OUTPOSTS OF OLD-STYLE MANAGEMENT Clive Loveluck

Administering the average mental hospital is equivalent to running a company in the top 10% of British industry, yet application of modern management techniques in the Hospital Service is minimal and hospital ‘managers’ struggle to control highly complex systems using crude and inappropriate methods.

Management is essentially concerned with the use of available resources to achieve specified objectives. The main effect of the use of the resources available in a psychiatric hospital is upon the mental health of the community.

Unfortunately, there is no general agreement on the dimensions in which a community’s mental health can—or should—be measured.

In the industrial situation there may be disagreement and confusion over objectives but those available—market share, etc.—are at least measurable. The lack of a clearly specified, measurable objective makes the allocation of resources in psychiatric hospitals a difficult task—and it seems to be a basic presumption of the Health Service that this job can be handled by doctors. The profession ethic and freedom of the doctor is presumed to lead to the best allocation of medical care, for it is the doctor’s decision which is the final determinant of treatment in each case.

One result of this belief is that, in a hospital, it is not the consumers of resources who ultimately decide on the allocation of those resources. Although the patient is the consumer of hospital resources it is the doctors who control the allocation. So decisions on the criteria for admission to hospital and length of stay reflect medical judgement rather than patient preference.

This may appear sensible since it is the doctors who have the necessary technical skills. Unfortunately, however, possessing technical skill does not necessarily imply the possession of managerial skill. In general, the decision-makers in medicine are not so much interested in the allocation of resources as in the individual treatment of the patient.

The information needed for balancing resources and costs against benefits is not collected and analysed because doctors and psychiatrists view their problem in a different way: will the use of treatment improve the health of the patient more than any other available treatment? Doctors making such judgements tend to exclude ‘opportunity costs’, i.e. the cost/benefit implications of not doing something. So, when a psychiatrist admits a patient to hospital, given a limit on the beds available, he must be excluding other patients—a factor which should weigh heavily on the criteria for patient admissions.

For these reasons, the problems of management in the hospital world are different from those in industry. Unfortunately, many people in the medical field exaggerate the differences and minimise the similarities. There are many similarities—in particular the approach of professional managers can be used in hospital administration as well as industry.

Such an approach begins by trying to understand the position of the organisation in relation to its environment—in the case of a psychiatric hospital, the community.

The relationship between a hospital and the community is, of course, very complicated. Nevertheless, it is a matter of considerable importance since it is from the community that a hospital draws its patients, and it is to the community that the patients will return. The diagram overleaf illustrates schematically this relationship:

Briefly, this process can be explained as follows: there exists a population (community) made up in the usual way of different age, sex, social and occupational groups. This population is continually changing because of birth and death rates, immigration and emigration. Within this population certain people—as yet unspecified in nature and number—suffer from mental disturbance to a greater or lesser extent. Eventually, this mental illness evolves to a point at which either the individual or some outside authority becomes aware of it because it presents some kind of social problem.

The emergence of the social problem obviously varies in manner: it may arise from some action which has resulted in a court appearance, or has come
to the attention of the person’s general practitioner, etc. The most usual process is that the patient will see the general practitioner who, if he thinks it appropriate, will arrange a consultation with a psychiatrist who, if necessary, will admit the patient to hospital after considering the available alternatives.

Once a patient is in hospital he will occupy a bed and therefore represent a ‘claim’ on the resources allocated to that hospital. But how much of a claim will this be? This depends upon a number of inter-related factors, in particular the length of time that the patient remains in hospital and the ‘pressure’ which the patient exerts in terms of nursing load.

At some point the patient will leave the hospital. Some will die in hospital, others will be referred to out-patients’ clinics and some will go back to the community. Again the precise route by which the patient returns to the community may be complex, but it is important—particularly since such a high proportion of patients ultimately return to the hospital. This becomes all the more relevant if we consider that the objective of psychiatric treatment is to enable the patient to return to the community and make the social adjustment which will allow him to lead as normal a life as possible.

There is nothing new about these patterns of movement of patients from community to hospital and back to community. It is perhaps surprising that we should know so little about precisely how these processes work. We should know more so as to act more efficiently and make decisions more appropriately.

Consider what we do not know about the process and what we ought to know.

What are the criteria on which a G.P. bases his decision to refer a patient to a psychiatrist?

Clearly, GPs vary in this and there is some evidence that the willingness to refer a patient is inversely related to the age of the GP. If this is so, then the gradual replacement of old by younger GPs will increase the load on psychiatrists without there being a real change in the incidence of mental illness.

What are the criteria on which a consultant makes his decision to admit or not to admit a patient?

Consultants vary in these criteria. It is quite possible for a patient who would not be admitted by one consultant to be admitted by another. Further, since the number of beds available necessarily affects the number of patients admitted, then the criteria for admission are not purely medical.

Is it possible to forecast how long patients are likely to stay in a psychiatric hospital?
Clearly, a hospital exists to cater for people who are ill. At the discretion of the consultants a patient may be admitted into the hospital for treatment. While a patient is in hospital a bed is occupied, and therefore, not available for another patient. If we could forecast how long a patient was likely to stay in hospital, it would help considerably in planning admissions.

In some types of medicine this is not difficult—for example, in maternity wards where patients are in hospital for a common purpose, and there are relatively few complications.

