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people in the hospital field — for instance*

## **The Notion of Hospital Incentives**

by **ROBERT M. SIGMOND**,  
*Executive vice president for planning  
Albert Einstein Medical Center, Philadelphia*

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## The Notion of Hospital Incentives

ROBERT M. SIGMOND

This article is divided into four sections. The first section examines the general concept of incentives. The second and third sections outline some incentive arrangements that might be administered by a hospital reimbursement agency. A review of some possible incentives involving manipulation of the reimbursement formula is preceded by a discussion of some incentives not directly related to the formula. Finally, recent legislation authorizing incentive reimbursement experiments is examined.

During the past few years, since the Gorham report,<sup>1</sup> the Manpower Commission report,<sup>2</sup> the Barr Committee report,<sup>3</sup> and countless other reports and papers and speeches, almost everyone understands that hospital cost reimbursement—with or without “pluses”—provides little incentive for efficiency or effectiveness.

The public became disenchanted with cost reimbursement during World War II after a great deal of experience with “cost plus” munitions contracts. Cost plus nothing has the same basic problem as cost plus something: there is no financial incentive for doing an efficient quality job in either case. Individual hospital cost reimbursement has always seemed wrong to some people, but it was subject to little criticism during a period when most hospital prices were well above cost and most payments for hospital service by governmental units and many individuals were well below cost—even nothing. Today, with almost everyone protected by government,

*Mr. Sigmond is executive vice president for planning of the Albert Einstein Medical Center, Philadelphia. This article is edited and adapted from his address to the National Forum on Hospital and Health Affairs sponsored by the Duke University Graduate Program in Hospital Administration, Durham, N. C., May, 1968.*



voluntary or commercial insurance, and with costs rising precipitously, this “you spend it—we pay it” blank check reimbursement begins to appear to border on the scandalous. One sometimes hears the argument that it is unseemly to raise questions that appear to impugn the integrity of responsible hospital trustees. This is not the point.

One does not slander the voluntary system by looking at the realities of the current “guaranteed payment” hospital scene. For example, executives of some hospital supply companies have expressed shock at how easily their salesmen can now encourage hospital representatives to trade up to the top of any product line. Many hospital trustees with 20 years of service are the most eloquent in labeling the current situation as being out of control. The incentive to make the most out of patently inadequate operating income is gone, mainly because operating income is now generally guaranteed to be above costs. This is not yet true in many rural and disadvantaged communities in which significant numbers of people still lack adequate prepayment or government protection. But it soon will be.

So far, the problem is being identified as a lack of incentives, not a lack of integrity. The search is on for incentives to take the place of the challenge of providing quality care with a combination of income sources that added up to chronic underfinancing for all but the most enterprising or the luckiest. The easy answer of substituting systematic contractual underpayment for the old fashioned, untidy underfinancing apparently is not being considered seriously. Instead, we are searching for new incentives. In the search for incentives, exactly what is it that we are looking for? What is the notion of incentives?

The dictionary defines an incentive as that which incites, motivates, stimulates or spurs to action. In the hospital field, the same basic drives motivate people as in other walks of life: self-fulfillment, security, wealth, freedom, prestige, power, service to humanity, the pursuit of excellence, acceptance



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by others, avoidance of embarrassment, and so on. Incentives are sometimes thought to be almost synonymous with financial incentives, but the subject is much broader than that. Money is important, but a lot more than just money motivates people in the hospital field. Pride of workmanship has always been more important than income for many hospital officials.

A few well known examples help to provide perspective on the lack of efficiency of financial incentives viewed separately from other factors. Most widely held service benefit prepayment contracts provide 10 or more fully paid maternity days in areas where most hospital obstetrical units operate at 50 per cent of capacity or less. Despite the incentive to break even financially by keeping the new mothers a few days longer (and give them the only decent rest they'll ever have), the average maternity stay in these areas has dropped steadily as it has everywhere else. The average maternity stay is now down to four or five days, less than half of the 10-day benefit.

