

# Hospital Rate Setting— This Way to Salvation?

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Hospital rate setting is a new type of regulatory activity rapidly spreading in the United States. Between 1970 and 1975 the number of rate setting programs grew from two to twenty-seven. These programs, most of which are administered by Blue Cross plans or state governments, now control the hospital rates or charges to one or more major type of payer in twenty-three states, and affect to some degree more than 25 percent of the nation's acute care hospitals (U.S. Dept. HEW, 1975).

The federal government's involvement in hospital rate setting has up to now been minimal. Both Congress and the executive branch have been moving cautiously, made sensitive, perhaps, by the misfortunes that attended the massive switch to cost-based reimbursement when the Medicare program was introduced in 1966. This time, the federal government is closely scrutinizing experience in the states before adopting new methods of hospital reimbursement for Medicare or in plans for the administration of national health insurance.

Congress has, however, offered positive inducements to the states to develop rate regulation. Both the 1972 Amendments to the Social Security Act and the 1974 National Health Resources Planning and Development Act provide for federal support of new state and regional experiments in hospital rate setting and for the evaluation of results of programs in current operation. So far there is no conclusive evidence that rate-setting programs constitute an important means of containing hospital costs.

This paper reviews highlights in the state and regional experience as of 1975. After outlining the nature of rate setting and the impetus behind the movement, it examines some of the major issues that implementation has brought to the fore. In particular, we will

note the kinds of assumptions on which this new and highly demanding form of regulation was premised, the sometimes contradictory expectations held for it, the strengths and weaknesses of various types of structures for its administration, and certain problems of methodology and information that handicap efforts of rate-setting bodies to accomplish their intended purposes. The final section deals with the kinds of risks and incentives that rate-setting programs introduce to the hospital industry, sometimes by intention, sometimes by inadvertence, and often because of the still limited state of their art.

Case studies of major rate-setting programs conducted or supervised by the author between 1973 and 1975 under contracts with the Social Security Administration provide the material for most of the descriptions and discussions of issues (Bauer and Clark, 1974a, b, c, d; Bauer, 1974a; Arthur D. Little, 1974a, b, c, d, e, f).

## The What and Why of Hospital Rate Setting

Controls on the amounts of future reimbursement to which hospitals will be entitled take many forms. "Rate setting," by the purest definition, is only one of these forms. For purposes of convenience, however, we will use the term here in the broadest sense to include any means for determining the financial remuneration of hospitals whereby the amounts to be paid for specified units of service are established by some external authority prior to the period in which the services are to be given.<sup>1</sup>

The rate-setting programs in operation at the end of 1975 are extraordinarily heterogeneous. They operate under different types of auspices and organizational structures, cover different kinds of payers, use different types of methodologies, and present varied degrees of risks and sometimes conflicting incentives. While they pursue a common goal of trying to contain rates of increase in hospital costs, their specific objectives often differ considerably. Some emphasize controls on new spending for facility and program expansions, some stress improved hospital management, and some

<sup>1</sup>One could argue persuasively that this definition should be broadened to include the imposition of ceiling limits beyond which hospital price increases would not be reimbursed, such as under the federal wage-price control program, and under the regulations implementing Section 223 of the Social Security Act Amendments of 1972. For purposes of this paper, however, the narrower definition of rate setting has been used.

simply try to keep hospital cost increases in line with the movement of the general economic indicators. The approaches they use to achieve these objectives range from education, jawboning, and public disclosure to formula-derived rate projections. Their means for resolving conflicts may take the form of negotiation, mediation, and arbitration or of formal hearings, administrative case law precedents, and court decisions.

This diversity among the programs is stressed at the outset to warn the reader against summary statements about rate setting that will inevitably appear in the pages to follow. In fact, as will be seen, there is considerably more commonality in the activities rate-setting agencies *fail* to pursue than in the ones they do pursue. As a major example, no program aims its reimbursement risks and incentives at the physician members of hospital staffs, although all fully recognize that the day-by-day decisions such physicians make in hospitals are by far the most cost-consequential ones. Similarly, no program yet takes into systematic account the considerable differences among hospitals in respect to case mix, patient characteristics, and types of surgical procedures performed, although cost function analyses show these to be highly explanatory factors (Lave and Lave, 1971; Feldstein and Schuttinga, 1975). The most comprehensive study to date, analyzing the experience of all hospitals in two Canadian provinces, showed that diagnostic and age variables together accounted for more than 80 percent of the variation in costs among hospitals (Evans and Walker, 1972).

Finally, although hospitals and rate-setting bodies alike give considerable lip service to the quality issue, no program has tried to use the results of medical audits or other systematic quality of care measures as factors in rate-setting decisions.

Before describing the rate-setting programs in further detail, we will review the reasons behind their development.

### The Rationale for Rate Setting as a Cost Control Measure

The current trend toward prospective rate setting rests on the premise that a major reason for the recent rise in hospital costs was the adoption by Medicare and Medicaid of retroactive cost-based reimbursement. By agreeing to reimburse hospitals for the actual "reasonable costs" incurred in providing services to patients, plus a share of depreciation and interest, it is argued, the third-party

payers have encouraged these hospitals to spend freely—secure in the knowledge that they will get back whatever dollars they put out.

Former HEW Secretary Caspar W. Weinberger summed up this position when he told the Subcommittee on Health of the House Ways and Means Committee in hearings on June 12, 1975:

I . . . firmly believe that the faulty design of Medicare and Medicaid is the principal culprit responsible for this super inflation in health care costs. The guaranteed government payment of health care costs in virtually any amount submitted by the provider, and with normal market factors absent in the health care area, inflation was bound to happen, and it did.

The third-party payers adopted one type of defense by the provisions of laws or contracts that excluded certain classes of hospital costs, such as bad debts and research, from the allowable cost-reimbursement obligation. Besides the federal wage-price control program and the Section 223 ceiling limits on Medicare payments, the next major attempt to contain costs through reimbursement has been the move to rate setting. The advantages seemed obvious: if a hospital could know its payment rate before it rendered its services, it would have the highest possible motivation to see that these services were produced in the most efficient manner, since its solvency would depend on keeping its spending within the limits of its anticipated revenues. The hospital would have positive incentives for efficiency as well, since if it could produce its services more cheaply than the predetermined rate had allowed, it could pocket the difference (Feldstein, 1968; Waldman, 1968).

Cost saving through improved hospital efficiency was to be the key: the public statements of theoreticians and program designers alike always stress that cost containment from rate setting will never be at the expense of access or quality.

Thus the rationale for cost containment through rate setting rests on several basic assumptions:

- rising costs are importantly associated with inefficiencies in the delivery of hospital services;
- these inefficiencies can be identified, and are amenable to control by hospital trustees and managers, were they to be so motivated;
- a more public and visible process of rate determination, with external review of institutional practices, can provide such motivation;
- those who establish prospective rates will have the skills and infor-

mation required to calculate rates that will neither underpay nor overpay each individual hospital for the particular mix and quality of products it provides;

- the point at which these rates are set will be sufficiently exact to motivate each hospital to overcome the particular inefficiencies in its own production process and to avoid future actions leading to new inefficiencies, but without affecting patient access or quality of care.

None of these somewhat heroic assumptions appears to have been based on empirical observation of the experience of existing hospital rate regulation programs, such as the Canadian experience during the 1960s, nor the accomplishments of rate setting in improving production efficiency in other industries, such as railroads and public utilities. On the contrary, the rush to hospital rate setting appears to have been almost entirely reactive. To state legislators with their feet to the fire of hospital cost inflation, moving away from retrospective cost-based reimbursement seemed only logical; problems of implementing an alternative system of prospective reimbursement could be dealt with as they arose.

To be sure, most Blue Cross plans, already sensitive to the complexity of the issues surrounding hospital reimbursement, entered the arena more pragmatically. Rate setting seemed an approach worth trying; they would learn how to do it as they went along. But whoever the sponsor, little or no systematic analysis was made to project the magnitude of the benefits to be expected from rate setting, nor were doubts expressed as to the ability of rate setters, first, to define the "efficient production" of hospital care, second, to measure efficiency in relation to the quality of the product, and, finally, to fashion incentive and risk structures that would induce behavior changes in the actors responsible for creating the inefficiencies. Nor was the possibility of creating perverse, cost-increasing incentives considered.

### The Impetus Behind Rate Setting

While many of the forces that moved Blue Cross plans and state governments to adopt hospital rate setting were unique to each locality, some were widely shared. They are important to understand, since they shaped the objectives of the ensuing programs.

