Patient Care and Economics

By DR. L.M.J. GROOT

INTRODUCTION

Enormously increasing health expenditures prompt us to give serious thought to the relationship between medicine and economy. It is a well-known fact that the economic systems of the industrialized countries have shown a steady rise in the cost of healthcare, to reach a level which now threatens the very existence of these systems.

This sharp growth steps up public expenses and/or private outlays in areas given high priority by consumers, which in turn raises the wage price factor. This factor jeopardizes the competitive position and profitability of trade and industry; unemployment ensues, national incomes decrease, and the dreaded spiral of recession is entered, with its devastating effects on so many.

Although there is no general consensus about what course will lead to recovery, there are many who expect that a curbing of public expenditures—which must also affect healthcare—will reverse the current economic decline. The complexity of the matter does not lessen when we bear in mind that a policy of cost control in healthcare may conflict with the objective of an acceptable level of employment since such cost control will reduce the number of health workers.

It is important to note that imposition of cost control is imbedded in the necessity to redress economic conditions. In short, medical care must now compete with such goals as full employment, a healthy economic situation and incentives for industry. This means that the time is past in which health services were not to be touched by the intricate process of establishing priorities simply because of the notion that there is nothing like good health.

Cost control as urged by the general economic situation differs from that frequently attempted by the healthcare sector itself. As a rule the former is more compulsory in character than the types of control applied within the sector itself, where the workers are likely to retain identification with their own field of activity.

Thus, only forces active in the socioeconomic range—the Minister of Finance, the Cabinet, the economic situation—are capable of proposing restrictions that can hardly be expected to come from inside the health domain.

THE MEDICAL PROFESSION AND CONTROL

Generally speaking, measures usually considered within the scope of cost control are more concerned with the environment of medical practice than with the latter itself. These measures concern supply, demand and financing.

With respect to supply, one should think of limitation of facilities (eg, the number of beds, a restrictive policy on special provisions, the licensing of general practitioners, specialists and other doctors, manpower planning and similar elements).

In terms of running costs, there might be guidelines for cost assessments in institutions and other settings, establishing conditions for staff employment and fixing professional fees.

Encouragement of primary care and greater emphasis on prevention represent options lying between supply and demand, which can only bear fruit in the long run. On the demand side, patients may need to be required to make financial retributions.

Finally, different forms of funding might bring savings. Thoughts here should focus on the introduction of budgeting in healthcare institutions, provisions of a greater number of capitation elements in the remunera-

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tive system, and possibly a wider enrollment of physicians on payroll.

In general, measures of this kind leave physicians at liberty (within the limits set by these external constraints), to make their own decisions regarding examination and treatment of their patients. Inside health institutions, we also encounter this relative freedom of action within the framework of limitations in staff and facilities. Here, interactions are specified by the relation existing between bureaucracy or management and profession.

In a good climate, profession and management consult with each other in framing the infrastructure of the hospital and in this consulting process, the balance of power between management and profession can change with each decision. Within such a setting, the profession has relative autonomy in the use of facilities and in allocating the various costs involved.

It may well be doubted whether this peaceful co-existence, with each side nurturing its own area, can also be maintained in a period during which expenditures are subject to strict control. When healthcare was still expanding, medical people could influence the improvement of facilities and provisions if they thought this suitable in safeguarding the patients’ interests. Undoubtedly, their efforts to further healthcare expansion were successful, more often than not propelled by the societal prestige of their profession.

One may wonder if this situation should not be reassessed, now that extension or improvement of facilities will no longer be possible in all instances, and restrictions must even be expected. It will be impossible to avoid setting priorities.

**ECONOMY AND MEDICINE**

To further scrutinize the relationship between professional medical care and economy, we should review the positions of the physician and the economist. The former makes his decisions at the doctor-patient level and within this context feels obliged to do whatever promotes the condition of his patient. Financial considerations should have little or no role in his decision, a fact which is further underscored by the existence of health insurance.

Vuori\(^1\) approaches this situation from the angle of the most efficient production. He underlines that, as a rule, users demand a higher consumptive quality than producers care to offer, on the basis of efficient production ratios. In these cases supply suitably bridles demand in its unreasonable desires.

In the doctor-patient relationship there appears to be none of the classic tension between supply and demand that causes the two parties to react critically to one another and produces balanced pricing as a result of their encounter. On the contrary, in many a case physician and patient readily agree about the need for maximum care, with money not playing a part. The arguments prevailing here may relate to the development of medical science, the patient’s safety and the effectiveness of the care, thereby actually evading the issue of optimal quality.

If in the doctor-patient relationship the economic principle is done justice only in a highly incomplete manner, the economic aspects are also not very appealing in a quantitative sense. To illustrate this, a study of the cost structure in healthcare is necessary.

In the medium term, healthcare expenses are largely constant and not open to direct influences. According to a communication from the Dutch Hospital Institute, average costs per day in Dutch general hospitals for 1980 were composed as follows:

- salaries and social charges: 64.3%  
- other: 13.0%  
- depreciation, renewal fund and interest: 14.0%  
- medical and nursing materials: 9.7%  

*Salaries and social charges, as well as depreciation, renewal and interest cannot be varied on short notice.* The other expenses incorporate major items—housekeeping and technical maintenance—which are not susceptible to immediate adjustment either. Actually, medical and nursing materials form the only item related directly to patient care and also liable to change within a short period.

