statement (Washington, D.C.: National Academy of Sciences, May 1974).

54. William O. Bailey, "Rising Health Care Costs--A Challenge to Insurers," National Journal Vol. 8 (May 1976): 608-609.

55. Statement of the Health Insurance Association of America before the Council on Wage and Price Stability, June 29, 1976, presented by Morton D. Miller; also, Robert F. Cunningham, Jr., "Around the Nation," PSRO Letter (September 1, 1976): 6-8.

56. Bailey, op. cit.