In regions where hospital cost rises were the most precipitous,

they forced corresponding rises in Blue Cross premiums that the plans feared might price them out of their markets. State insurance commissions joined them in anticipating insolvencies if the trend could not be halted. Similarly, governors and legislators in a number of states began to fear that rising hospital costs in Medicaid and other state programs if continued unchecked would bankrupt state treasuries. Meanwhile, constituents concerned about their taxes were pressing for controls, while constituents who paid their own hospital bills or were insufficiently protected by indemnity-type hospital insurance were pressing for relief.

Hospitals, too, were early backers of the rate-setting concept; their associations were usually active participants in program design. They saw several types of advantages. First, many hospital leaders believed that most of the rises in operating costs were stemming from a multiplicity of conditions genuinely beyond the hospital administrators' control. They believed that the external reviewing authorities would discover these facts for themselves once they began to scrutinize the details of operating costs. In the face of the public's concern and resentment, the arguments that hospitals mounted in their own defense appeared self-serving. Were the same arguments to be presented by independent rate-setting bodies, the credibility of hospitals would be enhanced.

The hospitals perceived a second advantage, namely in cash flow. Cost-based reimbursement is characterized by long-delayed retroactive adjustments by third-party payers that often plunge hospitals into fiscal crises; rate setting would allow hospital managers to predict their revenues for future periods and keep payments current with expenditures.

Most important, however, hospital leadership saw rate setting as a possible answer to the problem of cost shifting by major third-party payers. As over the years each payer tried to define ever more narrowly the particular hospital costs it would consider "allowable," expenses for items such as free care and losses from emergency room and outpatient care were falling between the cracks, becoming no one's responsibility. Hospitals were increasingly having to load such expenses on the bills of self-pay patients. The American Hospital Association's 1969 *Statement on the Financial Requirements of Health Care Institutions and Services*, a policy statement advocating elimination of such inequalities, proposed changes in reimbursement methods so that all legitimate hospital

costs would be covered fairly by all payers. In subsequent guidelines (AHA, 1972) the association formally accepted the principle that hospital rates be reviewed and set by independent state hospital commissions.

Thus, although the phenomenon of rising costs clearly sparked the move toward rate setting in the 1970s, we find that the major proponents, Blue Cross plans, insurance commissioners, taxpayers, state governments, and hospitals, often had quite different expectations of what rate-setting programs should accomplish. In summary, these diverse objectives included:

- curbing the rate of increase in the *unit price* of services (per diem, billed charges, etc.) for which hospitals would be reimbursed by some *particular class of payer*, such as Blue Cross, Medicaid, self-pay patients;
- curbing the rate of increase in *overall expenditures for hospitalization*, i.e., unit price times volume of service, for which the taxpaying public and insurance subscribers must eventually foot the bill;
- curbing the *shifts of legitimate hospital costs* from one type of payer to another.

Certain national commissions had even broader expectations, seeing rate setting as one component of a broad armamentarium of measures to bring about system changes that would increase not only the cost effectiveness of hospital care but of total health care expenditures (National Advisory Commission on Health Manpower, 1968).

Unfortunately, the methods employed to accomplish any one of these objectives can well block the attainment of other objectives. For example, the hospital's classic answer to criticism of high unit costs is to stimulate more admissions and increased volumes of services. Yet increased volumes (unless accompanied by bed reductions) can easily translate to higher total expenditures for hospital care. Further, if volume increases are obtained by rendering types of care that patients do not in fact need, or could obtain less expensively on an ambulatory basis, the level of cost effectiveness will decline.

Again, to the extent that any single class of payer is successful in minimizing his own share of hospital cost increase, the tendency to shift costs to other payers is encouraged. Conversely, successful fair share efforts will inevitably augment the reimbursement obligations of those payers from whom costs had previously been shifted.

In short, a basic schizophrenia of purpose confuses the efforts of many programs and introduces fundamental problems in the evaluation of their results. However, before further analyzing these and other types of issues associated with hospital rate regulation, it will be helpful to review the major features of the various rate-setting programs functioning in the United States as of the end of 1975.

## An Overview of Current Rate-Setting Programs

Blue Cross plans and state governments administer most rate-setting programs; in three localities hospital associations do so. The University of South Carolina is conducting a rate-setting experiment in sixteen hospitals.

Under special contract provision, twenty-two of the nation's seventy-four Blue Cross plans currently negotiate or establish Blue Cross rates or charges for their member hospitals. These plans, listed in Table 1, unless designated as pilot programs cover virtually all the hospitals in their region or state. Four Blue Cross plans—Indiana, Kentucky, Missouri and North Carolina—establish charge rates that hospitals voluntarily apply to their self-pay as well as to their Blue Cross patients. The Medicare program, under special waivers, accepts the prospective payment rates set by Blue Cross plans in Western Pennsylvania and Rhode Island as well as by the University of South Carolina program.

Nine states have rate-setting laws. The types of agency that perform the function and the types of payers whose rates they cover are shown in Table 2.<sup>2</sup> It will be seen that four states have independent commissions, with a structure roughly similar to that of Maryland's; five others administer rate setting through some existing state government agency. The unique private-public structure in New York and Rhode Island will be described later.

The unit of payment chosen for control is usually, but not always, that which had been customary for the payer affected. Although the largest number of programs use hospital charges as

<sup>2</sup>An attentive reader comparing Tables 1 and 2 will discover that Colorado and Connecticut have separate rate-setting programs, administered both by Blue Cross plans and by state government. The Colorado Blue Cross plan covers only a few hospitals; in Connecticut, the two programs are estimated to control about 65 percent of hospital revenues.



TABLE 1  
Blue Cross Plans with Rate-Setting or Review Programs as of January 1976<sup>a</sup>

<i>State or Area within State</i>	<i>Name of Blue Cross Plan</i>	<i>Number of Short-term General and Other Special Hospitals Covered</i>	<i>% Plan Area Population Enrolled in Blue Cross</i>
Connecticut	Connecticut Blue Cross	40	51
Indiana	Indiana Blue Cross	115	38
Kentucky	Blue Cross Hospital Plan	107	43
Missouri:			
Kansas City area	Blue Cross of Kansas City	57	34
New York:	(under state regulations & approvals)		
New York City	Blue Cross-Blue Shield of N.Y.C.	185	73
Upstate	7 upstate plans; as consortium	140	59
North Carolina <sup>b</sup>	Blue Cross and Blue Shield of N.C.	133	34
Ohio:			
Cincinnati area	Blue Cross of Southwest Ohio	35	59
Oklahoma	Blue Cross and Blue Shield of Okla.	40	24
Rhode Island	(with State Office of Budget) Blue Cross of Rhode Island	15	80
Wisconsin	Associated Hospital Service	149	34
Colorado	Colorado Hospital Service	8 (pilot)	36
Michigan	Michigan Hospital Service	12 (pilot)	58
Ohio:			
Cleveland area	Blue Cross of Northeast Ohio	2 (pilot)	56
Pennsylvania:			
Pittsburgh area	Blue Cross of Western Penn.	17 (pilot)	56
Wilkes-Barre area	Blue Cross of Northeastern Penn.	2 (pilot)	57

SOURCES: Communication with Blue Cross Association, January 30, 1976; Hospital Statistics, 1975 edition (1974 data from the American Hospital Association Annual Survey), American Hospital Association, Chicago, 1975; Blue Cross Association Enrollment and Utilization Report, third quarter, 1975.

<sup>a</sup>Blue Cross plans in Delaware and New Mexico also have rate-review and negotiating provisions in their contracts but are not included here because implementation, so far, has been minimal.

<sup>b</sup>Voluntary compliance.

the payment unit, the per diem unit is used in programs that control the largest number of hospitals. Payment by the case and capitation have been tried only in small experiments involving a few hospitals (Arthur D. Little, 1974c; Sigmund, 1968).

