KING's FUND CENTRE

THE FUTURE OF ACUTE SERVICES

DOCTORS AS MANAGERS

Edited by David Costain

KING'S FUND CENTRE FOR HEALTH SERVICES DEVELOPMENT

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FOREWORD

This book is the first in a series which addresses important issues affecting the style and management of acute health services in the UK. The series forms part of a larger King's Fund agenda, looking at acute services as we move into the twenty-first century.

Current improvements in medicine, development of new technologies, increased sophistication of management, demographic changes, and, not least, changes in organisational arrangements, combine to shape a service which should be very different from the current one. Different not only in its structure but also in its objectives; different for its staff as well as for its consumers. The series cannot hope to offer a comprehensive analysis of all the issues, but will attempt to select those areas where debate is most likely to be rewarding, bearing in mind that the overall objective of health services is to improve health. We hope that in stimulating these debates, the series will contribute to that objective.

We are most grateful to the Department of Health and the NHS Training Authority for financial help and advice.

David Costain
Barbara Stocking

CONTENTS

BIOGRAPHICAL NOTES

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Chris Spry is Regional General Manager at South West Thames Regional Health Authority. After graduating in Government at Exeter University in 1967, he entered the NHS National Administrative Training Scheme. Mr Spry has held various management posts within the NHS including: Assistant District Administrator, South Nottingham; District Administrator, South Nottingham; and District General Manager, Newcastle. While in Newcastle he was one of the leading sponsors of the Resource Management Project at Freeman Hospital. He was a member of the IHSM Working Party on Alternative Methods of Funding and Delivery of Health Care in 1988 and is now lead Regional General Manager on Project 26, 'The role of the DHA'.

INTRODUCTION

For the past several years doctors and other clinicians have been accepting roles as managers of all aspects of their area of the health service, usually under the title of Clinical Director, or something similar. This is currently becoming an established managerial model in the National Health Service, and this in spite of recent analyses suggesting that the implementation of such a model is not without problems and difficulties.

The idea of devolving management responsibility as closely as possible to the point of contact with the consumers was a central theme in the report of Sir Roy Griffiths into the management of the NHS, and was further reinforced by the Government's White Paper *Working for Patients*. Such an idea is intuitively attractive, but it could be argued that, in the enthusiasm to achieve it, relatively little attention has been paid to the nature of the responsibility, and the problems likely to be encountered when health care professionals, with little management experience, adopt these new roles.

In the past the role of professionals in the management of the health service has not been straightforward. Too often professional values have seemed to be in conflict with the concerns of managers, and professionals have appeared unwilling to accept the inevitability of external pressures and constraints on the service.

If the current initiatives are to be more successful, there are several questions which will need to be raised, and discussed widely, even if the answers are not immediately forthcoming. Among these questions are the following.

- What is the management task at this level? Is it simply to organise routine work in the most clinically effective way, is it to be proactive in seeking to identify and develop new initiatives, is it to manage the interface between patient care and the constraints imposed by the organisation — or is it all of these?
- What makes senior professionals the most appropriate people for these roles? Are they the best equipped because of their knowledge, their intelligence, or their leadership qualities? Are they simply historically powerful? Or is it that nobody else would be acceptable to them?
- Who should appoint them? Their colleagues, or managers? If both, under what system?
- To whom should clinical directors be accountable? Directly to the hospital or unit manager, or to a director of clinical services? How will the professional and managerial responsibilities be distinguished?
- What training, if any, will clinical directors need? Should it be simply a variant of middle management training, or is there some specific component?
- What is the role of clinical directors in the wider management of their unit? Will they be members of a corporate team, or will their role be restricted to operational management?
- What are the rewards that will motivate clinical directors to persist in their efforts? Financial, improved services, freedom?
- What support will clinical directors need? If a business manager is to be appointed, how should the two roles be differentiated?
- What further appointments may they aspire to in the future?
- How will they be judged to be successful? Will this be predefined? Will it be assessed by managers or by peers, or both?

The four essays in this volume offer some insights into these issues. The first two provide perspectives from the point of view of a clinician and a manager, respectively. The next offers the results of many years experience of trying to implement such a system in the USA. And the last contrasts these perspectives and assesses the options for the NHS.

The ultimate question for the success or otherwise of Clinical Directorates is whether in the longer term they lead to improvements in the clinical care and health of the population. We hope that this volume will help to make that more likely.

David Costain

Alexander P Ross, MS FRCS

CLINICAL DIRECTORS — A CLINICIAN'S VIEW

Doctors as managers

Doctors have always been involved in the management of hospitals through the days of the medical superintendent to hospital management committees and, latterly, through district and unit management teams.

To many, it is self evident that a hospital can function effectively only if there is a genuine involvement of doctors in the running of that hospital, since doctors by their clinical decisions influence the number of radiology and pathology investigations carried out, the size of the drugs bill, and even indirectly the catering and laundry costs of the hospital.

Indeed, the NHS Management Inquiry report[1] stated unequivocally that "the nearer that the management process gets to the patient, the more important it becomes for the doctors to be looked upon as the natural managers." In response, the Government strongly endorsed the report's view "that clinicians should be both encouraged and enabled to play a more active role in management and especially unit management."[2] However, it appeared to many clinicians as time passed that the 'encouragement' seemed to be largely hollow words and the 'enabling' seemed in most cases to be nonexistent. But one has to admit also that clinicians did not come forward in great numbers to apply for management posts. There are a number of reasons behind this apparent reluctance to become more involved in management.

First, the vast majority of consultants enjoy their work as doctors and find it satisfying and rewarding though I hasten to add that in this context I am talking strictly in non-monetary terms! Their involvement in management has always tended to be mainly through a sense of duty rather than one of seeking excitement or challenge. Second, a major factor that discouraged many doctors was the belief held in some quarters that to be a successful manager one needed to be in a full-time management post. One has only to look at Guy's Hospital to see that the right person with the right support can manage a large University Hospital successfully while still retaining a substantial clinical workload. The key here is the degree of support appropriate to the person concerned because clearly the needs of a manager who was previously the unit administrator differ significantly from those of one who is a clinician in active practice.

One has to remember also that the original Griffiths Report was written at a time when hospitals were coming to terms with the concept of the Unit Management Team (UMT) as detailed in *Patients First*,[3] i.e. a triumvirate of doctor, nurse, administrator. What happened in some hospitals was that the doctor on the UMT became the general manager of the hospital but this allowed the great majority of consultants to absolve themselves of any management responsibility while salving their conscience in the knowledge that a fellow clinician had become the general manager.

There is no doubt that the last year or two has seen a growing common realisation by politicians, civil servants, managers and doctors themselves that the hospital service cannot work effectively unless consultants are genuinely involved at a senior level in the management process and that involvement must encompass the consultant body as a whole and not just the token clinician. It is out of this realisation and through learning the lessons of the past that the concept of the Clinical Director has developed. It is a system which enables clinicians to be actively involved in the management process but has much wider implications than this alone. It has repercussions also in such areas as peer review and quality assurance. But more of that later.

The role of Clinical Directors

So what is a Clinical Director? One thing he is not is a director in the sense of ordering people to do this or to do that. In fact, it is said that the least successful directorates at a certain London hospital are those in which the consultant concerned thinks that a director is someone as described above. Other hospitals have reached similar organisational structure by evolution but avoid the emotive term of director by calling the individual concerned 'Consultant in Administrative Charge'. However, the title of the post is less important than its functions. In essence, the Clinical Director is managerially accountable for the proper functioning of his directorate and for the utilisation of resources allocated to that unit. It is important to stress that he retains his professional independence subject to the requirements of the General Medical Council and the appropriate Royal College or Faculty and, of course, the available resources.

A clinical directorate usually covers a reasonably self-contained clinical service, e.g. general surgery, or anaesthetics and operating theatres, or radiology, but the size and content of a particular directorate will obviously vary from hospital to hospital. However, experience to date suggests that the system can operate equally effectively in a large University hospital or in a District General Hospital serving a population or around 200,000.

All staff working within a directorate are answerable in a managerial sense to the Clinical Director but retain their professional accountability through appropriate channels. That is, the ward sister is accountable to the Director for the use of resources on her ward including staffing levels but professionally is answerable through the appropriate nursing officers. Thus, a Director could suggest that the rota system of utilising nurses on a particular ward should be altered to make more effective use of staff grade mix and the ward sister would be expected to comply with that suggestion. However, if she felt that the rescheduling created a situation which she regarded as being below acceptable nursing professional standards then she would have a duty to report this to her nursing officer. Hopefully, this is only a hypothetical situation that would never arise, and in practice the appropriate discussions would have taken place before a final decision had been reached with regard to the distribution of the nursing staff on that particular ward. The example illustrated above applies equally to all other staff working within that directorate but the way in which the Director relates in particular with his consultant colleagues will be described later.