Also, consider how many hospitals have installed recovery rooms, intensive care units, cobalt therapy, open heart surgery facilities, social service, and other expensive facilities and services with little hope of ever breaking even on these specific operations.

This is not to suggest that money can ever be entirely neutral in its impact. The effect of money is mixed in with a wide variety of other incentive factors—professional, social and legal—and each affects different elements in the hospital in different ways and with different degrees of intensity.

As conceived by some economists, the notion of institutional financial incentives—as contrasted with individual incentives—reflects an over-estimation of the strength of hospital internal organization and corporate decision making, or a level of abstraction about statistical relationships that has precious little practical meaning. Nevertheless, one can discern many instances where hospitals have developed in one way or another largely in response to specific financial opportunities. In the final analysis, the behavior of an institution is the behavior of the responsible people associated with it, and they can be

motivated by what is best for the institution just as authentically as they can be motivated by individual human responses. Frequently, the availability or non-availability of specific kinds of monies can cause a hospital to re-order its priorities.

There is a great deal to be said about basic forces that motivate people or that move institutions and that can be employed as incentives. But the subject of interest here is not really incentives, but incentive arrangements: the characteristics of administrable programs designed to appeal to basic human incentives so as to influence behavior to improve hospital efficiency or effectiveness.

Some general comments should be made about incentive arrangements before examining some specific propositions. First, incentive arrangements can be designed to be either negative or positive in their application. For example, in order to encourage a certain type of behavior, a father can offer his son the inducement of an increase in his allowance (a positive incentive) or he can set forth conditions under which the son would have his allowance cut or suspended (a negative incentive). In general, negative incentives are more powerful than positive incentives, but they are more difficult to administer and their "side effects" can be much stronger. Negative incentive arrangements can be designed to withhold money, prestige, manpower, license, or other privileges that a hospital has enjoyed in the past. Or positive incentive arrangements can be designed to offer new or additional money, prestige, manpower, license or other desirable privileges. Both types can serve as effective incentives.

A second general comment on incentive arrangements is that the effectiveness of a specific incentive depends at least as much on the setting in which it is applied and on the method by which it is administered as on the validity of the specific technique itself. In a complex field such as health, if the goal is not accepted, almost any incentive program can be "beaten" by manipulating quality, bookkeeping or a variety of other factors. On the other hand, if there is mutual understanding and agreement among all parties involved, even a weak incentive will often produce a desired result. This is why accrediting groups and other agencies which exercise controls usually stress education and assistance rather than police power.

A third general comment about incentives is that they can be directed simply at aspects of hospital efficiency or more comprehensively at hospital effectiveness, and the two can frequently work at cross purposes. Improved efficiency of producing specific units of service is of little value to a reimbursement agency if the unit should not have been produced in the first place or could have been produced elsewhere just as well or better, and at much less cost.

A fourth general comment is that incentive programs can be directed at the *processes* by which objectives are attained or they can be focused di-

"outside" review of management of inhouse patients. There is some evidence that, with extremely diplomatic handling of such a program, major impact can be achieved with respect to long stay cases.

**E. Consultation Services**—Reimbursement agencies can provide incentives for improved efficiency and effectiveness by offering a variety of skilled consultation services not otherwise readily available to individual hospitals. Most common examples involve consultation on financial management and information systems, but attempts have also been made in such areas as medical staff organization, utilization review, public relations and personnel management.

Reimbursement agencies can also provide information and consultation to beneficiaries about available health services and their utilization.

**F. Comparative Data**—Closely related to consultation services, reimbursement agencies can provide incentives by making comparative data available on costs and effectiveness. The Barr Committee is "convinced that pressures for improved management performance can be produced by making comparative data on management performance visible throughout the community."