Enabling statutes specify the types of providers and payers whose rates are to be regulated. In most states, the rates of nursing homes as well as hospitals are covered. Table 2 shows that the share of total hospital revenues affected by state rate-setting bodies varies considerably; only in Arizona and Rhode Island is the proportion clearly commanding. The absence of control on a hospital's total revenue allows it to make up for an unusually tight rate from one payer by inflating charges to others. The University of South

TABLE 2  
Hospital Rate Setting Activities of State Governments as of December 1975

<i>State</i>	<i>Type of State Agency</i>	<i>Number of Hospitals Covered</i>	<i>Type of Payer Rates Currently Regulated</i>	<i>Estimated % of Hospital Revenues Affected</i>
Arizona <sup>a</sup>	Dept. of Health Services	75	Charges to self-pay pts. Blue Cross	85
Colorado	Department of Social Services	89	Medicaid	8
Connecticut	Independent commission	40	Charges to self-pay pts.	30
Maryland	Independent commission	54	Blue Cross Charges to self-pay pts.	55
Massachusetts <sup>b</sup>	Independent commission (full-time commissioners)	133	Medicaid; Charges to self-pay pts. & others	45
New Jersey	Dept. of Health with concurrence of Dept. of Insurance	104	Blue Cross Medicaid	55
New York	Dept. of Health with concurrence of Dept. of Insurance; recommendation from Blue Cross plans	320	Medicaid Blue Cross	55
Rhode Island	State Budget Director with R.I. Blue Cross	15	Blue Cross Medicare Medicaid	90
Washington	Independent commission	119	Charges to self-pay pts. Workmen's Compensation	50-55

*SOURCES:* Telephone interviews with state agencies, December 1975; January 1976; Hospital Statistics, 1975 edition, American Hospital Association.

<sup>a</sup>Hospital rate review is mandatory under Arizona law, but compliance is voluntary. (To date there has been almost 100 percent compliance.)

<sup>b</sup>The Massachusetts Rate Setting Commission has approval power over the terms of Blue Cross contracts; since the current contract incorporates controls on charges consonant with the state's charge control law for self-pay patients, the 45 percent figure understates the commission's overall leverage.

Carolina's sixteen-hospital experiment is the only place where the rates set cover 100 percent of the payers.

In a later section we will review some of the principal cost containment targets and the mechanisms these programs have developed for reviewing hospital costs and budgets and for projecting rates. First, however, we will discuss certain questions of structure and organization that affect their administrative feasibility and limit or strengthen their power.

## Who Sets the Rates?

Successful implementation of a hospital review and rate-setting system requires that there be a sound legal or contractual mandate, an effective organizational base, adequate resources of budget and staff, power to enforce decisions, and a feasible and appropriate rate-setting and appeals process. In most of these matters the issue of who sets the rates is crucial.

### *Issues Surrounding Rate Setting by State Governments*

The clear legal authority given by state legislatures to regulate hospital rates, together with the statement of purpose that usually prefaces such laws, obviously provides a far stronger framework for regulation than do the voluntary contractual arrangements of the Blue Cross plans. The message is clear to all parties that action must and will be taken, and that it will continue over time.

The place within the structure of state government where the rate-setting responsibilities are placed is important, although it will not be discussed at length, since what may be most appropriate depends heavily on the particular history of organizational relationships within each state. Hospital associations prefer the independent commission model. They object on principle to having any one of the major third-party payers, such as a state department administering Medicaid, given the responsibility for setting rates, claiming that for a major purchaser of service to determine the price at which it buys that service constitutes a clear conflict of interest (AHA, 1972).

The case for rate-setting commissions is also made on grounds of independence from the direct political interference to which regular agencies of state government are usually exposed. Such independence, of course, also complicates the process of public accountability unless there is an accompanying public disclosure law.

In states with large numbers of hospitals, rate-setting responsibilities appear to demand full-time, well-paid commissioners; so far only the Massachusetts law provides them. The composition of commission membership is obviously important to both its acceptance and its effectiveness. Systematic analysis of what constitutes desirable numbers, types, and proportions of consumer and provider representation has yet to be made.

The commission structure predisposes toward certain problems in the rate-setting and appeal process. John Dunlop, the former Secretary of Labor, commenting on regulation in other types of industries, recently cited two of these (Dunlop, 1975). First, the traditional regulatory approach discourages the posture of negotiation; the rule-making and adjudicatory procedures prescribed in administrative practice laws mitigate against the development of mutual accommodation among conflicting interests. Second, the regulatory process

... involves legal game-playing between the regulatees and the regulators; the tax law is a classic example, but it is typical of regulatory programs in general. The regulatory agency promulgates a regulation; the regulatees challenge it in court; if they lose, their lawyers may seek another round for administrative or judicial challenge.

Meanwhile time passes—the regulatory lag. And legal services become one more factor in hospital costs. The stakes in legal battles are high, particularly during the first few years of a new regulatory commission's life, since the case precedents that are set will set the limits on its future activities. It is not improbable to suppose that more time and skills may be devoted to beating the system in the courts than are devoted to improving efficiency in the hospitals.

Placement of the rate-setting function within an established state agency may provide more flexibility. If that agency also has concurrent responsibilities for other regulatory functions affecting hospitals, such as licensing, inspections, planning, and certificate of need, such placement should minimize duplications of hospital reporting requirements and avoid regulations written at cross purposes. Most important, a centralizing of regulatory functions should force the agency to formulate some coherent overall health policy and regulatory strategy for the jurisdiction it covers. In such a context, rate setting could become an effective tool for coordinated policy implementation, particularly if such an agency also sought to forge links to PSROs for utilization and quality controls and to HSAs for planning (Dowling and Teague, 1975).

Opportunities for synergism through the concentration of regulatory powers may be more apparent than real, however, since problems of noncommunication and bureaucratic rivalry can impede coordination among the separate offices within a single large agency almost as effectively as they do among the offices of

separate agencies. For example, the 1975 Moreland Commission exposed an almost total lack of interchange between the nursing home inspection and the rate-setting divisions of the New York State Department of Health (New York State Moreland Act Commission, 1975).

Wherever the rate-setting function may be located within state government, certain endemic problems are likely to handicap its effective implementation. One is the familiar bricks-without-straw phenomenon, where state legislatures pass laws that require state agencies to perform new functions, but fail to pass the budgets that are needed for proper implementation. This was dramatically illustrated in New Jersey in 1971 where an unusually well-drafted law centralized a host of health regulatory functions, including hospital rate setting, in the State Department of Health—with no new funding (Somers, 1973). In consequence, for two years the department was able to assign only one full-time staff member to carry the rate-review responsibilities for New Jersey's 104 hospitals.

Currently, programs that promise to contain hospital costs have sufficiently high political visibility to make extreme under-budgeting of this kind unusual, but even now most state rate-setting executives feel severely handicapped by budget constraints. The Maryland commission, after eighteen months of operation, has not yet been able to conduct rate reviews of all the Maryland hospitals. Looking ahead, with many state governments entering severe fiscal crises, one cannot be sanguine about funding continuity even at present levels.<sup>3</sup>

Another set of endemic problems arises from state civil service regulations governing job classifications, salary scales, recruitment, examinations, and promotions. In many instances these seem almost programmed to discourage the employment of rate-setting staff with capabilities to carry out the complex and important responsibilities with which they are charged. It is tribute to the devotion and imagination of rate-setting program administrators that

<sup>3</sup>Rate-setting commissions can, if their enabling law permits, raise the revenue for their operations from special assessments on hospitals which can then include them as costs allowable for reimbursement. This type of arrangement, endorsed by the AHA guidelines, is criticized by some legislators because it removes the public accountability of the rate-setting body. One way out is to have assessments support the program but flow through a special state fund which can be used only with the approval of the legislature.

they manage as well as they do. However, most of the leaders in state rate-setting bodies today are unusual people, attracted by the challenge offered for developing programs in a new and important regulatory area. It is doubtful that many current incumbents will want to be at these same posts five years hence, and that replacements of the same caliber will be available. Again, looking to the future, one must speculate whether there is anything intrinsic to hospital rate regulation that is apt to make its long-run core staffing prospects much different from any other type of state regulatory body.

Even though state legislatures grant formal authority to rate-setting bodies, there are very real political constraints on the amount of power these bodies can actually exercise. If their actions prove to be sufficiently unpopular, laws can be changed, or already slim appropriations further cut. As the history of community battles over certificate of need has so well documented, constituents of legislators are markedly ambivalent about their community hospitals: they want costs to be controlled overall, but at the same time, they want their own hospital to be fully equipped and staffed to give them the care they need at the moment they need it. By the same token, they fight proposals for service closings.

The problem appears to be common to other types of regulatory bodies as well. Noll, in a Brookings Institute report on regulation (1971), observes:

One measure of success of the [regulatory] agency is continued operation of the regulated sector. Widespread service failure is likely to be blamed on the agency, and is therefore to be avoided even if the cost exceeds the costs of the service failure.

Finally, there is the familiar problem of the capture of regulatory agencies by the industries they regulate. Noll offers the following explanations of this phenomenon:

There is little political gain in effective regulation. Once a regulatory agency has been established to deal with an issue of public concern, public attention is apt to shift to new issues. While the stake of the public may still be high, it is diffused.