Relationships with other managers

The relationship between the directorate and the management of the hospital as a whole is of fundamental importance. Some hospitals lack the necessary understanding and imagination to deal with this effectively and have created what they think are Clinical Directors yet exclude the majority of those directors from the most senior management tier in that particular hospital. Power without responsibility is dangerous but responsibility without power is frustrating! I believe that it is essential, perhaps with the exception of the largest hospitals, that the clinical directorates should be constructed so that the directors of each one join together to form the management board of that hospital with the 'matron', and other supporting staff such as personnel and finance. It is highly desirable that the management board should have its own finance officer attached specifically to that hospital but the person in question must possess the necessary competence and experience to act effectively, otherwise the credibility of the whole system can be jeopardised.

Obviously, someone has to have the final say in any organisation and to make the ultimate decisions within the hospital and this responsibility clearly lies with the unit general manager. Although I do not believe that the professional background of this manager is of fundamental importance, I do believe that it facilitates the initial establishment of effective clinical directorates if he is a clinician and one who commands the confidence of his consultant colleagues.

Relationships with other consultants

What about the Clinical Director's relationship with the other consultants within his directorate? Since they are the people who initiate most of the expenditure within the directorate either directly or indirectly, the Clinical Director can not possibly represent the views of his colleagues at Board level nor, equally important, ensure that his consultant colleagues are fully informed with regard to Board decisions unless he meets regularly with them. However, it is obviously just as important that other staff within the directorate are both kept informed and have an opportunity to contribute to the discussions relating to functioning of the directorate. Thus each directorate should have regular meetings between the Clinical Director and his consultant colleagues but also present should be the nursing officer of the clinical service who will act as liaison with the nursing staff and the clinical service unit administrator who will liaise with other staff working within the directorate such as medical secretaries and records staff. The meetings of the directorate should be structured with an agenda of business and notes of previous meetings. The frequency of the meetings will vary depending on such issues as the time of the year in relation to the planning cycle or proposed plans for major redevelopment of the hospital.

As a generalisation, one can say that in the past consultants have tended to work as freestanding individuals with little or no sense of allegiance to any corporate body. This is not because by nature consultants are isolationists but because they are very busy people whose work pattern means that they may rarely meet their fellow surgeons or whatever. However, although the directorate meetings may have to be held at somewhat antisocial hours it does mean that the consultants meet with their colleagues on a regular basis. They come to realise that every clinical decision they take has implications for the directorate as a whole.

Peer review

Within these directorate meetings, discussions of medical practice should take place. In my own hospital, the surgeons have started to decide upon clinical policies relating to such issues as antibiotic regimes that will apply to all the general surgery 'firms' and wards. This not only has revenue savings implications but makes the lives of the junior medical staff and nurses significantly easier! This is what most clinicians can understand as peer review and it is what I mean by peer review—that is, consultants within a given specialty discussing their clinical practices with their colleagues and, where appropriate, altering that practice when persuaded by reasoned argument that there is a better or cheaper but equally effective way of dealing with a clinical situation. 'Peer review' as practised in the United States is to my mind a misnomer.

In addition to their concern with resource management, clinicians naturally feel more concerned with clinical matters and 'quality assurance' within that field. Hitherto, they have done this as best they can by fitting in clinical meetings such as death and complications presentations between various other clinical commitments. However, the growing interest shown by politicians and health authorities in the subject of quality assurance should lead to an acknowledgement that clinicians should be 'encouraged and enabled' to build on their experience in this area. This will require an allowance within one's contract for such meetings and other clinical commitments will have to be deferred so that the clinicians, consultants and junior medical staff working within the directorate can meet at regular intervals to review their work.

But if this clinical review process is to be effective it is essential that the relevant data are available in an accurate and up to date form. The accuracy of the data has to be the responsibility of the clinicians and the JCC/NHS Management Board Resource Management pilot sites are looking at different ways of achieving this accuracy at reasonable cost.

Support

This leads me on to the support that the Clinical Director and his directorate require to function efficiently. The director must remain an active clinician if he is to retain credibility with his consultant colleagues and he will therefore require senior administrative support to help in the day to day running of the directorate. I believe that the business manager concept may be appropriate to large hospitals but it is a waste of scarce financial resources to employ such an individual in each directorate in the average District General Hospital. I am not impressed with the idea of such an individual covering several directorates as he then has specific allegiance to none.

Some hospitals have found that the nurse manager within the directorate can provide the necessary administrative support but the 'office manager' is a key post also. In a number of hospitals the medical records function has been decentralised to the directorates including the vital task of coding. Inevitably, the desire to collect meaningful and useful data is leading to an explosion of information technology within hospitals and as a result the role of the medical secretary is becoming increasingly important. It is my opinion that it is a distinct advantage if there is an office manager who has a medical secretarial background. This provides the person concerned with that vital ability to decide on administrative priorities based on clinical importance. I can say from experience that the lack of this ability can lead to potentially catastrophic results for individual patients.

Selection

I have left until now the question of where you find your Clinical Director. The system is doomed to failure if the appointed director does not command the confidence of his colleagues so it is vital that soundings are taken before an appointment is made. It is in the interests of all the members of the directorate that they are led by an effective director as that person is the advocate for the directorate at management board level.

I am in no doubt that the director should have an additional contract and job description to cover his management duties. It is important that these documents do not blur the differences between his managerial and professional responsibilities. If the director fails as a manager then his appointment as Clinical Director can be terminated but he will continue with his appointment as a consultant in the relevant specialty.

In conclusion, I believe that the clinical directorate system is a method of ensuring the effective involvement of doctors in the management of hospitals in a manner that is appropriate to the 1990s. If operating effectively, it is a system that will involve almost all the consultants in that hospital. It will enable those individual consultants who become Clinical Directors to gain experience in the general management process and where appropriate to consider seriously greater involvement in management at unit, district or regional level.

Finally, it establishes a system that will facilitate genuine medical peer review and quality assurance schemes. This is an area that should be given the fullest support and encouragement by general management and the medical profession alike. We are all working in the health system to serve the patient in the best possible way. Peer review and quality assurance help to achieve that goal.

Chris Spry

CLINICAL DIRECTORS — A MANAGERIAL POINT OF VIEW

The NHS is seeing a rapid spread of the 'Clinical Director' concept, and NHS managers will need to understand why that is occurring, what it entails and how its success can be helped or hindered.

Managing clinical work

Not unusually, the reasons for impending change are open to interpretation. At one level it may be seen (simplistically) as a fashionable and politically expedient importation into the NHS from Johns Hopkins Hospital, Baltimore via Guy's Hospital in Southwark. At a more fundamental level it may be seen as the inevitable consequence of the economics of scarcity of resource colliding with the open-ended opportunities offered by scientific knowledge, pharmacology, and technology. Doctors do their work at the point of collision. Their decisions on individual cases aggregate into a pattern of medical practice which in turn forms part of a hospital's total portfolio of services. The portfolio to which doctors (and much of society) aspire is not the portfolio which government (and society?) is willing or able to afford.

If this description of fundamental reality is correct then it follows that the collision between resource and aspiration needs to be managed. To do otherwise—not to manage—results in randomness and muddle, and cannot be accepted in a service which is so significant a consumer of national resource.

A factor in understanding the more explicit involvement of doctors in management is the appreciation that the traditional ways of coping with 'creeping growth' in the cost of medical services (through savings in support services and the estate) are now insufficient, particularly when the task of meeting the cost of unfunded inflation is taken into account. Figure 1 shows a broad breakdown of Newcastle Health Authority for 1988–89. If unfunded inflation and other elements of external 'fiscal erosion' amount to, say, £750,000 (0.5%) and if 'creeping growth' to, say, £200,000 (a mere 0.2% of clinically-related expenditure, hardly an outrageous figure when new drug costs and new materials are considered), then expenditure on non-clinical support services would have to contract by 2.5 to 3% per annum in order to compensate. This might (and should) be possible in some years but not year after year, especially when competitive tendering has already resulted in a major shake-out of resources and when the relative inelasticity of some non-clinical budgets is taken into account. However, some would argue that the figures quoted (£750,000 and £200,000) are very conservative (amounting to fiscal pressure of just less than 1% per annum). If this conservative analysis is correct then the collision between scarce resource and clinical aspiration is bound to have repercussions in the clinical arena. If the fiscal pressures are yet greater the collision has major implications in the clinical arena.