**G. Provision of Service**—Reimbursement agencies can provide incentives for improved efficiency by attempting to produce various elements of hospital operation more efficiently than can be done by individual hospitals. In fact, many reimbursement agencies were created by the hospitals themselves to do just that with respect to charging for hospital service. But the reimbursement agencies can also provide various other services to hospitals at cost. The most common example to date involves shared use of the reimbursement agency's computer facilities for accounting, inventories, payroll, and medical records. Gains can result from use of the shared service, but also from improvements stimulated among hospitals who do not wish to join the shared program.

Suggestions have also been made that reimbursement agencies should operate one or more hospitals themselves, to serve as a model of desirable practices.

**H. An Offer to Purchase**—A unique incentive proposal involves a standing offer by the reimbursement agency to purchase individual hospitals. By providing communities with potential alternative uses of the capital invested in hospitals (including any funded depreciation), the reimbursement agency could provide a powerful incentive to hospital directors to look sharply at the effectiveness of their institutional programs.

Closely related, reimbursement agencies can offer to pay a lump sum or an ongoing subsidy to hospitals for closing down or converting ineffective wings or units. (A long list of do's and don'ts in administering this type of incentive could be compiled from the experience of the U. S. Department of Agriculture with farm lands in the Soil Bank program.)

#### Incentives Involving the Reimbursement Formula

A great variety of methods of manipulating the reimbursement formula have been demonstrated or suggested in various places. There is even some indication of a kind of "Hawthorne effect;" that is, any new approach will bring results that enlists the cooperation and enthusiasm of members of the hospital team.

Various proposals are classified into those which involve a change in the payment unit (the denominator), and those which involve controls on the amount per unit (the numerator).

**A. The Payment Unit**—Traditionally, hospital service is reimbursed on the basis of the inpatient day, the ambulatory visit, or even more fragmented units. Vari-

ous proposals involve broadening the reimbursement unit so that avoidance of specific units of work of questionable utility will not result in direct money loss to the provider. Such proposals tend to encourage substitution of equally effective low cost service units for more expensive units.

The most comprehensive suggestion along this line is payment to the hospital per beneficiary, otherwise known as capitation reimbursement. Under this plan, the hospital is paid the same monthly amount for service to the beneficiary who uses only preventive services (or no services at all) as to the beneficiary who requires the full range of intensive care services. An approach to capitation reimbursement, without interference with free choice of physician or hospital, was tested by Blue Cross in Yuma County, Colo. In this demonstration, the hospital receiving the capitation reimbursement in effect purchased service units from other hospitals when other hospitals were selected by its beneficiaries. This arrangement provides financial incentive for a hospital to plan in terms of the most effective manner of meeting the comprehensive health requirements of its beneficiaries in coordination with other institutions. The hospital's financial position is improved if it can purchase expensive low-utilization services for its beneficiaries at other hospitals at less cost than it could duplicate these services itself.

Other proposals for broadening or homogenizing the reimbursement unit are less comprehensive than the capitation idea. One suggestion would pay for inpatient service per admission rather than per patient day, with the idea of providing financial incentive for early discharge. Another somewhat more comprehensive proposal would reimburse per case, so that the same amount of reimbursement would be made for ambulatory patients as for inpatients.

Other suggestions attempt to introduce incentives by developing more specific rather than more comprehensive service units. For example, instead of paying for each patient day on the same basis, each day of an inpatient stay can be paid separately on a sliding scale basis to encourage early discharge.

**B. Controls on Amount per Unit**—Most reimbursement formula incentive ideas have centered on the numerator of the formula: the actual expenditures and their control.

One suggestion would relate reimbursement to budgeted rather than audited expenditures. This method is designed to provide an incentive for development of more systematic budgeting processes at hospitals. In addition, since budgeted expenditures can be known in advance whereas audited expenditures are only available after the fact, the budget approach provides a basis for a reimbursement agency to provide comparative analysis and review, as well as consultation and advice before the expenditures are actually made. Some students believe that great benefit can accrue if interim payments are made on the basis of budget projections, with final adjustment continuing to be made on the basis of audit figures, when available. Other students would have final payment based on budget data, but with opportunity for appeals by hospitals which wish to attempt to justify variations from budget. Obviously, the key to the budget approach is the capability of the reimbursement agency staff that is working with the hospitals on budget analysis. Some believe that this staff should be maintained by a neutral agency.