[However] . . . most regulatory issues remain of continuing deep interest to the regulated industry. Its economic viability may rest on the agency decisions. The industry's motivation to fight unfavorable decisions is very high. . . .

[A] . . . measure of success is the failure of the courts or the legislature to override agency decisions on either procedural or substantive grounds. An agency that tries to minimize the chance of being overruled must, when the interests of the regulated firm and the public are at odds, be overly responsive to the interests of the regulated. It wants to be sure it cannot legitimately be accused of being unfair to the groups that are most likely to challenge its decisions.

According to this observer, whether the agency is independent or located in the executive branch of the government, or whether it is headed by a single administrator or is collegial, does not seriously affect its essentially pro-industry proclivities in the long run (Noll, 1971).

Hospital associations, however, sensitive to the political climate, usually recognize the importance of efficiency objectives to a greater extent than do their individual hospital members. Even if regulatory policy is dominated by the industry, Ginsburg observes (1976), this difference in perspective should result in a lower price than if there were no regulation.

### *Blue Cross Programs*

Programs administered by Blue Cross have two large advantages over those administered by state government: they can usually command the budget, staff, and computer resources they feel to be necessary to implement their rate-review processes in an equitable manner, and they can be more flexible in the rate-setting processes they design. Program costs are paid for out of subscriber premiums. As long as the plan's board of trustees is satisfied that the program is cost-effective, funding will continue. Furthermore, because Blue Cross programs are not subject to the job classification restraints of civil service, they can attract to their rate-review staffs people with intimate knowledge and understanding of hospital operations, such as ex-hospital controllers and accountants, who know what areas of inefficiency to look for and who can successfully defend their decisions during appeals. Finally, Blue Cross programs have much more flexibility than state programs. They are free to design rate-setting processes that incorporate various mixes of educational, negotiational, and formalistic approaches, and to modify these approaches over time in the light of subsequent evaluation.

On the other hand, the Blue Cross programs labor under their

own special handicaps. In most states, participation is entirely voluntary; hospitals may decide not to participate at all. Or, once participating, if they feel the program is too strict, they may withdraw. (They have rarely done so, but this may only reflect their best guesses as to likely alternatives.) Second, lacking a legal mandate for their programs, Blue Cross plans may not be able to secure all the types of data they might wish from the hospitals on which to base their rate decisions. Finally, they are likely to receive scant recognition from their subscribers for their efforts. As with other types of cost-containment efforts by Blue Cross plans, the costs of running such programs inevitably appear in larger administrative budgets—making the plans open to charges of “inefficiency” by critics and competitors who assume no such responsibilities.

### *The Model of a Mixed Public-Private Structure*

Since Blue Cross and state government rate-setting programs each have certain specific strengths and weaknesses, the possibility of their cooperation in carrying out rate-setting responsibilities offers an attractive alternative. In this model, the legal authority for hospital rate setting and for the securing of necessary data on which to base rate decisions comes from state laws, but the limited staff and budget usually available to state government agencies can be augmented by sharing implementation responsibilities with Blue Cross, which can bring a more appropriate level of resources to the task. This type of complementary activity is currently taking place in three of the nine states with rate-setting laws.

In Massachusetts, Blue Cross auditors are regularly detailed to work in the state rate commission office to supplement the core staff; they review hospital costs reports and conduct a large proportion of the commission's hospital audits. In New York state, the Department of Health establishes the regulations that determine the rate-setting process for Blue Cross as well as for Medicaid, promulgates standard hospital reporting forms, and makes final decisions on all rates and rate appeals. But the department permits the eight Blue Cross plans to conduct their own analyses of member hospitals' costs and submit recommendations on future Blue Cross rates for member hospitals.

In Rhode Island, under state law the state Director of the Budget has final authority to approve hospital budgets, but Rhode



Island Blue Cross staff conducts most of the analyses on which the budget negotiations are based. The Budget Office has access to all such analyses, as well as to the data on which they are based, and thus needs only a small staff with which to conduct monitoring activities and special studies. The Budget Director's staff representative participates in hospital budget negotiations side by side with Blue Cross officials.

These sorts of partnerships may serve to diffuse the heat of possible opposition to tough rate-setting decisions that might well weaken or destroy either of the partners were they to act singly. On the other hand, political risks always attend a state government agency's dependence on outside technical assistance.

Having noted these various types of structural constraints on currently operating rate-setting programs, let us examine their objectives and the mechanisms they employ to pursue them.

### Rate-Setting Objectives and Processes

We saw earlier that third-party payers, legislators, and hospitals have looked to hospital rate setting as a means to accomplish different purposes. In the interest of space, we will not consider here the hospitals' goal of achieving fair share payments by third-party payers, but will confine our discussion to the goals of containing increases in hospital prices and of containing increases in overall expenditures for hospitalization without attendant sacrifice of access or quality.

The central issue is how to set rates in a manner that will neither underpay nor overpay, but will encourage each institution to increase the efficiency with which its services are provided. One overriding obstacle to accomplishing this is lack of any reliable way to define or measure the efficiency of most patient care services of hospitals. Another lies in the large number of hospitals to be regulated and their great diversity in patient mix; case severity mix; medical staff training levels; scope and quality of services; size, age, and characteristics of physical plant and equipment; financial reserves and endowments, and so on. So far, as we have already noted, many of these basic types of data are either not available or not used. Even when the required data become available, it will be some time before techniques to weigh and correlate the differences

among hospitals are sufficiently refined to permit reliable judgments as to whether given levels of costs are justifiable or whether they reflect inefficiencies.

Thus, most rate-setting bodies must carry out their mandates to contain costs with few clearly defined notions of where specific spending excesses may lie. The tripartite mission of many hospitals—teaching and research as well as patient care—serves further to complicate their task. Finally, rates must be set in the realistic context of whether hospitals can, in fact, control many types of costs that rate setters may identify as unjustifiable. They soon come to recognize, for example, the very limited power of hospital administrators and trustees to change the cost-inducing behavior of their physicians.

### *Specific Cost-Containment Objectives*

The objectives to be pursued by rate-setting programs are usually set forth in state enabling laws and as part of preambles to Blue Cross contracts or contract amendments. Characteristically they state that:

- rates (or budgets, or charges) should be related to the efficient production of hospital services of good quality;
- excess hospital costs that may be associated with duplications of services and facilities should be discouraged.

Several also provide that:

- increases in hospital rates should be linked to increases in the prices of goods and services in the general economy.

Only in the 1975 Rhode Island experimental program under a Social Security Administration contract are rates set within the limits of some overall ceiling on an increase of total expenditures for hospital care in a geographic region. The rate-setting program and the hospital association arrive at the percentage figure for this state-wide maxi-cap annually, through a strenuous process of negotiation some months before the hospitals submit their budgets for review. Subsequently, the reviewers negotiate each hospital's budget within the limit of the total increase—with the freedom to give higher increases to some and lower to others. Here, for the first time in the United States, rate-setting bodies are being forced to make choices

in cost allocations among hospitals, rather than considering each case entirely on its own merits in an open-ended situation.

State rate-setting bodies usually have considerable latitude in translating the broadly stated objectives of enabling legislation into regulations and guidelines that either implicitly or explicitly specify particular targets for cost containment. Such regulations usually state certain intermediate rate-setting goals and set out mechanisms for achieving them that appear to be politically, administratively, and technically feasible in the context of their local environment. Blue Cross contract provisions, on the other hand, usually specify objectives explicitly and spell out the rate-setting process in full detail.

Almost all programs try to hold down capital costs through cooperation with certificate-of-need programs; their own major program efforts focus on the control of operating costs. Targets for cost containment usually include one or more of the following, in descending order of frequency:

- control of *increments to interest and depreciation* from unapproved facility construction or expansions;
- control of *increments to operating costs* from new medical programs, additions to personnel and supplies in existing programs and services, expanded fringe benefits, contracted services, and so on;
- encouragement of *improved management*, better internal budget and control systems;
- encouragement of the *phasing out of underutilized beds and services*;
- detection of *inefficiencies in base costs*, particularly in the hotel and support service departments;
- identification and *reduction of departmental cross-subsidies*.

Rate-setting programs may or may not explicitly spell out such target objectives. Often, their actual goals must be ascertained from interviews with program executives, from analysis of regulations or rate-review guidelines, and from observation of the rate-review process. Furthermore, there appear to be considerable differences in the intensity with which these various goals are actually pursued.