Figure 1. Newcastle Health Authority: Budget differentiation 1988–89

'Clinical' Budgets	Million
Medical, dental, nursing and midwifery staff	69.232
Drugs	8.972
Medical and surgical consumables, dressings and appliances	10.434
Pathology	4.789
X-ray	2.289
Other 'paramedical' staff and departments	7.930
Health education, and locally organised research schemes	0.402
	104.048

'Non-Clinical' Budgets	Million
Administration, medical records, telephones, postage, etc.	9.141
Hotel services	10.528
Estates (maintenance, rates)	7.762
Energy	2.901
District HQ	2.605
Staff travel and removal expenses	1.800
Staff uniform and patients' clothing	0.980
Transport	0.500
Supplies procurement	0.430
Staff training	0.462
All other (including litigation budget)	1.434
	38.743

Models of management

The management task is, therefore, unequivocally present in the clinical arena. Yet many questions remain. Is it to be a case of 'doctors and management', 'doctors in management' or 'doctors as managers'? In each case there are different models that could operate.

It would be a mistake to presume that such preoccupations are new. The economic imperatives and ethical dilemmas may be sharper now but there has always been a substantial body of opinion that recognised that medicine is, in any event, an art that benefits from good management of its available resources. Good patient care requires careful coordination of diagnostic investigation and the full range of therapeutic endeavour. Improved outcome for the patient often depends on disciplined approach in procedure and technique not merely by the consultant but by those working for and with him or her. The training of doctors requires planning and supervision. These are all management tasks. Many individual consultants have always been diligent in such matters. The 'Cogwheel Report'[4] in 1967 proposed the creation of Divisions as a means by which medical colleagues collectively in a specialty could consider such issues, promote coordinated improvements and offer advice to administrators. Similarly the establishment of bodies such as Theatre User Groups and Control of Infection Committees aimed to facilitate better management.

Although it is dangerous to generalise it is probably a common perception that such devices have had only peripheral benefit. The presence of consultant representatives on District Management Teams from 1974 onwards and, later, on Unit Management Teams usually helped to enhance mutual understanding and to achieve specific deals with medical staff. The Cogwheel pattern and consultant presence on Management Teams undoubtedly created, in some hospitals at least, an environment in which doctors and managers could work together in problem-solving, forward planning and whole-hospital coordination issues. What this broad model did not deliver (except very rarely) was a comprehensive commitment to management in the sense which is now emerging. Moreover there would be few if any who argued that general managers could undertake such management in the absence of cooperation from doctors.

Clearly it is now necessary to describe what management in the clinical arena might entail. For a typical specialty it might be illustrated as in Figure 2.

In considering each of these components of the specialty management task it is important to note that many of the elements have no verbs attached or else the verbs are 'soft'. This is deliberate. One theme of this paper is that the evolution of clinical directors will depend less on what the areas of management concern are (which are likely to be fairly consistent in hospital management) than on the nature of responsibility personally accepted by doctors. This hypothesis incorporates the assumption that the areas of management concern do represent a significant change from an incompleteness and lack of integration in the past. It also recognises however that the practice of management will vary from one place to another depending on the local culture and on interplay of individual aptitudes and personalities.

Figure 2. Components of Specialty Management

PLANNING	OPERATIONAL MANAGEMENT
Health care programmes	Ward/Dept. organisation
Agree planned case mix	Bed use
Budget bid	Waiting lists
Handling emergent development	Problem-solving
	Budget-holding
Colleagues awareness	Personnel function
	Clinical routines

LEADERSHIP

Representing specialty
Initiating change
Coordination

REVIEW PROCESS	DATA / INFORMATION
Performance vs. plan	Quality of data / flow
Actions to change	Interpretation & analysis
Peer group activity	Communications

Source: Adapted from Freeman Hospital Resource Management Newsletter, No. 4 (November 1988)

In some ways the least 'glamorous' of the components is the most fundamental. The type of management which is now necessary requires accurate and timely information on what service or treatment is being given, to whom, at what time, and with what resources. Without such information changes in practice or provision will be ill-informed. The collection of the necessary data has traditionally been one of the least valued activities in a hospital, given low priority and suffering from a vicious circle of indifference as to function and exasperation and eventual neglect as to quality and timeliness of output. The experience of the Resource Management pilot sites suggested that such problems could best be overcome by moving the function of data collection to specialty or departmental level and integrating it as closely as possible into the normal operational routines and responsibilities of the clinical service. The creation of a clinical database is one of the principal objectives of the

Resource Management approach. It not only illuminates management, but also greatly facilitates the review of clinical cases and practice. Its existence provides an incentive to medical staff cooperation with other aspects of the hospital's management systems. It relies however on continuously competent management, much of it at specialty level. Routines and timetables for data input and transmission need to be observed scrupulously. The staff concerned need encouragement and training. Here then lies a first example of choice as to the nature of specialty management. If there is a clinical director, how much responsibility does he or she have for data and for ensuring the proper interpretation, analysis and communication of the resultant information?

The operational management of a specialty is perhaps the next area to examine. In many respects this should be the least contentious area in which the notion of 'doctors as managers' can be advanced. The management of the use of beds, of waiting lists and of clinical routines should undeniably be the responsibility of doctors. Yet even here the ground rules are often fuzzy. Where inefficiencies are perceptible or where conflicts of interest over the use of shared resources arise, who, if anyone, has the responsibility, power and willingness to take decisive action? If action is taken, is it based on objective analysis or on fudged compromise? Is the mechanism collegiate among equal colleagues or does one individual have authority to decide? What sanctions can such an individual exercise over colleagues? The clarity with which such questions can currently be answered in any hospital is likely to influence the future evolution of specialty management. This general uncertainty over the evolutionary path of clinical directorship is confirmed when the wider aspects of specialty operational management are considered.

If a specialty is to function with the optimum balance between effectiveness, efficiency and limited resources, matters of ward or departmental organisation and the deployment of staff (of several disciplines) are important ingredients for success. Any change in such matters usually requires the exercise of persuasion, the demonstration of need for change, and a talent for implementation. Being a good doctor does not automatically mean that the requisite management skills are also present. Moreover people's resistance to change can be enhanced if there is lack of clarity in the authority or mandate held by the person designated as manager.

Such difficulties are seen in their most concentrated form in the field of budget-holding. A budget is an expression of agreement about the resources required and available to meet an intended workload. Adherence to budget is rarely easy. Many variables occur which can readily blow budgetary performance off course. The pattern of clinical demand is rarely the same as was predicted when budgets were set. Staff turnover, sickness or absence for training may need to be compensated by the use of temporary staff or by alterations to rotas. New clinical techniques, new drugs, new diagnostic opportunities can all affect dramatically the cost of an otherwise numerically stable workload (more usually they change the pattern of workload too). The ability to identify such variables and their effect requires good information, careful analysis and predictive judgement. Decisions about what action to take to restore an acceptable budget balance depend on personal characteristics in the manager and on the distribution of power within both the specialty and the hospital as a whole. Sometimes such decisions necessitate a rationing of patient access to service or changes in clinical practice (regarding diagnostic routines, prescribing policies, the use of materials and other detailed aspects of what doctors do for their patients). These decisions go to the very heart of 'clinical freedom'. An increasing number of doctors recognise that such 'managerial' constraints are inevitable. What is now being seen is an environment in which such constraints are increasingly explicit rather than being implicit. The difference arises not merely because of financial stringency. It stems from the fact that the 'fixed assets' of patient care (beds, theatres and ward staff) are no longer the major constraint of the volume and range of clinical practice. Drugs, implants and medical and surgical consumables have become so significant a proportion of the cost of clinical practice that the lack of money to purchase them in the quantities desired must be seen as a constraint equal in significance to beds, theatres and ward staff. The interplay of these constraints usually means either that explicit decisions must be made to ration the use of drugs, implants and consumables or else that reductions in beds, theatres and ward staff may occur specifically to compensate for uncontrolled overspending on the drugs and consumables budgets.