Another proposal would limit payment per unit to a specific hospital in relation to the average payment computed for a group of hospitals. There are many variations on this theme. The limiting averages can be computed for various classifications of hospitals based on bed size, scope of service program, or geographic



location, all designed to arrive at the fairest negative incentive. The limitation may be expressed as a certain percentage—usually 10 or 20 per cent—above the group average. In at least one such existing arrangement, a hospital may avoid all or part of a penalty incurred in one period by averaging the “excessive” cost period with the succeeding period before any loss is actually incurred. In another variation, a hospital with costs above the group average has an opportunity to appeal and justify the “excessive” costs and avoid the penalty. (The most critical appeal group, of course, consists of hospital representatives.)

Limitations based upon group averages of the various types described above may be applied to total expenditures or specific departments or groups of departments. The individual department approach, of course, provides the greatest incentive effect.

Another approach which has been tested involves limitation on the percentage increase from one period to the next, based on the percentage increase of a group of hospitals. All of the variations noted above with respect to average amount can be applied to the percentage increase incentive: various types of grouping, limited range above the average increase, forward averaging appeal and justification procedure, and the departmental approach.

Another approach sets a target rate for a future period, and provides penalties for hospitals above the rate and rewards for hospitals below the target rate. The amount of penalty or reward depends upon the extent to which the individual hospital “missed” the target. A number of ingenious formulas have been devised for use in these types of incentive programs.

Another approach would simply reward a hospital with a share of any reduction in cost incurred since the preceding period. This approach can be applied to over-all expenditures or on a departmental basis.

An approach advocated by the Barr Committee would base reimbursement on a firm rate negotiated by each hospital with the reimbursement agency in advance of each payment period. Once the negotiations are completed, the hospital has economic incentive to “beat” the rate.

Another approach involves payment to each hospital of a negotiated share of “fixed” costs irrespective of units of service, with unit payments based on “variable” costs only. This approach is designed to reduce the financial incentive involved in providing “unnecessary” service.

A related approach distributes all “fixed overhead” costs over ambulatory service units, and limits payments on inpatient units to direct costs. This approach is designed to provide incentives favoring ambulatory service over inpatient care whenever feasible.

Another approach with a similar objective would reimburse selected “preferable” services, such as ambulatory services, on the basis of retail prices.

A variety of proposals center around interest on invested capital and depreciation as elements of reimbursement. Most commonly, interest reimbursement is limited to actual interest expense incurred, irrespective of the theoretical interest associated with the total capital investment. Others would limit the rate of interest that could be reimbursed. Others would limit interest payments to borrowing for “approved” projects. Similar incentive arrangements have been suggested with respect to depreciation, especially building depreciation. Proposals have been made to pay depreciation only when funded in a hospital or community fund, or to pay depreciation only on “approved” projects. In addition, proposals have been made to pay for capital expenditures on a project basis and eliminate building depreciation and interest on capital investment from the reimbursement formula.

Another approach would establish ceilings for certain specific expenditures, based on accepted standards. For example, prices of purchases might be limited to the prices of comparable goods available through cooperative group purchasing programs. Similarly, expenditures for services such as laundry or computing might be limited to costs of equivalent services available through shared service programs. Such arrangements would provide incentive to hospitals to join such cooperative programs or to attempt to do better.

One well-known and almost universal approach limits payments during a period to the sum of the published charges for the service provided. Finally, an incentive to maximize non-patient income involves reimbursement based on some percentage of total expenditures that is less than 100 per cent.

