INTRODUCTION

It has been said of managers, by clinicians, that they know the cost of everything and the value of nothing. It has also been said of clinicians, by managers, that they know the cost of nothing and the value of everything. The usual response from either party when so maligned is “If only we did!” Resource management, if it works, will allow both parties to know the cost and value of, if not everything, at least 60% of it.

In this article I intend to outline the elements and benefits of resource management and to outline the implementation plan for the Acute Unit of Lancaster Health Authority.

THE ELEMENTS OF RESOURCE MANAGEMENT

There are two elements to resource management.

The first is the provision of the information systems necessary to provide information that is accurate, relevant and timely, to a host of users including senior managers, clinicians, nurses and paramedics.

The second is that of organisational and personal development: even good information is only of worth if it is used. If individuals are not trained in how to make use of that information or if the organisation cannot effectively act upon the information and conclusions drawn from it, then the investment in the computer systems is wasted.

THE INFORMATION SYSTEMS

The heart of the information system element of resource management is the case mix management system. It provides a common information data base to clinicians and managers. It is an aid to the effective and efficient use of resources and in evaluating the quality of patient care.

The basis of this information is the recording of all patients and the treatments/tests they received. The records are held at an individual level but can be grouped around one or more information items that are deemed to be clinically meaningful. The trick of the case mix system is to take the activity by patient type and link that to the expenditure of resources in that area.

Furthermore, these systems can provide clinicians with a tool for audit or research. Some case mix management systems enable clinicians to establish their preferred profiles of treatment for specific patient groups and to use these as a monitoring mechanism against actual care delivered.

Similarly, managers will be able to track patient activity against resource and so be confident about the actual level of work being undertaken and its implications for the hospital.

The case mix management system relies on data from a number of operational systems, both computerised and manual. Obviously a computerised system provides a quicker, more effective method of capturing patient data than a manual one.

There are two systems which are regarded as essential for an effective case mix management system. These are:--

a) An accurate patient administration system [PAS]

b) A nurse management information system

An accurate PAS is essential, not just for case mix and the quality of the information produced but for the contracts that come into play from 1st April 1991.

A nursing system is required because of the large number of staff and amount of cost that nursing represents.

There are four other key activity areas of which the Department of Health recommend that at least two have feeder systems installed. These are:--

a) Pathology

b) Radiology

c) Pharmacy

d) Theatres

In Lancaster, a pharmacy system has recently been installed and a developmental theatre system is being implemented. We are awaiting the successful outcome of regional pilots for pathology and radiology. An important element to Lancaster’s approach is that where departmental feeder systems are being considered, the systems chosen must also be of immediate value and benefit to the departments concerned. This is not altruism, merely enlightened self-interest; if a system is not user friendly, then it is inevitable that the quality of the data recorded will decline as will its completeness, as the department concerned minimises its use of it.

The above then are the feeder systems that are required for case mix. There are other areas from which information will need to be captured but they have lower priority which depends on their importance in the resource utilisation within the Acute Unit of Lancaster Health Authority. These include the paramedical departments, ECG and EEG.
Lancaster has just begun the procurement procedure for a case mix management system and should sign a contract with a supplier by mid May 1991. From that date, the implementation will take six to nine months. At a minimum any system will allow the following:

a) exception reporting
b) trend analyses
c) "what if" analyses to explore future activity/costing options
d) statistical analyses
e) graphical presentation of information.

The standard reporting periods will be by calendar months and 4/5 weeks, but users will be able to define their own reporting periods.

The important question then is "what do we do with it"?

**THE ORGANISATIONAL ELEMENT OF RESOURCE MANAGEMENT**

In 1986 the DHSS released Health Notice (86) 34: "Resource Management (Management Budgeting) in Health Authorities".

This announced that the principal objective of the resource management initiative was the "introduction of a new approach to resource management and to demonstrate whether or not this results in measurable improvements in patient care".

The health notice contained the promise of separate evaluations by the Management Board and JCC as well as by a separate body.

Thus the six pilot sites were seen initially as experiments, but the NHS Review announced that resource management was to be rolled out to 20 Acute sites initially but to 260 Acute sites by 1992.

This was before a joint evaluation by the NHS Management Executive and the JCC had been carried out and caused much resentment, especially as no real evidence was available as to the benefits of resource management. An interim report by Brunel University was published in June 1989. Its conclusion was "given that the benefits of change are logically dependent on hospital wide systems, or a time-series of data, then most of the change to data has been predicted on expectations of benefit rather than evidence".11

In other words there is no hard proof yet as to the benefits. This is not surprising when Huddersfield, considered to be one of the more advanced sites, had only 4 consultants out of 40 actually using the clinical information system. This, combined with the lack of thought given to what the main indicators of success should be, has lead to a credibility gap for many people. Therefore, you either believe in resource management, are an agnostic, or will never accept it.

The point I believe is that resource management will work only if it covers all of the hospital medical and managerial staff and that they make use of the information and that the organisation allows people to do so. There is now an incentive to do so. Prior to the White Paper, resource management could be seen as somehow detached from the real world of treating patients and balancing the books. This has now changed.

From next year a unit's success will be founded on its ability to deliver the optimum balance of volume, cost and quality care. These three factors are the prime components of a contract and of these the most difficult to define and measure is quality; yet quality needs to be measured to ensure that cost and volume do not dominate the organisation. My personal view is that over the past few years, with the pressures (often contradictory) of staying within budget and increasing activity, the quality of care delivered has been generally ignored by the organisation as a whole.