The management task in budget-holding thus entails difficult processes of analysis, judgement, negotiation, and implementation. Moreover hospitals have traditionally been slow to appreciate that aspect of cost control that comes as second nature to factory production managers. If an end product (whether it is patient care or a motor car) requires the use of materials, rigorous judgement should be exercised as to what materials are required, at what quality specification and at what cost. Materials should not be used in greater quantities, higher specification or cost than is absolutely necessary to ensure the desired result. It is a very obvious discipline, but one which hospitals and their staff are poor in observing. If optimum value is to be achieved with limited resources hospital managers must care a great deal more about 'production cost control'. This is the most 'micro' dimension in 'medical micro-management' and is best exercised at specialty level where the necessary insights and expertise are most likely to be found.

Support and understanding

How much of such operational management responsibility do we expect clinical directors to exercise? What support do they need and how amenable are their clinical colleagues to the exercise of managerial decision-making in such matters?

This part of the analysis commenced with the observation that the operational management of a specialty might be regarded as the least contentious area in which the notion of 'doctors as managers' can be advanced. Its conclusions suggest that such an observation might be naive. Perhaps we might advance an alternative view that it is in the planning area that the role of clinical directors might prove to be easiest. Figure 2 referred to 'Health Care Programmes' and a consequential schedule of other responsibilities such as securing agreement on planned workload categories by case mix, negotiating the requisite budget, and ensuring that clinical colleagues understand the nature and implications of the plan for the year ahead (or longer).

A Health Care Programme in these terms comprises an assessment of population need for certain clinical services (bearing in mind new emergent techniques, clinical regimes or services), a judgement of how much of that need can or must be met, a budget which describes resources available to meet planned provision and a description of organisational or physical change needed to support clinical plans. It is a typical example of the rationalist approach to life. Such rationality is usually regarded as a cornerstone for good management and for sound administration of public money. It calls for thoroughness in analysis, comprehensiveness in vision, an ability to integrate multiple elements into a single coherent expression of intent, and skills in prioritising and negotiating.

Such a specification of skills highlights the potential for difference between good planning and bad. When the complexity of health care need and provision, the pace of change and the impact of external financial and political variables are all taken into account the fragility of the rationalist approach to planning becomes apparent. Good planning is difficult to achieve. Many of those affected by it will be sceptical as to whether it is worth the effort and whether it justifies the totem significance that the bureaucracy attaches to it. It will not be easy for clinical directors to operate comfortably in this field.

What then of the 'Review Process' component of the specialty management task? Some aspects of it align closely with what has been good practice in medicine for a long time. The review of clinical cases and the sharing of views as to how revisions in clinical practice might improve the quality of care and of outcome are examples of good management as well as of good medicine. The search for measurable ways of assessing outcome is equally a matter simultaneously of good management and good medicine. There is however an important distinction to be recognised.

Quality review and the measurement of performance in terms of outcome achieved expose the practitioner to comment and criticism. No matter how supportive the environment, it can be a sensitive process. An environment in which such review is educative stands a better chance of achieving commitment from practitioners than one in which overtly managerial concerns are perceived to be dominant. Yet our examination of operational management issues in the clinical arena demonstrated the importance of good practice in making the best, least wasteful use of scarce resources. It is inevitable therefore that specialty management suggests that clinical directors might be seen as more acceptable in forging a relationship with the clinical review system than a manager from a non-medical discipline might be. Yet even in making such a tentative assertion we must beware of generalising. A clinical director believed to be 'leaking' too much of the insights of clinical practice review to a general manager might, in some hospitals, be regarded with great suspicion by clinicians.

The other aspect of the Review Process referred to in Figure 2 concerns measuring the performance of the specialty against the plan (or Health Care Programme). The previous discussion of the difficulties involved in budgetary control and of the relative frailty of the rationalist approach to planning suggests that this aspect of the Review Process sounds easier than it is likely to be in practice.

Where does this somewhat pessimistic analysis leave us? The intricacies, demands and potential pitfalls in the areas of data and information, operational management, planning and review suggest that although superficially these areas of management concern entail the use of familiar language, they involve examination, intervention, coordination, change, prioritising, decision-making and operational disciplines to a degree greater than has probably been seen before at specialty level. Many sensitivities are involved: the notion of clinical freedom, the independence and interdependence of different professions, the exercise of managerial authority over the activities of people who in the past have not recognised that managerial authority might apply to them.

Yet there seems no escaping the reality that management must be exercised at specialty level in order to achieve the optimum between service and available resource.

The dilemma for hospital managers is that whereas the intellectual framework for management usually relies on precision in ascribing responsibility and in defining the powers and instruments available to the responsible manager, the culture within which specialty management must be exercised is often unfamiliar with, if not hostile to, such disciplines.

The alternatives

In this paper the term 'clinical director' has been used to describe the notion of a doctor accepting responsibility for management of the specialty. There are other models. For example one might see a Specialty Manager (perhaps drawn from the ranks of nursing, administration or the professional and technical disciplines) working in partnership with a consultant representative from within the specialty. Yet within each broad model there is scope for considerable variation one specialty from another, one hospital from another.

There is a danger that a movement to create clinical directors might proceed without sufficient thought as to what is involved. If expectations are unrealistically high, disappointment is likely to ensue. If the significance of local culture is not understood, the initiative may wither through lack of support. If the relationship between specialty management and whole-hospital general management is not clear and comfortable, mutual disenchantment is likely. The definition of responsibilities and powers needs to be as clear as possible in the circumstances but perhaps not so rigorous and threatening that it scuttles the initiative from the outset. The personal ability of putative clinical directors needs to be assessed.

Training and other forms of support are likely to be necessary. Moreover many General Managers may themselves feel threatened and undermined by the prospect of managerially powerful doctors; there is a 'hearts and minds' campaign to win among managers as well as among doctors and nurses.

Specialty management usually entails some degree of decentralisation within a hospital. For example the collection of data on clinical workloads may be achieved most reliably by decentralising staff out of the Medical Records Department and into the specialties. What does this mean for the respective roles of Specialty Manager (or Clinical Director) and Medical Records Department? If nursing is the major resource used by a specialty, should not the responsibility for managing that resource lie at specialty level? If so, what then is the role of the hospital's Head of Nursing? If there are Clinical Directors, do they manage the nurses? If a hospital develops a powerfully decentralised pattern of specialty management, what mechanisms does the Unit General Manager need in order to establish whole-hospital coherence and cohesion?

Specialty management will of course require a framework of incentives. Without incentives why should doctors and nurses take on the onerous task described earlier in this paper? Yet a policy on incentives will need to be highly sophisticated. How does the hospital's General Manager ensure that specialties do not exploit the incentives policy to their own narrow advantage to the detriment of other services? How are externally imposed financial targets (such as coping with underfunded inflation or meeting Regional or District Cost Improvement Programme levies) to be met while still leaving room for worthwhile incentives at specialty level?

What conclusions can be drawn from this review of the position? The starting point of the analysis is that the collision between scarce resources and open-ended aspiration makes it necessary to manage in the clinical arena in the areas of management concern described in this paper. Figure 2 displays the proposition that it is leadership which harnesses the success or otherwise of management concern in the fields of planning, data/information, operational management and review. Leadership can take a variety of forms. This paper contends that such leadership is unlikely to be exercised with the necessary combination of sensitivity, knowledge, continuity and decisiveness by either Cogwheel Divisions or by Unit General Managers managing the 'remote control'. It further contends that specialty management is therefore a sensible development. It is however agnostic on whether specialty management is best achieved through the creation of clinical directors ('doctors as managers') or by creating specialty managers who work so closely with doctors that the latter can be seen as 'doctors in management'. The factors which should influence the pattern locally include principally:

- A shrewd assessment of prevailing climate;
- The degree of willingness to invest in information systems and to contemplate decentralisation of many aspects of management;
- The readiness and capabilities of those likely to be involved;
- The ability to create a framework of incentives;
- An assessment of how far specialty management in the early period of its existence is likely to be able to reach into the areas of management concern. What issues will be 'off limits' or likely to be beyond short-term capability?

Implicit in this agnosticism and in the factors described above is the belief that specialty management should evolve. It should not be seen as a precise model which one 'implements'. Its evolution will depend as much on external influences (fiscal, political and social) as on internal experience. In the end the most decisive influence may turn out to be the durability of the Specialty Managers or Clinical Directors themselves. Specialty management as described in this paper is an immensely challenging field. Will doctors want to devote the necessary time to being Clinical Directors? Will they seek to delegate much of the hard grind of management to a Business Manager working in support of them, and if they do, how tenacious will be their grip on the real power of the job?