The types of containment *not* pursued through rate setting should also be noted. Only Rhode Island's program attempts to identify and reduce excessive lengths of patient stay. With this single exception, none of the programs uses its rate-setting power to

reduce hospitalization costs that might be associated with inappropriate patient care management such as unnecessary surgery, unnecessary tests or drugs, or delays in treatment scheduling. Nor do the programs adjust rates to reward quality controls that minimize the extra hospital costs associated with complications resulting from hospital infections, from drug synergisms, or from other iatrogenic conditions. Again, although most program executives privately deplore the often six-digit remuneration of hospital-based physicians such as radiologists and pathologists, in this area too, controls are rarely attempted.

In short, as noted at the onset, rate setting rarely attempts to influence the huge segment of hospital costs generated by physician actions.

Scant effort is made through rate structure to promote hospital-based alternatives to inpatient care—such as day surgery units, home care programs, or preadmission testing. Widespread introduction of such services, designed to reduce overall expenditures for hospitalization and overall medical costs would, of course, force up the per diem or other unit costs for the more complex cases still requiring acute-care inpatient services. If the rate-setting body is evaluated according to its success in moderating increases in unit prices, over the course of time such actions would be counter-productive in terms of its own institutional viability.

### *Methods of Determining Rates*

There is no established wisdom to guide hospital rate setting. Most programs are still struggling to develop a satisfactory process; they make changes in their methods almost yearly. Basically, however, in every program next year's hospital rates will in one way or another be based on this year's rates; modifications of natural trends will be relatively modest. No program starts the rate-setting process with the concept of zero budgeting.

Rate setters reach their decisions in one of a number of ways:

- special reviews of the costs, budgets, and volume of each individual hospital in the light of its own characteristics;
- interinstitutional comparisons;
- rate increases tied to movement of economic indicators;
- recommendations of planning agencies;
- some combination of these methods.

In all but a few programs rates are set annually, for all hospitals, either as of a given calendar date or at the beginning of the hospital's fiscal year.

*Cost-Budget Reviews* The Blue Cross and hospital association programs tend to establish rates on the basis of cost and budget reviews that focus primarily on cost trends within the individual hospital. Reviews usually include line-item scrutiny of all budgeted additions to facilities, services, and personnel, and close analyses of cost trends in each hospital department. This rate-setting method reflects in part the preferences of hospitals, in part the belief that a strenuous but equitable review process itself serves to make hospital officials more cost conscious, to force the setting of internal priorities for expansion requests, and to motivate hospital managers to improve their own budgeting and to exercise better internal controls. Once the reviews have been conducted and budgets or rates approved, the hospital is usually free to make budget transfers within the bottom line amount. Most programs try to avoid infringing on management prerogatives.

*Interhospital Comparisons* State programs tend to rely heavily on interinstitutional comparisons. Adopting one or another method of classifying hospitals into comparison groups, they perform analyses by service, department, and/or cost center. Employing screening methods, these analyses identify statistical outliers of preestablished parameters around the mean or median of each hospital group. Most programs then individually review the more costly outlier hospitals or hospital departments, giving opportunity for justification before establishing the final rates. Others, notably the New York state programs, automatically adjust the rates of outlier hospitals downward to the preestablished ceiling<sup>4</sup> (Bauer and Clark, 1974d).

The same types of information are used for individual reviews and interinstitutional comparisons, although each program has designed its own report requirements to suit its own objectives and methods. Hospitals submit annually some type of uniform cost and budget report to the reviewing agency. At a minimum, this includes

<sup>4</sup>New York does not ask for budget projections from the hospitals. It calculates future rates solely on the basis of cost trends from the prior to the current year, and projected inflation rates. Massachusetts employs this type of formula to set its Medicaid rates, but employs different methods to control charges for self-pay patients.

general statistical and financial descriptors of the hospital and counts and projections of its activity measures (patient days, clinic visits, and so on). At a maximum, the report may include detailed descriptors of medical staff, teaching programs, scope of services, contracts and leases, long-term capital budgets. The report packages run from twelve to forty-eight pages of schedules. As of December 1975, only one program (again, Rhode Island) sought any patient-related information on case mix or the age or sex of the patients for whom the hospital was caring. This program obtains standard reports derived from abstracts of the records of all patients discharged from Rhode Island hospitals each year, using the Professional Activities Study report system.

*Limiting Rate Increases to the Rate of Inflation* The New York, Massachusetts, and Western Pennsylvania programs explicitly tie hospital rate increases in allowable costs to corresponding wage and price trends in the general economies of their regions. Elaborate indices have been designed for use in making projections. Automatic adjustments are usually made at quarterly or six-month intervals during the rate year, to adjust the rates to the actual movement of the designated economic indicators. During the early years of the two New York programs affecting New York City hospitals, adjustments for underprojections were not routinely made. This was one of the several contributing causes of their widespread fiscal distress, documented by Rossman (Hospital Association of New York State, 1975).

Most of the other programs, while not employing formal economic projection indices, informally adopt some rule of thumb percentage increase in rate that they will consider to be reasonable in their budget reviews for the coming year, a target that serves the same purpose but that is more flexible. Hospitals that are dissatisfied may request special cost and budget reviews based on inter-institutional comparisons.

*Increments to Operating Costs* Budget increments for operating costs due to changes in facilities or services during the prospective rate year can be easily identified through the use of appropriately designed reporting forms. The problem lies in determining, on a line-item basis, whether or not the proposed new expenditures are necessary. Programs that conduct individual hospital reviews reach these decisions before setting the hospital's rates; in a formula

system, they are reached after the rates have been set, through individual hospital appeals. In either case, decisions must ultimately be reached on the basis of subjective judgment of the reviewers. The process is almost always time-consuming and fraught with emotion and is the source of the greatest tension between the parties at interest.

Decisions on adding to the rate the cost of interest and depreciation for new facilities are usually left to planning agencies; if a certificate of need or formal approval is forthcoming, the rate-setting agency usually agrees to make the necessary rate adjustment. Since in many areas the effectiveness of planning agency reviews is questionable, such controls are often more apparent than real. Some rate-setting programs, however, notably those of Washington, New York, and Rhode Island, work in close collaboration with planning agencies in mutually reinforcing arrangements (Bauer and Altman, 1975).

A few programs, such as Maryland's, reserve the right to make independent determinations on capital expansions, arguing that even though a community need for an additional hospital facility or service may have been found to exist, the capability to pay for it through the reimbursement rate may not. In such cases, the community and the hospital must raise the operating funds for the added service in addition to the necessary capital.

The New York state program is particularly stringent in regard to new services and facilities. In general, its formula for rate projection adjusts *only* for wage and price increases, except when new costs are authorized after a process of formal appeals. This assumes that the identical hospital product is to be produced in 1977 as was produced in 1970, when the cost control program began.<sup>5</sup> Even when appeals for changes in facilities or services are granted, since rate projections in New York are based solely on historical costs rather than budgets, support for a new program will not be fully included in the rate until several years have elapsed. In Massachusetts no new operating costs are recognized for one full year. Such refusals to subsidize start-up costs also discourage expansions.

*Identifying Out-of-Line Costs in the Base Year* Most rate-setting programs are fully aware that simply projecting a hospital's base

<sup>5</sup>Blue Cross plans in upstate New York, however, include a factor to allow for changes associated with new technology.

costs forward to construct future rates provides license for the indefinite perpetuation of existing inefficiencies. A weakness of rate-setting methods that rely on statistical screens to identify hospitals for special review is that they have no means to detect inefficiencies in the hospitals that fall within their allowed cost parameters: that is, they assume that low costs are equated with efficiency rather than other factors such as case mix, quality differences, or exogenous factors. Individual budget reviews offer more possibilities, but most reviewers admit that with the kinds and quality of data and analytic tools presently available to them, their power to detect all but grossly out-of-line situations is severely limited. Only the university sponsored program in South Carolina employs industrial engineering consultants to work with hospitals to identify and correct specific areas of low productivity. (In both rate-setting and nonrate-setting states, however, individual hospitals are, on their own, increasingly using management science consultants to improve internal operating efficiency.)