### Incentive Reimbursement Legislation

The notion of reimbursement incentives is now part of the law of the land. Section 402 of Public Law 90-248, the Social Security Amendments of 1967, provides for experiments with “incentives for economy while maintaining or improving quality in the provisions of health services” in connection with Title XVIII (Medicare), Title XIX (Medicaid) and Title V (Maternal and Child Health Programs) reimbursement.

This program offers an opportunity to try out a great many incentives for hospital effectiveness. Most hospitals and hospital groups are eligible to submit a proposal for an incentive reimbursement experimental plan. As indicated in the recently published guidelines, the program is designed to “make it possible for all concerned in providing or financing health care to apply their creative and technical ability to the development and implementation” of “new ideas that have a potential for moderating the rise in health care costs.”<sup>6</sup>

The eight *Guidelines* published for Section 402 make it clear that a participating hospital could keep at least part of any savings resulting from its plan. Furthermore, Section 402 authorizes the government to meet additional costs which might result from the experiments. It would appear, therefore, that experiments could involve no financial risks for the hospitals. They would have everything to gain and nothing to lose, and much to learn from the experiments. Opportunities exist to develop incentive reimbursement experiments with other hospitals in conjunction with Blue Cross plans, planning agencies, government agencies, and others. The more comprehensive proposals will be given priority consideration. According to the *Guidelines*, priority will also be given to plans that focus on over-all effectiveness as contrasted with a simpler emphasis on economy and efficiency. Among the more comprehensive ideas mentioned in the *Guidelines* is the capitation payment type of program such as was tried out on a small basis a few years ago in Colorado.<sup>7</sup>

Experimental plans may involve a change in the

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method of reimbursement itself or some change in the application of the present reimbursement provisions.

Many hospital officials have wondered about the incentive for their hospitals to participate in an incentive reimbursement experiment. Such officials usually believe that participants must gamble that the experiment will be successful. Irrespective of their confidence in any particular incentive idea, they do not believe that responsible officials should gamble with the financial stability of community institutions for experimental purposes. But Social Security officials provide assurance that participating hospitals can be guaranteed against loss. After all, this is an experimental program, not a demonstration program. Guarantee against loss introduces an unreal element into the experiment, but almost all experiments are conducted under artificial conditions, especially in the early stages. Most experiments are carried out under laboratory conditions designed to provide knowledge which may be tested eventually under "real life" conditions.

Section 402 experiments provide the very real incentive to a hospital of producing financial savings which it can use in improving quality, or making available needed services. A second incentive is to avoid supposedly distasteful features of the current

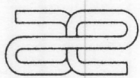
reimbursement arrangements. A third incentive is the opportunity to contribute to new knowledge and to help demonstrate the responsibility of the hospital system to public issues. In the words of former Secretary, John Gardner, Section 402 is "an invitation to initiative."

The leading elements of the hospital system have always responded to invitations to initiative in the past. They can be expected to respond to Section 402 when it is fully understood.

Hospital associations, planning agencies, Blue Cross and other reimbursement agencies have a responsibility to join with officials of the Department of Health, Education and Welfare in helping hospital officials to grasp the significance and opportunity of Section 402. ★

### FOOTNOTES

1. U.S. Department of Health, Education and Welfare, *A Report to the President on Medical Care Prices*, USGPO, February, 1967.
2. Report of the National Advisory Commission on Health Manpower, Vol. 1, USGPO, November, 1967.
3. Secretary's Advisory Committee on Hospital Effectiveness, *Report*, USGPO, 1968.
4. *Reimbursement Incentives for Medical Care, Objectives and Alternatives*, Office of Research and Statistics, Social Security Administration, March, 1968, p. 53.
5. *Ibid*, p. 18.
6. U.S. Dept. of HEW, *Guidelines for Incentive Reimbursement Experiments*, March, 1968.
7. Thomas M. Tierney, and Robert M. Sigmund, "Could Capitation Ease Blue Cross Ills?," *Modern Hospital*, August, 1965.



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