Jerome H Grossman, MD

PHYSICIANS AS MANAGERS IN HOSPITALS

Introduction

Physicians in America have believed that the changes in medicine which have been occurring here are temporary and that it is only a matter of time until we return to practice as we in the United States knew it in the 1950s and 60s—solo, fee-for-service practice, hospitals that are separate from doctors, and cost plus financing. It is only in the last decade, really in the last five years, that there is any serious acceptance of how fundamental the changes really are. In the United States, medical care has come to be managed through public bureaucratic systems and private corporate systems. Physicians must take the art and science of management seriously, both intellectually and emotionally. We physicians are used to mastering things quickly. 'Management' *thinks* easy—it *reads* easy—however, it is about as hard as going from right-handed to left-handed. It isn't easy to do, especially if one is a physician. What follows are some experiences in bringing physicians into corporate management roles from ones that were very personal and individual.

In focusing this paper on the Physician Manager, it is important to differentiate three kinds of managing by doctors. The first, managing the care of individual patients, has been and still is central to being a doctor. The second, managing patterns of care for various disease types, is a more recent phenomenon, and is one result of the cost containment movement. The third, managing the delivery system or part of it, is quite another and very different function, one for which physicians have not been selected or trained, and one which is truly part of another culture than patient care.

Nevertheless, doctors are being asked and are electing to become more involved in managing the system. Why? Because there is widespread and intensifying unhappiness with the present operation of medical services. The unhappiness is driven outside Great Britain by the rate of increase in healthcare cost per capita, but is exacerbated throughout the world by the lack of satisfaction of those who receive, provide and pay for care. Since reducing costs affects the way physicians manage patient care, it is crucial to include physicians in designing and implementing changes that are hoped to be cost reducing.

The dissatisfactions of payers, providers, and patients are only the symptoms of the underlying problem. Whether we design the delivery system using competition, regulation or capacity limitation, we seem unable to come to any satisfactory compromise about appropriate medical services and their cost. What we have discovered is indeed disconcerting, even frightening. We do not know what is effective care. We do not know what is efficient care. We do not know which quality measures are appropriate. We do not know how much effective, efficient, high quality care should cost. We are driven by the technology of treatment, not the outcomes of treatment. We are often influenced more by our own needs than by patient satisfaction. We are inexperienced in weighing trades-off between cost and quality because there are few available research results, either from scientific or health service sources to help us with these judgements.

Because we have no widely shared agreements on the outcomes of care, we have attempted to make 'improvements' in what we do by focusing upon process. We now use fewer days, tests, procedures, and equipment in treating patients in the belief that we have reduced costs without reducing quality, but we do not understand the impact of these changes upon the overall cost effectiveness of treating each patient's episode of illness. We do not know how to manage the salient aspects of an organised system that delivers a service. We are enmeshed in beliefs and assumptions, perceptions and feelings about what we do which are relevant to an obsolete medical context. The treatment process is based on behaviours supported by conventional wisdom, the comfort of familiarity, and the rewards of outdated institutional norms, because we do not have the result of appropriate clinical research.

How we got here

Prior to WWII, medicine was primarily an interpersonal and nurturing profession in which most illnesses were not curable. After WWII, the medical world embarked on a love affair with technology and began to believe that we could indeed cure man's ills with acute medical treatment. That belief peaked in 1965 with the introduction in the United States of Medicare and Medicaid programs and a promise by our President that we could make every person in America free from disease. Healthcare came to be viewed as 'a right not a privilege', and we believed that with enough science and technology we could guarantee universal medical well being. However, while technology has not delivered universal health, it has drastically changed the delivery system. All aspects of the system have conspired to deliver more units of service of greater and greater technological sophistication, resulting in higher and higher costs, with little if any improvement in outcome. This is because we

continued to manage the medical care process in the belief that more is 'better'. We did not admit that if we looked at the outcomes of this care, the news was not good—not good at all.

A quotation from the Foreword of the *Working for Patients* [5] document by Margaret Thatcher expresses the aims that exist in the United States as well when she said "We aim to extend patient choice, to secure the best value for money". In the United States, we are in a period of questioning and transition, because thus far, the attempt to use a combination of deregulation and market forces to improve medical care delivery has had only limited success in producing greater efficiency. At the same time we have seen that 'market oriented delivery systems' favour those with money at the expense of the indigent. What we have discovered is that the cost increases go beyond the technological. They involve the infinite number of small changes in the practice of MDs, nurses, pharmacists, and others due to 'fee-for-service' payments to hospitals and doctors, reinforced by the malpractice system. We have defended our increased use of resources by claiming more was better, safer, and, therefore, more 'correct'. We now know this is often not true.

In Great Britain and in Canada, strict limitations on both capital and operating expenses have had a significant effect on slowing the increase in costs. Both Britain and Canada pay hospitals based upon global budgets determined centrally with little adjustment for changes in activity. The changes Great Britain is embarking upon have the potential danger of replicating some of the American experience. If individual hospitals are free to invest in capital and to market health care services to a receptive patient and physician community, the same explosion of cost without improvement in outcomes or satisfaction may occur. On the other hand, if the system is outcome driven and marketing is based on cost/quality trades-off offered to an informed purchasing community (representing patients, and society at large), important good can result both in terms of cost as well as the health status of patients.

For we physicians, the bad news is that we are the largest part of the problem. The good news is that we are the only solution in sight. The best news is that we are beginning to suspect that fixing the part of the problem we cause can lead us to a way of practising medicine that will include the interpersonal and supportive rewards of the profession prior to the technological tidal wave, as well as those emanating from scientific advances.

Managing patterns of care (Managing the content)

Before the era of managed care, physicians managed only the care of their own patients. Only in large group practices or service components of medical school departments, did physicians have any general management responsibilities. Their main focus was on personnel management, recruiting and retaining physicians who practised within commonly accepted standards. Quality was determined by their education, training, and credentialing (being Board Certified) and was monitored by tracking such things as the morbidity and mortality of patients for whom they cared. There were few concerns with the costs of medical care. Quality was not thought to be related to resource use, either in terms of efficiency or cost-effectiveness.

The issue of cost assumed centre stage soon after the initiation of Medicare and Medicaid, as medical care costs began to rise at more than twice the rate of general inflation. The then fledgling Health Maintenance Organisation (HMO) movement and its demonstration of reduced cost by changing the patterns of care to individual patients introduced the first major change in physician management responsibility.

What was the best approach to understanding and managing patterns of care? Almost twenty years ago, the author made his first foray into using data as a source of influencing medical practice patterns in the start-up phase of a staff model HMO. In developing an automated medical record system for the HMO, he believed that by giving physicians clinical information in aggregate form, they would use it to develop cost-effective protocols for treating patients because they were in a pre-paid medical plan where the goals had shifted from more units or patients to judicious use of services to each patient. It turned out that the information in the medical record is only a limited part of the data needed to make cost decisions about patient care. A medical record system does not include any information about cost. Also, the physicians were not skilled at assessing individual services' contribution to reaching outcomes. It has turned out that almost all the gains in cost saving from HMOs in America have come from using the hospital less often, not from different content of care. This gain has been dispersed to the fee-for-service sector through the use of 'utilization management', in particular pre-admission certification.

The early experiences in HMOs involved decisions about using the hospital at all, not about managing within it. The change in the content of care in the hospital was minimal. The savings they brought were in the main from reducing the use of the hospital by treating patients in the outpatient setting. However, they could not control the cost of the hospitalisation once the patient was in the hospital. Given the fact that their revenue was limited by capitation payments anything that would control the costs of the hospital would be important.

What gave the New England Medical Center the opportunity to make permanent changes in practice patterns was the growth of HMOs in the Greater Boston area. HMOs wished to purchase their specialized hospital care at as little cost as possible. The prospect of being able to buy that referral care

at a guaranteed price was attractive to HMOs. We realized that if we could manage our costs at the Medical Center we could garner a greater share of HMO referral patients. The promise of that growth helped our physicians to change their practice patterns.

Our physicians had never been asked to look at their practice, their care delivery patterns with an eye toward making them efficient. Simply placing the information before them and identifying the goal made a major difference. For example, in 1981 when we began this project, we examined the way we delivered hospital services associated with coronary artery bypass graft surgery. By hospital services, I mean all of the elements of the hospital stay, not how the surgery was performed. What we discovered was that we treated all of the bypass graft patients the same way. When we looked at the difference between those who came for elective bypass surgery vs. those who were emergencies we found we could make significant reductions in stay in the recovery room, diagnostic tests used, and length of stay in the hospital. We found that we could make initial sets of practice changes in almost every area of the hospital. These changes were sufficient to reduce our costs per patient to a level which made our offering of these packages very successful.