*Phase-Outs of Underutilized Beds and Services* A number of programs try to attack the problem of continued low occupancy. Some, like those in Massachusetts and New York, impose rate penalties when average occupancy rates fall below preestablished minimum levels, for example, 80 percent for medical-surgical, 70 percent for pediatrics, and 60 percent for obstetric services. By establishing rates that fail to subsidize excess costs from underutilization, they hope to encourage appropriate bed reductions. Other programs try to achieve this purpose indirectly through their interhospital comparisons of unit costs, to identify services where utilization is low but staffing remains high. To detect these kinds of inefficiencies requires that the true unit costs of direct services be compared. This means that for purposes of the analysis, at least, the traditional cross-subsidization of services within hospitals, whereby revenues from departments like the laboratory make up losses from departments like the emergency room, must be eliminated. Also, direct costs are isolated for comparisons before indirect cost allocations are made.

### Some Obstacles to Achieving Cost Containment with Equity

As we have seen in the foregoing section, the several different types



of processes used in rate setting employ different types of methodologies and demand different types of information.

*To reach decisions on new facilities and new medical programs* requires guidelines and supporting data for determining community need, and reliable methods for projecting the capital and future operating costs attendant on hospital expansions.

*To tie future hospital rates directly to the movements of wages and prices in the general economy* of an area requires the development of an economic index constructed of items selected and weighed to reflect the particular types and mix of labor and supply items hospitals use to produce their services, and reliable data reported at frequent intervals for small areas. Although technical difficulties surround each of these tasks, the early 1970s have witnessed considerable progress (Gort et al., 1975; Berger and Sullivan, 1975). A major block to further refinement is the lack of Bureau of Labor Statistics wage and salary data for small geographic areas, since important variations in these factors may exist even within the boundaries of counties and of metropolitan areas. Inequities in projections that are inevitable during periods of rapid inflation can be compensated for by quarterly or semi-annual adjustments in rates during the prospective year. Unexpected factors over which hospitals have no control, such as the recent rise in malpractice insurance premiums and in fuel prices, can also be handled by periodic across-the-board rate adjustments.

The major problem with tying rate increases to inflation increases is that the mechanism does nothing to improve hospital operating efficiency. On the contrary, unless linked to a hospital review process as in the Western Pennsylvania Blue Cross plan, it protects and perpetuates any existing inefficiencies by projecting their costs into the future. At the same time, such formula projections make no allowance for innovations that may contain or reduce long-term episodes of illness and thus case costs, if such innovations demand short-term expenditures that drive up the unit costs of particular types of patient services. Again, however, a sensitive review and appeals process, though cumbersome, can mitigate this danger.

*Occupancy minimums* designed to encourage hospitals to phase out underutilized services or effect mergers with other hospital services are easy to promulgate. But any hospital service reduction generates strong resistance by physicians since their livelihood

may depend on continued access to that hospital. Therefore, unless utilization minimums are accompanied by moves toward opening up staff privileges and by regular feedback from effective utilization reviews, physicians can respond by ordering unnecessary volumes of care in order to avoid ceiling penalties. Again, the program may be able to demonstrate success in moderating unit prices, but the defensive actions taken may serve to increase the community's total expenditures for hospital care.

Whether the kinds of *indirect penalties on underutilization*, such as Maryland's, will work better remains to be seen. Much still remains to be learned about the complex art of volume prediction and volume adjustment; it is an area where hospitals can play many types of defensive games. In general, hospitals whose unit costs rise because of uncontrollable shortfalls from the predicted volume eventually obtain rate adjustments; those whose unit costs decline because of volume increases up to the limits of allowable parameters (if any), benefit.

*To assess hospital efficiency* calls for enormous leaps forward from where we stand today in our methodological capabilities.

Individual budget reviews, while offering important possibilities for achieving desired kinds of change in hospitals, are usually criticized for lacking objectivity, since decisions are reached on an ad hoc "best judgment" basis. Hospitals that can muster the accountants and physicians to plan an effective case, it is argued, have unfair advantage. However, the same criticism holds for the special reviews given to "outlier" hospitals identified by statistical screens. It also applies to the large volume of hospital appeals under a formula rate projection such as New York's. This is because rate setters under any method of review lack reliable standard performance measures on which to base their decisions. In the end, the reviewers must reach their decisions according to the plausibility of each particular case on the basis of the best evidence they can muster.

*The lack of performance standards* by which to measure hospital efficiency is the most intractable problem in rate-setting methodology. Most programs during their first years hopefully set out to develop such standards to guide them in setting rates that are "reasonably related to the efficient provision of hospital services of good quality." However, if one accepts a definition of "efficiency" to mean using the most economical, timely, and efficacious mix of labor, materials, and skills to generate a particular product of a

given quality, the inherent problems these rate setters face in trying to develop standards become clear.

First, in the patient care services of hospitals it is usually impossible to identify, much less quantify, the actual product that is being produced, that is, specific degrees of improvements in health status and/or alleviation of suffering of the patients who come to the hospital for care. Even were these products to be defined, it is far from clear in many instances just what types, mixes, and timing of labor, materials, and skill inputs are efficacious in producing them (Cochrane, 1972). Finally, as we noted earlier, whatever monitoring of quality does exist, such as through medical audits and PSRO studies, is not reported to rate-setting bodies. Thus rate setters find themselves reduced to using surrogate measures of product, of process, and of quality—such as “patient days,” “number of tests,” and “accreditation”—measures whose inadequacies have long since been demonstrated (Berki, 1972; Institute of Medicine, 1974; Rutsstein, 1974). The pervasive temptation for rate setters simply to equate low cost per unit of service with “efficient production of hospital services of good quality” is only too understandable.

Lacking the ability to develop performance standards for patient care services, and reluctant to impinge on physician prerogatives, rate setters often content themselves with trying to control the more peripheral types of costs that are incurred in the hotel and maintenance departments of the hospital. Even here, however, few reliable performance standards exist. Again, the output measures are widely agreed to be unsatisfactory (Bauer, 1975). For example, when reviewers detect twofold differences between two hospitals' housekeeping costs per square foot, they may have spotted genuinely inefficient deployment of resources in the high-cost institution—but on the other hand, closer examination may reveal that the spread in costs reflects only differences in architectural layout, in building construction, and in traffic volumes. Management studies in individual hospital departments can indeed spot areas of inefficiency and develop standards that may point the way to savings (Hardwick and Wolfe, 1972). On the other hand, substantial cost containment from rates adjusted according to preestablished nationwide performance measures has yet to be demonstrated (Wolf, 1973; Elnicki, 1975).

Attempts to identify hospital inefficiencies by using inter-hospital comparisons have been fraught with several other types of

difficulties. First, because of the wide diversity of hospitals, it is difficult to identify the key variables and to account properly for them in making comparisons. Second, both the scope and quality of the information reported from hospitals leaves much to be desired.

For rate-setting programs that rely on comparative analysis to screen for inefficiency, *equitable selection of the comparison hospitals is essential*. There are various classification schemes by which to group hospitals (Bauer, 1974b). Most use only very crude variables such as size, urban versus nonurban location, and teaching status. This leads to considerable debate and special pleading during individual hospital reviews, as each institution brings forth data to show the many important respects in which it differs from its comparison group hospitals. In formula-type processes it leads to large volumes of appeals and lawsuits. Considerable refinement of grouping systems has been made in recent years, however. Some systems classify hospitals on the basis of detailed data on a few key variables, such as complexity of hospital services (Berry, 1973) or service complexity plus numbers and types of teaching programs (Shuman et al., 1972). The Shuman and Wolfe system has been successfully employed by the Blue Cross of Western Pennsylvania for several years.

Another approach, developed by J. Phillips at the American Hospital Association, captures and weighs a large number of both exogenous and endogenous variables through cluster analysis. A version of this more sophisticated grouping method is currently being used to group the 119 hospitals in the Washington State Hospital Cost Commission's program (Baker, 1975).

No rate-setting program yet classifies hospitals directly according to the complexity of the medical problems with which they deal.

*Lack of patient-related data* is the most serious single deficiency in the information available to rate setters. Without access to diagnostic case mix and operative procedure profiles, they risk the continual danger of setting rates too high for hospitals whose work demands low levels of input and of setting rates too low for tertiary-care institutions. With the advent of patient discharge abstract data that must be generated for use by PSROs, this lack may soon be at least partially remediable. The New Jersey and the Maryland rate-setting programs plan to use such data to factor case mix into their rate decisions as soon as possible (Thompson et al., 1975).