In a psychiatric hospital, on the other hand, patients are of varied ages and admitted for a wide range of illnesses, making the problem of determining a forecast of length of stay much more difficult. It is important to realise that there is a significant distinction between a ‘forecast’ and a ‘prediction’. A prediction is a statement of what we believe conditions will be, e.g. number of resident patients, at some time in the future. A forecast, on the other hand, is a statement of what conditions will be if present trends continue. Thus a forecast is possible if we can determine some form of trend. This can be done if a regularity can be observed in the data which we are analysing—in this case, length of stay.

Clearly there are many more things which we ought to know but do not. One reason for the gaps in our knowledge is that research into psychiatric hospitals and mental illness is almost always clinical or sociological whereas many of the problems are truly managerial. This is not to say that clinical and sociological research should not be undertaken but that it should be supplemented by management research oriented towards action designed to make more efficient use of the available limited resources.

It would seem that one reason for the lack of management research in psychiatric hospitals is that most people involved in decision-making try to understand and control a complex social system (which a hospital certainly is) by devising some simple measures of performance. This illusion, which appears to be quite general, is highly dangerous for a number of reasons:

Complex systems tend to be counter-intuitive. In other words, in a complicated system we tend to take action which we feel—intuitively—to be appropriate but which, because of the complex inter-relationships involved in the system, can be misguided.

Complex systems resist policy changes for two reasons: the counter-intuitive behaviour and because they tend to be insensitive to changes in what appear to be (but may well not be) the most important factors that influence them.

Complex systems have to be controlled through influence points which are quite often difficult to identify.

In view of the difficulties of understanding complex systems like hospitals, it is no surprise that many of the problems—faulty allocation of resources, an undue concentration on ancillary activities (such as laundries and canteens) and a lack of control—should be caused by attempting to direct the activities of the hospital by relying on simple measures of performance.

Let us take one simple example of this. Readmitted patients present one of the most difficult problems in a psychiatric hospital. They make up approximately 50% of the population in most hospitals—a percentage obtained by taking the number of re-admitted patients as a percentage of total patients at any given time. This is a very simple measure because it disregards at least two important factors:

(a) the probability of a patient returning is related to age and sex. So the number of readmitted patients at any one time is related to the age-sex structure of the patient population during the past history of the hospital

(b) an important characteristic of the re-admitted patient is the length of time he/she spent in the community before re-admission. The current method of calculating the percentage of readmitted patients ignores this entirely.

The situation throughout is such that, in a highly dynamic situation, the hospital is trying to understand and control a complex system with a simple, static measure of performance.

What should be done? Basically we must be prepared to devise more complex measures. One such measure was devised for St. James’ Hospital, Portsmouth, and involved a restructuring of the data to give a measure that could be used for forecasting and a measure that could be used for forecasting and control. It is complex to describe in detail, but the method can be outlined.

If we consider, for any one month, the total number of patients discharged, and also record the month of return of those patients we can build up a table as illustrated overleaf:

If we now add the figures diagonally (as shown by the arrow) and take this figure as a percentage of the total number circled, we have the percentage of patients exposed to the community for up to one month, who returned during that month. This can be repeated for the period up to two months, up to three months, etc. In effect, this gives us a cumulative pattern of re-admitted patients. Since the Table
is prepared separately for each age and sex group we now have a measure which takes account of both the criticisms made earlier.

There is a further advantage to this approach. If we plot the cumulated percentages on a particular kind of graph paper (called logarithmic-normal probability paper), we invariably get a straight line relationship which enables us to forecast the rates of return of discharged patients. Experimental work at St. James’ Hospital indicated a high degree of accuracy for such forecasts.

The argument put forward in this article is simply this. There are substantial differences in the kind of management problems which arise in a psychiatric hospital compared with an industrial or commercial organisation. However, these differences are normally exaggerated and should really be minimised. The ‘managers’ of a psychiatric hospital should instead be concerned with looking for similarities. A particular similarity which should be exploited is the attitude towards the professional philosophy of management.

Can the Hospital Service afford to ignore the knowledge, techniques and managerial attitudes developed over the past years which have enabled us to have the richest society yet known? It would appear that in some ways the Service is doing so, particularly as one watches the hospital ‘managers’ struggle in their attempt to control a complex system using crude, inappropriate methods of investigation and control.

The problems and importance of psychiatric hospitals in the combatting and treatment of mental illness surely are such that it is time for a more concentrated use of the methods of modern management.

| Month of return | Jan | Feb | Mar | Apr | May | June | July |
|-----------------|-----|-----|-----|-----|-----|------|------|
| Jan             | 3   | 6   | 2   | 1   | 0   | 0    | 0    |
| Feb             | -   | 0   | 1   | 1   | 0   | 0    | 0    |
| Mar             | -   | -   | 1   | 2   | 2   | 1    | 1    |
| Apr             | -   | -   | -   | 1   | 1   | 1    | 2    |
| May             | -   | -   | -   | -   | 0   | 3    | 0    |
| June            | -   | -   | -   | -   | -   | 2    | 5    |
| July            | -   | -   | -   | -   | -   | -    | 1    |
| No. of patients returning | 3   | 6   | 4   | 5   | 3   | 7    | 9    |

(The figures entered are purely illustrative)