This strategy worked well in a growth environment. It allowed us to take care of more patients with less increase in hospital staff and facilities. However, it was not a true integration of the management of patterns of care with the management of the institution. Clinicians mainly 'order' the care in the hospitals—they do not 'produce' hospital care. Care is the aggregation of a number of separate small units into a complete service—a hospitalisation. A physician usually thinks only of his patients when he thinks of management responsibility. He might even go on to think about all patients with a disease or group of diseases, and the standards and variations in caring for them. In contrast, nurses and hospital employees think about functions; i.e. nurses think of beds being staffed 24 hours/day, 7 days/ week. Laboratories think of being ready to do tests regardless of who orders them. There are different ways of addressing responsibilities within an institution as complex as the hospital.

In order to achieve real savings, it was necessary to bring physicians into the active management both of patterns of care and of the production of care as well. The physicians had to see the impact of their care patterns on the institution's management, and the nurses and administrators had to come to understand the costs of care in terms of individual and groups of patients. They both had to understand true costs, average and marginal costs, and other management control issues. Finally these understandings had to be translated into an operating environment which reflected this new context: producing cost-effective care as efficiently as possible.

What emerged was an institution-wide project which began in 1981. The first phase was completed in 1986, and the second major phase is just getting underway. There were several major aspects to this project:

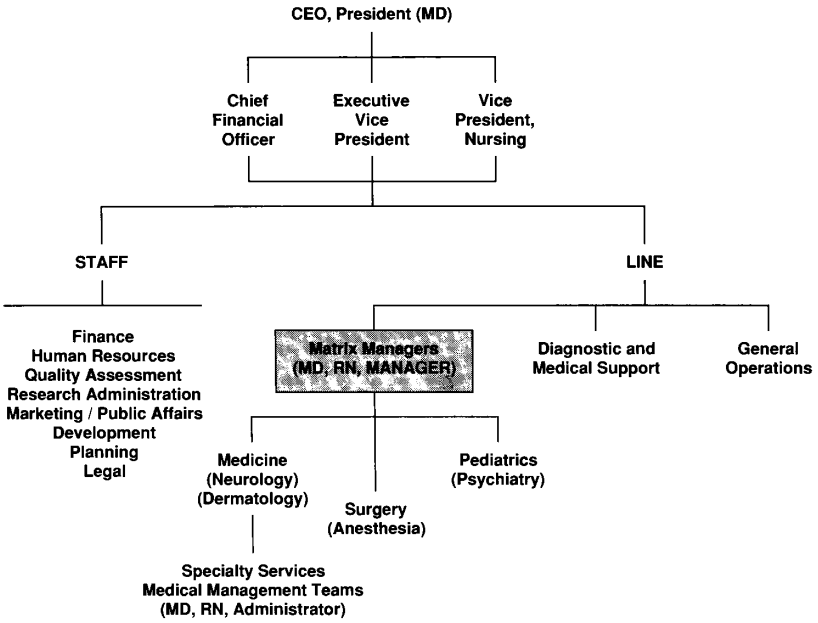
1. The change in management structure from emphasizing hierarchy within professions to emphasizing matrix across professions, both at the hospital and departmental level,
2. Development of normative protocols called 'care management plans' for most types of patients who come to our Medical Center,
3. Development of an information system integrating clinical and financial information, and the creation of a management control system involving planning, budgeting, and periodic monitoring which reinforces all aspects of the project,
4. Training and education program designed to give clinicians and administrators skills to operate in the new environment, and
5. Managing the interface with physicians in the community, patients and payers.

Organizational structure

Changing our organizational structure was an essential part of our initial activity. In most hospitals, managers, nurses, and doctors have vertical reporting chains which touch only at the senior management level. Each group operates independently. John Hopkins introduced the concept of integrating the functions at the level of the Academic Department of the Medical School (and Hospital) with the physician as director. Similar experiments are underway at Guys Hospital and other hospitals. In our restructuring we chose a matrix management form in which the physician manager was a partner with a nurse and manager, but not the director. Many of our academic physician chairmen had neither the interest nor skills to take on the task of matrix member. They had been chosen for their intellectual and physician leadership skills, not their general management skills. We, therefore, chose to identify physicians with an interest in general management, who were then assigned by the Chairman to act as the physician member of the matrix.

Table 1 shows the organizational structure we developed to support this integrated approach to management. As you can see, we grouped all of surgeries together even though they are separate academic departments. We treated the clinical support departments, such as x-ray and laboratory, as suppliers to these three divisions.

Table 1. New England Medical Center Hospitals



Development of protocols

To give operating form to the matrix at the patient care unit level, a collaborative effort between nursing and the physicians, called Nursing Case Management/Collaborative Practice, was instituted. Protocols have been developed to cover care across clinical settings including ICUs, routine patient floors, rehabilitation, out-patient and home care. Case Management Plans outline the anticipated usual or standardized length of stay, clinical outcomes, intermediate goals, and interventions involved in the care of a given case type of patients across an entire episode of illness. 'Critical pathways', abbreviated versions of Case Management Plans, identify the nursing and physician interventions which must occur in a timely fashion to achieve specified clinical and financial outcomes. For example, in treating a child with cleft palate, they found that if the child was taught the postsurgical way of drinking before entering the hospital, one could save significant days. It was most interesting to combine the efficiencies that the nurses saw around education of patients and return of functional state which saved days of care.

These care plans serve as the basis of our integrated care delivery system. They describe the production process as our doctors and nurses have agreed to carry them out. They serve as the standard against which we examine the actual care of patients with those diseases.

The information system

To achieve integrated management, we identified the need to develop an information system which integrated the clinical, financial and transaction data.

Many hospitals have made significant progress in introducing computerized operational systems such as laboratory, radiology, pharmacy, and nursing-acuity systems to supplement the traditional financial systems of billing, general ledger, and payroll. These systems primarily support day-to-day operations of the hospital; they do not provide decision support for the hospital management process.

We believe that most hospitals (even those in Great Britain) do not lack sufficient data with which to manage, rather, they lack information. We set about to correct this deficiency by developing a decision support system which overlays the hospital's existing information systems. The feeder systems for our new system included transaction data drawn from operational systems, medical data drawn from medical records systems, and financial data drawn from general ledger systems. In effect, any data element captured in the feeder systems is available for use in our data base.

We structured the information within our data base into 'intermediate' and 'end' products. We define intermediate products as tests and procedures such as lab tests, operating

room procedures, or patient days. For each intermediate product, we determined the hospital's 'true' cost, that is cost identified by fixed/variable, payroll/non-payroll, direct/indirect criteria. As a result, we were able to determine how change in practice which affected utilization of intermediate products would affect hospital costs. We defined 'end products' to be hospitalizations classified by discharge information into homogeneous groups such as DRGs. 'End products' are thus synonymous with protocols of clinical practice. At both levels of 'products' we used historical information to establish standards rather than develop normative protocols. Once we had developed our data base, we then wrote a number of applications to use the data in managing the hospital. One of the most widely used applications was to facilitate on-line inquiries regarding clinical practice. For instance, we did studies regarding use of prophylactic antibiotics in surgery, ultrasound testing, intensive care utilization and use of alternative chemotherapy drugs. The most extensive use of the system has been to replace the hospital's management control system. Our system is now used as the principal budgeting and monitoring tool within the hospital. The budget process starts with the projection by doctors of expected case type volumes and utilization of resources by care type. This projection of activity is then compared to the standard costs of intermediate products to develop an estimated expense budget for the hospital. Extensive simulation is then performed by doctors and management regarding how budget assumptions might be changed to achieve more favourable budget results. Once a budget is determined, the system is used to provide monthly reports to doctors and managers regarding variances between budget and actual performance for intermediate and end products. As a result we are able to establish accountability among doctors, nurses and managers. For instance, if the laboratory is over budget, we can identify whether the variance is due to excessive test ordering (the responsibility of doctors) or use of more labour than predicted (the responsibility of the lab manager). If Cardiology is over budget, we can identify if the variance is due to excessive length of stay, testing, or patient severity and which doctors contributed to the variance. The system is also used extensively in pricing decisions, capital budgeting, examination of high cost cases, and concurrent reporting. The system has been used extensively not just as a financial analytical tool, but to describe and monitor outcomes. Included within our ICD9CM codes is extensive information regarding infection rates, returns to O.R., adverse drug reactions, and other surrogates of 'quality' measurement. We are able to evaluate not only whether these adverse outcomes occur more than predicted, but also the financial consequences of these events.