Taking the methodology of case-mix analysis from the stage of research to application in rate setting will be difficult, however (Rafferty, 1971; Lave and Lave, 1971; Feldstein and Schuttinga, 1975). Diagnosis per se does not adequately reflect work-load demands in hospitals—the real problem lies in finding measures of case complexity. Few classification schemes to measure differences in patients' requirements for care that can be related to costs have yet been developed, although work is in progress (Diggs and Easter, 1974; Thompson et al., 1975; Cooney, 1974). In the absence of better measures, most programs take the teaching status of hospitals as a gross surrogate for both case mix and case complexity. Some, as already noted, also use complexity of services and composition of medical staff.<sup>6</sup>

Finally, *the quality of the cost and activities data* that rate-setting bodies receive in reports from hospitals is notoriously weak. Although the rate-setting bodies design standard schedules on which the data is to be reported, lack of uniform accounting and reporting practices in the hospitals usually make the resultant figures useless for comparative analysis. This problem not only results in honest confusion, but offers able hospital controllers wide scope to exercise skills in "reimbursement accounting."

In a noteworthy exception to this general rule, the California Health Facilities Commission has over a considerable number of years developed first a detailed uniform accounting system, then a uniform reporting system, and finally a uniform budgeting system, each with very detailed accompanying manuals. Hospitals began to use the system for the first time in 1975. The states of Washington and Arizona have adopted the same system with slight modifications. While it is too soon to know what effects these systems will have on the quality of the data reported by the hospitals, it illustrates that progress is being made in a difficult and important area. Finally, under Section 1533(d) of Public Law 93-641 (the National Health Planning and Resources Development Act), the Department of Health, Education, and Welfare is charged with developing uniform accounting and reporting systems for the nation's hospitals. Criteria to guide such development have been

<sup>6</sup>Lave and Lave (1971) found that institutional characteristics of size, teaching status, and a number of advanced services explained only about 25 percent to 45 percent of the variation in their case-mix measures and thus concluded that these could not be considered good surrogates.

formulated (Bauer, 1975) and a new accounting system has been developed.

In summary, the techniques for setting rates that will serve to contain hospital costs yet be equitable to both the public and the provider are still quite primitive. However, serious developmental efforts are being made to improve them.

## Risks and Incentives

The degree of risk inherent in any program depends largely on the equity of its rate-setting process, the tightness of its rates, and the hospital's ability to secure additional revenue—whether from payers whose rates or charges are uncontrolled, from increased volume, or from favorable adjustments and appeals. As we have noted, all these factors vary considerably from one program to the next—depending on particular laws, regulations, or contract provisions.

A closer examination allows us to distinguish two quite separate types of risks, those to which the hospitals are deliberately exposed by the program to encourage them to contain costs, and those to which both hospitals and rate setters are unintentionally exposed from malfunctioning of the rate-setting process itself.

### *Deliberate Risks*

The overall rationale for rate setting, as we have seen, is to put the hospital at risk for living within a rate calculated at a point that will discourage inefficient operation but that will meet the hospital's financial requirements for continuing to produce services at previous levels of quality and access.

If a given rate-setting methodology is sufficiently sophisticated to permit reviewers to identify the extent of excess costs stemming from inefficiencies in hospital operation, such as failure to adjust staffing to swings in occupancy, the presence of expensive "sweet-heart" contracts with relatives of investor-owned hospital proprietors (or nonprofit hospital trustees), or failure to phase out underutilized services, rate adjustments can impose financial hardships on that hospital if it fails to mend its ways. Unless it can make up the rate difference from other revenue sources, the hospital will have to cut out its inefficiencies; the cost-containment objectives of the program will be achieved.

In real life, however, sources of inefficiency are rarely so clear cut, and, as we have seen, the reviewers have only limited means to detect them. In particular, with the present state of the rate-setting art, reviewers will discover many "out-of-line" situations, but hospitals will be able to explain most of them away. They will usually be able to show that their outlying costs have resulted from incomplete or unreliable data used in the rate reviewers' comparative analyses, or be able to point to real differences in patient mix, resource complexity, service quality, or one of many more legitimate explanatory variables. In consequence, most rate-review bodies after a few years of bloodletting experience devote most of their attention to limiting increments to hospital costs rather than to the much more difficult task of detecting on-going inefficiencies in the base of these costs.

### *Risks from an Inadequate Rate-Setting Process*

The limitations of rate-setting methodology put both hospitals and rate setters at risk. First, and most obvious, the rate may underpay some hospitals, failing to meet their financial requirements for rendering services without detriment to the quality of or the access to proper patient care. This danger may be more apparent than real, however, since safeguards are usually available. A program's adjustment and appeals process is, of course, the principal means of mitigating the effects of inequitable rates. Some third-party payers such as Connecticut Blue Cross offer risk-sharing arrangements. They agree to make up some fixed percentage of a hospital's loss if its actual costs turn out to exceed its revenues from the prospectively established rates; in turn, the hospital agrees to share any savings that it might accrue under the rate. Other programs, such as those of Maryland and Indiana, allow hospitals to request rate increases at any time, rather than, as in most programs, confining reopenings to fiscal year endings. Finally, rate setters often informally sweeten the rate for a hospital's next rate year to make up for any justifiable losses in the prior year. In short, most programs employ a variety of means to relieve the plight of the hospital that can demonstrate that it is genuinely underpaid because of some weakness in the rate-setting process.

The risk of *overpaying* hospitals is equally real, but seldom discussed. Setting rates that are too high in relation to the type,

quality, and appropriateness of services rendered brings cost consequences to the rate-setting program and the public that are especially serious because they are likely to remain undetected. While the underpaid hospital can be counted on to make its case heard, offering a chance for rectification, the hospital that is overpaid through the processes of an inequitable system can be guaranteed to be silent. Common examples of overpayment are found in:

- hospitals with a less complex case mix than that of comparison group hospitals;
- hospitals whose case mix becomes progressively less complex over time;
- hospitals that were inefficiently operated when the rate-setting program began and thus started with an excessively high rate base;
- hospitals where the quality of care deteriorates;
- hospitals that deliberately inflate volumes of admissions, tests, procedures, patient days beyond what patients need in order to achieve low unit costs and thus avoid being caught as outliers in interhospital cost comparisons.

One can only speculate as to whether the cost savings effected from rate reductions for assumed or detected inefficiencies in some hospitals outweigh the overpayments to others.

A poor rate-setting process and methodology also expose a rate-setting body to political risks. First, its credibility is damaged since any adjustments it gives to unjustly underpaid hospitals tend to make its prospective reimbursement system look more and more like retrospective cost-based reimbursement. Thus, while in any given year the rate setters may be able proudly to show the public that they are keeping hospital cost increases down to a commendable X percentage increase, over a longer period of time subsequent rate adjustments will result in a quite different and less impressive overall record. In its own defense, any rate-setting body will want to keep its rates tight and its adjustments minimal, even at the expense of equity.

This in turn, however, exposes it to other kinds of risks—retaliations by hospitals, for whom revenues are lifeblood. Hospital retaliation can and does take the form of defensive accounting practices, lawsuits, cancellation or nonrenewal of Blue Cross contracts, and/or political action to change the enabling laws under which state rate-setting bodies function.



*Incentives for and against Cost Containment*

In examining the kinds of incentives that are set in motion by rate setting it is necessary to recognize two quite different classes. Some types of incentives, whether rewards or penalties, are expressly designed into a program to encourage greater hospital efficiency. Others, often perverse, emerge unexpectedly as unintended consequences of the program's own structure, or from its failure to recognize or deal with the special nature and goals of hospitals as organizations. It is useful to distinguish between structural and behavioral types of incentives.

As we have seen, early advocates of rate setting believed that hospitals would be motivated to increase efficiency by the possibility of retaining any savings they could effect by keeping spending under the allowed rates. In fact, hospitals do not respond to the possibility of making such windfall profits. Their financial officers quickly learn that their institution's future rates are calculated primarily on the base of its historical and current year spending; to reduce this spending base would, therefore, run completely counter to its long-run interests (Messier, 1975). Thus, in most programs, the true operative incentives are for each hospital to spend exactly to the limit of each year's allowed rates or budget—and as much more as it can reasonably expect to justify through the program's adjustment and appeals process.<sup>7</sup> Where group comparisons are made, it behooves them to calculate spending toward the top of the allowable spending parameter for their group. Over time, of course, this escalates the group average year by year.

Where penalties for underutilized services are imposed through downward rate adjustments, the obvious incentives are, as we have seen, for physicians to alter their admissions and ordering practices to keep beds filled. However, in services such as obstetrics where demand cannot be artificially stimulated, such controls may work well. In New York state, 483 obstetric beds were phased out in one period from January 1973 to March 1974 (Meitch, 1974).