By splitting the organisation into two and freeing one part of it from the pressures of service provision, the purchaser can start to demand certain quality measures. These will not be too specific at first but will, over a period of time, become much tighter. However, because quality is such an ill defined subject at the moment it is possible for the provider organisation to set the agenda. There are, moreover, two good reasons why it should:- medical audit and nursing audit. These are tasks which clinicians are having to undertake now; there seems to me little logic in not using these processes to validate the quality measures of the Lancaster Acute Unit, and so prevent another set of time-consuming quality measures being constructed by an outside organisation.

With thinking on contracting, resource management, and medical/nursing audit still in its early stages, there is a lot to be done to see how this could be best taken forward, but it seems likely that four clear, interrelated activities will develop. These are:-

a) The review by peer groups of clinicians of the process and outcome of care experienced by different groups of patients

b) Internal agreement between managers and clinicians on the quality and quantity of service the unit will be able to provide

c) Prior to contract negotiations between purchaser and provider the unit will need to monitor its expenditure against activity and compare that with what it thinks it can deliver

d) From this baseline the unit can go into contract negotiations knowing what it can and cannot agree to.

If a unit does this well then it will flourish, but if it gets it wrong and fails to find the right balance between cost, quantity and quality, then it will find the going very hard. Some contracts will be lost and not only will those specialties directly concerned be affected, so will others. Economies of scale will gradually be lost, creating a self perpetuating cycle of cost and quality conflicts and affecting all services. There will be a slow withering and the unit will become a "little leaguer" in the provision of health care. A further effect will be the loss of morale within the hospital; no-one will get much job satisfaction from being in a place of work where it is felt that the quality of care is in decline.

It is complacent to believe that, because most hospitals in rural areas such as Lancashire have a general monopoly in most specialities, the patients will still have to come to their local hospital come what may. It is likely that if a hospital
gains a bad reputation, then the articulate middle class residents will start demanding, from their GP's, referrals to different hospitals. For instance, there are two major acute hospitals in Preston and Blackpool which are only half an hour from Lancaster. I would predict that it would be those specialities with an elective element to their workload who would be first affected by this consumer drift.

It is essential, therefore, that clinicians and managers consider the best possible ways of working together to ensure these activities run smoothly. Lancaster is one of many health authorities faced with the contradictory demands to cut waiting lists but to remain within budget. The way it has coped with this indicates the way in which the direction of the organisation should evolve for the White Paper. Lancaster has appointed clinical co-ordinators; they do not direct their colleagues, rather they act as link points between management and their colleagues.

Coupled with this last year was the reaching of agreements with various specialties as to the target levels of activity that the consultants were satisfied with and which would not overtax the unit's resources. The consequence is that Lancaster will probably treat 2,000 more inpatients and day cases during 1990/91 than 1989/90 and not be overspent.

A successful organisational structure must take into account several facts.

Firstly, doctors can manage their own practice. What they cannot do is to manage their colleagues, or other professions.

Secondly, as with other professions, doctors can and do form 'firms'; it is with these firms that the managerial structure must link. (In the NHS they generally group around specialities.)

Thirdly, to have 10 to 20 firms competing for attention with the managerial structure can be too unwieldy. There needs to be some groupings around general service areas, with a clinical co-ordinator, a business manager in support and the relevant director of nursing services, (who controls the largest staffing resource within the hospital), overseeing these areas.

Fourthly, the clinical co-ordinator is not a manager, rather he is a leader, seeking the views of his colleagues and engaging in dialogue with management. He can take issues raised by the organisation back to his colleagues for discussion and gain their views and commitment to any proposed changes. It is not his role to force his colleagues into change.

Fiftieth, everyone is mutually dependant. It is the role of management to provide clinicians with the services necessary for them to provide their service. Equally, clinicians have a responsibility to recognise that there are limits to what can be provided and that their actions have consequences for others.

Everyone therefore within the organisation will require information relevant to them to allow them successfully to carry out their role but also to allow them to see the wider role and functions of the rest of the hospital service.

The hardest part of resource management will be identifying a mechanism which allows consensus to flourish and creates a successful partnership between clinicians and managers.

THE WAY AHEAD IN LANCASTER

The next two years will be the critical time for Lancaster.

1991 will see the introduction of the essential information systems and discussion on what the organisational form and structure should look like to deal with the White Paper.

The key information systems will be:-

a) The implementation of a trial medical audit system for general surgery and gynaecology. A successful pilot will mean a roll out to other specialities.

b) The installation and development of a theatre management system.

c) Assuming the success of regional pilots in pathology and radiology, their introduction in Lancaster.

d) The pilot within Lancaster of a nurse management information system on two wards. If satisfactory, then a roll out to other areas as quickly as possible.

e) A continuing emphasis on the accuracy of the patient administration system to allow for accurate medical audit and accurate contract charging.

f) The purchasing and installation of a case mix management system as an information tool for managers and clinicians.

1992 will see the production of information from these systems and the refining of people's roles and responsibilities and their training in information management. It is only then that the full potential of resource management will be realised. Up until then belief in resource management can be seen as an act of faith. But for the unbelievers there are two things to bear in mind:--

The White Paper and contracting will put great demands on a hospital's ability to produce information and to know what it is doing.

Resource management is the only way open to gain the systems for producing that information.

REFERENCES