The information system plays a central role as the common language between all of the hospital's principal players. The success of the system's on-line reports serves to educate physicians, nurses, and professional managers about the relationship and impact of their work. The system itself is only a tool. It is the interplay of the system and the key players and the ability to model the impact of changes to costs and volume which are the centre of our attempt to provide more cost-effective services.

Training and education

We learned very early that most physicians had neither the cultural inclination nor the skills needed to become general managers. The cultural shift to concern for cost effectiveness of patterns of care for individual patients through 'protocol or guideline' development was in itself an enormous undertaking. To add 'institutional' cost effectiveness was overwhelming.

Neither the hospital staff nor the medical staff had ever undertaken a collective approach to solving common problems. Doctors were responsible for taking care of individual patients and using whatever services they felt appropriate. The hospital administrators were given a total budget to provide all services requested by doctors. The physicians' uneasiness in assuming new roles was shared by nurses and other clinicians who found themselves in the middle between hospital administrators and doctors. A redistribution of roles and responsibilities was required for which most people were not prepared.

The existing structure within the hospital of jobs and organizational units mimicked functional activities. When we began to ask doctors to worry about efficiency of individual and groups of patients, they then asked administrators and financial people to think about the care to individual patients and types of patients. Everyone felt comfortable. The change required new skills and new relationships. The major groups—doctors, nurses, and managers—had major differences in the number of hierarchical levels and the content of management that impeded establishment of meaningful working relationships across the three groups. Despite these problems, significant progress was made toward establishing integrated patient treatment programmes.

Our formal training sessions have been extensive. They have concentrated on several areas: enhanced teamwork and integration; communication; negotiation; and dispute resolution.

A senior group of physicians, nurses and administrators numbering 25 have been part of a formal senior management development program. They have met for day-long or two-day labour retreats three or four times a year. Each retreat has been aided by the presence of an organizational development facilitator. While each session has had a different focus, there have been two underlying themes. The first has been to improve senior management's effectiveness in working together by breaking old norms of group behaviour, building trust, and reaching consensus on concrete action steps. The second has concentrated on

exposing the group to a range of new management models, and styles around such issues as people, performance and pay, changing corporate cultures, negotiation strategies and dispute resolution.

Nurses and managers have been far more receptive than the physicians to formal training sessions. Despite the difficulty of recruiting doctors to our programme, each division has developed between five and ten physician representatives who are actually participating in the new order.

What we learned is that education and training is probably the most important part of our project, but also the most difficult and time consuming aspect of the work owing to difficulty in mounting high quality sessions and spending the time on it. It was also the one aspect most often slighted by budget crisis.

Managing the interface with physicians in the community, patients and payers (Marketing and sales)

In the United States, the Academic Medical Center is to a large extent a referral hospital. It depends on physicians in the community and the referral of patients. Personal relationships between medical centre doctors and their colleagues in the community were the principal basis for referral patterns. The introduction of the managed care (HMO) movement shifted these relationships to a more formal contractual basis. This basis now includes the payer of care and as a result introduced price (or cost) into the basis for 'patient referral'. It was this introduction that was an important basis for our management project. It was the Medical Center's belief that if it could offer a guaranteed price to these HMOs, we could attract new business to the Medical Center. It must be remembered that at that time HMOs normally were at risk for all of the costs incurred when they referred a patient to an academic medical centre. The idea that they could predict their 'exposure' by being guaranteed a fixed price was a powerful sales tool. However, it was possible only because we had changed the operation of the Medical Center and had a method of producing those hospitalizations at the price we quoted.

How did the physician manager participate in this aspect of managing the institution? For us it required joining the administrator and the physician manager in setting the price for a given set of services. It required the physician manager to agree that he and his colleagues would take the responsibility of delivering those services within a given price. Our physicians have been very good in carrying this out and have succeeded in marrying their traditional personal relationships with the contractual relationships. As you can imagine, the growth of referrals contributed to the programmatic and economic success of the clinical departments as well as the hospital. Zero growth or contraction would produce a very different outcome. If in Great Britain there are significant shifts of patients, there will be significant winners and losers.

Thus, how Great Britain chooses to structure the sale of services between hospitals and districts will be a critical decision. From our experience it is important that this structure takes into account issues of quality as well as issues of cost. The measures of quality are only now becoming defined. In the United States the basis of sale between institutions is still principally based on cost.

Practical outcome of the project

The Medical Center did succeed in increasing its volume of patients through the hospital by more than 20% with approximately the same number of staff and beds even though these patients were on average significantly sicker. We were able to accomplish it with the same number of beds and the same number of personnel. Second, we do have an operating fabric of management which is different from before and includes easy and regular communication and decision making among our three principal management groups: physicians, nurses and administrators. In the end, our management information system was not only useful for ourselves, but has become the basis of a software company which supplies this system to more than 175 hospitals around the world.

Perhaps the most important outcome is the design and development of the next phase of management development, unsurprisingly called Management II. In Management I we borrowed measurement and evaluation techniques from process research, including the work of Bob Brook and Jack Wennberg and their colleagues, and established the structure, skills, and support systems to integrate them into routine medical practice. However, we found that these techniques have not prepared us to meet the current quality/ cost trade-off challenge. A critical advance in health services research allows us important new information which will help us in advancing our protocol design to address the quality/cost trade-off. Research developments in the measurement of the outcomes of care have produced a number of well-tested measures of multiple outcomes. These outcomes include: generic measures of patients' functional status (i.e. their abilities to perform usual daily activities) and well-being (i.e. their evaluations of their health and illness-related distress), and evaluations and reports regarding the care they received (e.g. patient 'satisfaction' with care). Our plan is now to implement routine data collection systems for each of these outcome measures and to link these measures with the information we now collect regarding both the process of care and its related costs. The New England Medical Center has

recruited four leading basic scientists to a newly formed institute for the study of improvement of medical care and health which will serve as the research laboratories for this project in addition to conducting independent and sponsored research.

The second major thrust of the project is to recognize that the hospital walls are an artificial boundary for an appropriate unit of service. As we go forward, the great bulk of care that patients receive will be outside the hospital. It will be for chronic illnesses that extend over time. Thus, in this project we are restructuring the unit of service to represent episodes of illness related to a patient's definition of a problem and an outcome (instead of the location or provider of care as the boundary of unit of service).

The third area of the new project centres on further decentralization of the structure into teams and group practices. The core of these group practices is the composition of a collaborative practice composed of an attending physician and primary nurses who care for the same patients across clinical settings such as ambulatory, inpatient, ICU, rehabilitation and home care during an entire episode of illness.

The combination of these larger episode of illness units of service together with the new outcome measures in decentralized group practices provide a new context in which to improve continued examining of cost/quality trades-off. We seek to find ways to use the limited resources available to us to achieve good outcomes. We believe by applying management techniques to the process and content of work we can achieve or better outcomes with many fewer resources. By further decentralization to permanent teams and by clinical studies of the impact of procedures and tests on outcomes, we believe there is another 25–50% efficiency possible without reducing outcomes or access. This project is just beginning and like its predecessor has a five year time horizon.

What have we learned ?

Doctors and nurses can and will find ways to make the care of individual groups of patients more efficient. However, there are limits to what is possible. The two types of efficiencies that we identified were: (1) the number and types of service rendered 'per case', and (2) in institutional productivity. In 'services' per case, the limits came from the fact that for 50 years we had added units in the name of safety and reduced risk (without scientifically determining that they contributed positively to the outcome). When we came to remove them, we needed to do a controlled study of their contribution. In Productivity or Production we found that the idea of maximum efficiency was so foreign in contrast to standards of safety to so many, that to create or enforce standards was very difficult.

Conclusion

Most importantly, we learned that although we felt we had made great progress, we in reality had reached only to the top of the first hill toward achieving cost-effective care and saw what a gigantic mountain there was ahead of us. When combined with the growing dissatisfaction and failure of the semi-competitive model of bringing balance between what society wanted and what we provided, we reached the conclusions that were outlined in the Introduction of this paper. It is our belief that it is incumbent upon us to climb that mountain of attempting to read the objectives and methods of delivering medical care. The objective must be organized honestly around the outcomes of the care we give, measured in terms of changes in the health status of patients and their satisfaction with what they have received. It is our belief that society's view of medicine and medical care has changed enormously in this last two decades. Men and women are increasingly aware that health is accomplished only if they as individuals take care and only rarely by ministrations of the medical care system. Rather than going to the doctor early and often, many view it as better to go late and rarely. We in medicine must accept the fundamental fact that much of the control of the outcome of both medical care and the achievement of health comes from the attitudes and actions of patients themselves. This implies major change in both roles and responsibilities within the healthcare system and the content of delivery of care.