<sup>7</sup>It is possible that such counterincentives to improve efficiency may be less strong in rate-setting programs that pursue the objective of meeting total hospital financial requirements in each year's rate, allowing a reasonable margin of working capital and a factor for growth. Examples are programs in the state of Washington, the Cincinnati region, and Indiana.

As Dowling has explicated (1974), what kinds of incentives will be set in motion also depend on the type of payment unit the rate-setting program employs—per diem, per service, per case, and so on. Many of these incentives, unfortunately, run counter to the objectives of containing overall hospital expenditures. For example, as we have already noted, a tight per diem rate designed to keep unit costs low encourages increased lengths of stay and volumes of procedures, whether or not these are medically justified. In New York state, for example, where the tightest limits on per diem increases have been imposed, the average length of stay exceeds that of any other state in the nation. Unfortunately, although the shortcomings of per diem and charge payments are by now well recognized, most of the feasible alternatives also offer their own potentialities for establishing perverse incentives.

Most observers believe that the mere existence of hospital rate setting, regardless of type, has a positive effect on administrators and trustees, stimulating them to pay closer attention to hospital costs and to upgrade the quality of financial management. On the other hand, the advent of a new program often signals hospitals to make a hefty increase in rates before the program comes into effect, in order to maximize the base from which their future rates will be projected.

One possible source of future difficulty, already experienced by rate-setting bodies in some Canadian provinces, is a changed framework of incentives within which hospital labor negotiations take place. To the extent that the managers of individual hospitals feel they have nothing but trouble to gain from hard bargaining, either the costs of higher wages and increased fringe benefits will be passed through the new rate as “uncontrollable” costs, or the rate-setting body will find itself in the position of bargainer, since it alone has the authority to decide what final terms it will allow (Messier, 1975).

In general, the overriding emphasis on high utilization of hospital inpatient services, and lack of support in the rates for start-up cost of alternative forms of care, such as hospital-based home health services, militate against efforts of progressive hospitals to experiment with or move toward a changing role in their community health system. Fortunately, however, a few programs, such as Rhode Island's, actively encourage such system-improvement innovations.

Besides these structural types of incentives, intentional or perverse, most budget review programs regard their rate-setting process itself as a positive instrument for effecting behavioral change. The program's requests for detailed cost and budget data, its individual review sessions, and its cost and volume monitoring reports during the rate year are usually designed in some fashion to strengthen internal management controls in hospitals and to promote cost consciousness.

Case studies in Indiana and Cincinnati and in the New Jersey program prior to 1975 indicate that the new visibility of their operations and the scrutiny by knowledgeable external reviewers may well motivate better management (Bauer and Clark, 1974a, b; Arthur D. Little, 1974e). Operating on the assumption that most administrators have strong personal concerns with job security and opportunities for promotion, these programs (largely designed by hospital associations) structure their rate reviews so that hospital managers are questioned on their performance by informed fellow administrators and by trustees, and thereby demonstrate their degree of professional knowledge and competence. Most such reviews are confined to costs directly under administrator control, in particular those for the hotel services of hospitals.

Some state programs also view the rate-setting process as a vehicle for inspiring organizational change within the hospitals. For example, the Washington program requires each hospital and each department head to submit a narrative account of its cost-saving management objectives for the coming year, with quantitative progress toward these objectives to be reviewed when the next year's budget is submitted.

State disclosure laws that expose hospital costs to public scrutiny offer another type of positive incentive for cost containment. Success depends on whether the press and consumer groups know how to ask the right questions from the cost data, how to interpret the answers, and how long they maintain their interest.

We have already noted the unanimity with which both Blue Cross and state agency rate setters choose almost completely to ignore the influence of the hospital medical staff on hospital costs. To the author's knowledge, no program has made any attempt to gear incentives to raise the cost consciousness of physicians, to work with utilization review committees on problems of unnecessary utiliza-

tion, or to bring the sacrosanct question of open staff privileges into rate-review discussions. Some rate-setting organizations appear to operate on the fiction that administrators and trustees could, if they only wanted to, take any necessary action to influence physician cost-affecting behavior. Other programs, however, consciously use the processes of rate-setting reviews to encourage modification of the traditional balance of power within hospitals. Few administrators and trustees themselves want to add unnecessary, loss-producing services, but are often pressured to endorse the wish lists of all their service chiefs rather than risk offense to any one of them. The requirements of the external rate-review system can provide a foil to force their medical staffs to order their new spending priorities and to cost out the consequences (Bauer and Clark, 1974c; Bauer, 1974a). Rate setters become the necessary scapegoats.

Requirements for five-year capital budgets from each hospital also force the setting of internal hospital priorities, and give rate setters and planning agencies an opportunity both to anticipate and to evaluate expansion requests in terms of population needs and the services already being provided by potential referral hospitals. If sensitively and judiciously applied, rate setting combined with other forms of external regulation could increasingly provide conscientious hospital trustees and managers with the muscle they need to make unpopular cost-saving management decisions—a substitute for the lever that the profit factor provides to corporate managers.

## Conclusions

State and regional experience during the 1970s indicates that in and of itself, hospital rate setting is by no means the way to salvation. Federal policy makers were wise not to have prematurely rushed into this plausible-sounding route to cost containment. Setting rates for thousands of hospitals of diverse character at the point that will induce greater “efficiency” and that will at the same time protect the legitimate concerns of third-party payers, providers, patients, and the bill-paying public is easier legislated than accomplished. The methodology for implementing a task of this delicacy is still at a primitive stage. Worse, well-intentioned mistakes in designing either the structure or the processes of rate setting may be counter-productive; quite possibly they may actually stimulate increases in

overall hospital care expenditures. This should not be surprising; it is the perennial risk associated with any new type of intervention in complex social systems.

At the same time, most rate-setting programs appear to be learning from their initial experiences. They are continually improving their methodologies and enlarging and improving the information base on which they are reaching rate decisions. Nevertheless, in the absence of a broader policy of health regulation, expectations of cost containment through most of the types of rate-setting programs currently in operation should be kept modest, commensurate with the modesty of their programs' own operational objectives, namely, to thwart the spiral of hospital inflation by discouraging duplicative expansions and overbedding, and to encourage types of potential cost savings in areas of hospital functioning not affected by physician decisions.

Rate-setting programs are not charged with responsibility either to identify or to control the vast bulk of excess hospital costs that spring from basic discontinuities in the system through which patients now obtain their health services. Nor can they be responsible for excess costs stemming from the ways in which society has chosen to organize and finance these services. In fact, rate setting per se is just a highly complicated tinkering operation, plugging up leaks in one small section of a rudderless ship that is cracking at the seams.

In the future, perhaps, it may play a far more powerful role. Continuing untrammelled health care costs may eventually force the nation to adopt some coherent overall health care policy to improve the processes of resource allocation in line with principles of cost effectiveness. Implementing such a policy will require new coordinated approaches and cooperative activities between and among organizations now providing care and those influencing its provision via planning, utilization review, quality monitoring, and payment. In preparing for such a role hospitals and rate setters have joint interests in developing far more refined methods of defining and measuring what hospitals do for the money they spend, and far more refined methods of accounting for that money.

The working links that have been forged between planners and rate setters vary in strength from one program to the next. The Rhode Island experience demonstrates that such a partnership can be used to promote system-wide objectives. Within the overall limit

of hospital spending increases imposed by the annual maxi-cap, the rate-setting body approves spending for new programs in hospitals in strict conformance with written listings of priorities of statewide community need established by the planning agency.

As yet there are no similar links between rate-setting programs and utilization review and quality monitoring organizations such as PSROs. A national health policy designed to improve the cost effectiveness of hospital care would seem to call for their development. This would raise the sights of rate setters from narrow considerations of the unit costs of producing given types of hospital services to decision making enriched by information on the appropriateness, quality, and, one hopes, eventually, the efficacy of those services.

Speculating on the possibilities of building these various types of cooperative relationships designed to improve the health status of the population while containing costs is a heady exercise. While acknowledging the possibility that in the real workaday world, the organizational and technical problems that inevitably accompany efforts to implement such new tasks may again turn to defeat the good intentions of those who pose the proposition, this approach still appears to be the best of any likely alternatives. Failure to move forward incrementally toward greater cost effectiveness of health care can only, by default, precipitate far cruder measures, such as across-the-board hospital rate freezes and cuts in health insurance benefits. Such solutions to the complicated problems of containing costs of the multibillion-dollar hospital industry would, of course, single out the ill and disabled citizens in our society to bear the consequences of reduced accessibility, comprehensiveness, and continuity of good quality medical care.

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