Hence, from an economic viewpoint, there are few items of interest as far as individual patient care goes; the only costs showing some relevance are very moderate. These usually concern the expenses of drugs, dressings and bandages, of material used up in x-raying and the like. Whether a patient is subjected to more or fewer laboratory examinations carries little or no weight in terms of costs, and in case of automation these are even negligible. Whether or not one more radiograph is made of a patient will only be apparent from the use of more or fewer films and photo-chemicals. Whether a patient’s stay in the hospital is or is not extended by another day, will exert little influence on the overall hospital expenditures.

This abundance of constant cost elements may even cause what might be termed perverse effects. With declining occupancy rates in institutions, prices will have to be raised in order to compensate for under-utilization. From this we can conclude that a decrease in the use of capacities will have no important impact on total costs.

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I do not mean to say that utilization of the infrastructure by the individual patient cannot yield interesting economic implications. These will notably occur when the infrastructure is not adequate to satisfy patients' needs; good examples are open-heart surgery, renal transplants, and overoccupied nursing homes. Under a policy providing for strict control of the number of beds, as now adopted by many countries, it may well be that this infrastructure will become insufficient. Then we will certainly have to consider which patient will be judged eligible for treatment. Possibly economic desiderata will then also start to play a role in the allocation of means for the benefit of individual patients. For the economist, however, this situation is of little relevance because if insufficient capacities are used to excess, the total amount of expenses will not change and will have to be accepted as such within a given period.

From the foregoing, we cannot draw any other conclusion than that the doctor-patient relationship can present only few opportunities for exchange between the economist and the physician. It seems as if there are two separate worlds. With the physician oriented toward a situation that can hardly be grasped in an economic sense, and the economist concentrating on infrastructure and its costs, the two worlds appear far beyond each other's reach.

**RECONSIDERATION OF MEDICAL DECISION MODEL**

The question may arise if in his activities the physician is and must be guided by the needs of the individual patient, or if his decision model is after all co-determined by other elements as well.

In this connection I refer to the highly interesting publication by Wulf on the principles of clinical thought and action. According to Wulf, these principles are indeed directed at the individual patient, but they are likewise supported by a methodical scholarly approach.

This means that the medical decision model will increasingly be influenced by statistical rather than individual considerations. This places the economic relevance of patient treatment on quite a different footing.

When the stay of a patient suffering from a certain disease can be reduced by one or a few days, this will have little consequence from an economic standpoint. However, should the patient be one of a substantial group, the decision to hasten his discharge may well carry economic weight. A decrease in the number of patient days for such a population certainly will initially influence variable costs, but thereafter also staffing and even infrastructure.

A restrictive policy with regard to treatment, projected for patient populations, may indeed affect the cost of healthcare, and cost relevancy definitely comes into play in that case.

Two factors can be shown to be responsible for decision making of a more collective character:

1) Introduction of more options for the examination and treatment of patients makes it essential that decisions affecting treatment be given a scientific basis. A broad range of possibilities makes reflection on effectiveness but also on efficiency imperative. For example we should consider the opportunities presented by novel diagnostic techniques. It should be determined to what degree these make other techniques superfluous and to what extent benefits derived from superior diagnoses can be substantiated in subsequent treatment. As far as treatment is concerned, we will have to find out if it is really to the patient's advantage. This calls for a study of probabilities, with regard to outcome of examination and treatment. To create this scientific basis, two important topics may be considered, namely the quality problem and the possibilities for cost-benefit and cost-effectiveness and analysis.

2) Collectivization of medical decision-making is moreover stimulated by the fact that today's decisions about healthcare are often made at the political level and financing as a rule is effected either wholly or largely out of public funds. In this connection, Wulf makes an interesting distinction between act-utilitarian and rule-utilitarian approaches. The former exclusively takes direct consequences to the individual patient into account, whereas the latter in addition allows for the impact of a particular decision on the whole patient population. A certain treatment, which might bring some relief to an individual in his specific situation, could turn into an unacceptable procedure if its application to all those possibly to be considered should lead to unjustifiably high costs.

This reinforcement of the collective elements of decision making need not involve any disadvantage for the individual patient. On the contrary, in the first place the scientific basis of the decisions regarding innovations in healthcare will see to it that patients are not bothered with more methods of examination and treatment than strictly necessary. One sometimes gets the impression that in certain instances developments in the medical field could be termed a threat rather than a benefit to patients.

Also these reflections about use of resources may cause facilities to be distributed as well as possible under a restrictive policy. Finally, I should like to point out that this collective approach need not, and indeed must not mean, that there is no scope for a specific approach to the individual patient within the frame of so-called "medicine by protocol."

In conclusion, the introduction of aggregated elements in decision making regarding patients may open up this field to a medical and economic approach to the problem, seeing to it that both medical and economic considerations are done justice and that the physician and the economist can join in performing their respective tasks.

**REFERENCES**