Given this fundamental change in the goals and strategies to achieve them, the structure and operation of the system must change as well.

It is our belief that the way tasks are structured within the system no longer works. One reason is its high degree of sub-specialization with task centered credentialing as the major quality control device. This needs to be replaced by a system that measures quality in terms of its outcomes and costs, not on whether individual tasks are carried out safely and consistently. As effective care requires medical roles of coaching and training, it reclaims the central function of interpersonal and spiritual values that characterized medicine in the past. It is our belief that both doctors and nurses as well as patients and payers seek that outcome. It is equally our belief that much of science and technology properly used can assist in accomplishing these goals in ways which contribute to efficiency and effectiveness rather than impede it.

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DOCTORS AS MANAGERS: FRUSTRATING TENSIONS

Introduction

The three papers in this volume examine aspects of the increasingly popular idea that including consultants in hospital management would improve the quality and cost of hospital services. Incorporating professional knowledge and representation in management decisions seems a logical step in an era marked by an attempt to get the best value for money from the NHS. After all, who would know better than a doctor how to set priorities and make the system work?

Such a notion is appealing, but its implementation has been slow and its benefits undocumented. Each of the three papers describes ways by which physicians could contribute to management, but each reads like a cautionary tale. If including doctors in managerial decision making is such a good idea, why are both managers and consultants still hesitant to move ahead? This final paper examines some reasons for medical and managerial distrust of the idea of clinical directors and identifies some serious barriers to overcome before doctors can become effective participants in management.

Background

Hospitals have become complex businesses requiring good management to operate successfully in an environment of scarce resources. Most of the hospital's use of resources is dictated by the clinical actions of individual physicians and surgeons. Therefore, in an effort to fit service demand to available hospital budgets, medical input to planning and production has seemed desirable. But doctors have often been reluctant to participate, usually prefer to continue in clinical practice while they are managers, and adopt styles that are often considered dictatorial and directive by their managerial colleagues. Managers frequently complain that doctors generally do not understand management's role, often fail as managers, and appear more concerned to protect their fellow consultants than to improve the hospital.

Doctors usually cite several reasons for their reluctance to participate. First is the generally negative opinion of doctors about management. Many view management as a meaningless activity or even as an obstacle to good medical practice. Second, doctors complain that managers do not understand what is needed for good medical practice. Finally, those doctors wanting to participate in management often feel they lack managerial skills and adequate training.

I believe that doctors' negative views and poor performance as managers reflect more than administrative inexperience or a lack of appreciation of what managers do. Rather, medicine and business management are fundamentally different cultures. Employing doctors in management will yield good results only when we recognize and find means to deal with the radically different values and ideologies of medicine and management. At the heart of this problem is a conflict between the collective perspective of managers and the individual orientation of doctors.

Managerial values

In the management culture, individual interests are subordinated to the whole. Management sees its role as collective—planning and directing the work of the enterprise to optimize the results. In this process, managers identify important goals and plan production processes to achieve them. Managers allocate resources where they do the most good and constantly make trades-off in which some individuals, functions, and departments receive less than they want. Managerial participants are expected to make their case for what they want and need but then to "buy in" and make their part of the enterprise work once the decisions have been made. Distributive decisions are seen as necessary and just, so long as the overall business does well. Managerial values emphasize collaborative action, teamwork, and collective achievement.

Medicine's values

Medicine's success has been built upon a foundation of individual service rather than collective production. The profession's values reflect the primacy of the individual doctor–patient relationship, which is buttressed by the ethical principle of beneficence—the assumption that the doctor will work on behalf of the best interests of the individual patient. In the past half-century medicine has offered increasingly stunning benefits and, in Great Britain, made them free at the point of use. These two factors have encouraged patients to view the doctor as altruistic as well as beneficent and have enhanced the importance of the doctor–patient relationship. Many observers believe that the increasingly powerful relationship between doctor and patient is the driving force underlying the public support that has propelled the medical profession to an unprecedented

position of authority and professional and financial autonomy in modern societies. These factors—the doctor's increasing clinical effectiveness, their freedom to hand out apparently free services, and their rising status—have reinforced the profession's ideology as maximizing rather than optimizing, being individually rather than collectively orientated, and behaving independently in action rather than interdependently.

Through selection and socialization, individual doctors become orientated to and adopt the attitudes and beliefs of the profession. Although not immutable, these values are slow to change, particularly since, as I have suggested, they have been reinforced by the profession's success. Delbecq and Gill [6] confirm these behavioural characteristics in their analysis of a study of managerial orientation of 800 physician managers. They concluded that "physicians represent a high 'need for control' population. They have a very high need for influence, a very high need for dominance, and a very high need to be the focal point in decision structures." Physicians were likely to withdraw support from group decisions when disagreement occurred, while other types of managers would move toward group consensus as a problem-solving strategy. Physicians considered it a failure to give ground to achieve mutually acceptable compromise. At the same time that they themselves tended to be authoritarian and independent, most of these physicians disliked authoritarianism in others.

The conflict zones

The job of the best hospitals in the future will be to keep costs low while providing high technical quality and service. Efficiency and effectiveness are central to achieving these goals. Drucker, one of the leading writers about management, defines efficiency as "doing things right" and effectiveness as "doing the right things." Neither can be achieved in the hospital setting without the participation of consultants. The role of clinical director can be central in helping resolve some of the conflicts with consultants that arise as hospitals struggle for better performance.

Effectiveness in the context of medical care is largely a function of individual doctor's decisions; to achieve greater effectiveness means influencing clinical decisions to reduce unnecessary and inappropriate tests, referrals, and treatments. Such activity lies historically in the domain of clinicians' rather than managers' actions. The traditional methods to influence effectiveness are the development and teaching of clinical standards, clinical audit to collect data about performance, and feedback of these data to modify behavior.

The clinical director has an important role to play in achieving effectiveness in the hospital. Conflicts often arise over differences between collectively determined standards and individual doctors' preferences. Doctors generally do not like to be monitored. The clinical director may play a key role in adjudicating the conflicts and in overseeing the audit process to be sure that ineffective actions are corrected.

Maximum hospital efficiency can be achieved only when managers and clinicians work together. The production functions of the hospital are highly dependent on managerial planning and systems that cannot work unless consultants cooperate. Efficiency results from such actions as standardization of procedures, smoothing of work flow, delegation of tasks, agreeing priorities, and following collective policies. All these require that doctors subordinate idiosyncratic behaviours to agreed procedures that help the organization run more efficiently.

Not all measures to improve efficiency and effectiveness create conflict. Clinical directors certainly have a role to play in identifying those improvements that are easy to implement. However, the major attractiveness of clinical directors should be their special ability to design and implement high yield changes that may be controversial. As a general rule, controversy is greatest over those actions that most threaten the professional authority and autonomy of individual doctors. If clinical directorates are not successful in helping hospitals work through this kind of problem, then we must question their usefulness.

For example, greater efficiency and quality might result if standard post-operative procedures could be followed and patients could be discharged as soon as possible following a specific surgical procedure. Most surgical consultants would resist any changes that required them to modify their postoperative practices or habits of rounding. The clinical director would play a key role in identifying this type of opportunity for enhanced efficiency, defining the problem, gaining agreement that it warranted solving, producing options by getting input from managers and consultants, analyzing and recommending the best option, and securing understanding and agreement from the consultants. Work on this process would range from analyzing the cost–benefit of postoperative procedures to gaining agreement that consultants would attend their patients daily or delegate the responsibility for discharge. Clinical directors would need both managerial and clinical perspectives to solve the problem, as well as the interpersonal skills to take a controversial issue through debate by both management and consultants and the credibility to get both sides to accept the compromises necessary to achieve an optimal solution for all.

The ideological differences between doctors and managers make teamwork in the conflict zone difficult. The role of clinical director, placed as it is between the two cultures, puts immense stress on the consultant who takes on this lynch-pin function. He will be encouraged to take part in the collective decision-making characteristic of team management in hospitals but will be seen as "selling out" to management by his consultant colleagues if he compromises their individual autonomy and interests. To avoid being seen as a turncoat by the medical profession, he may be seen as uncollaborative and assertive in his managerial work.

Moreover, the professional values of clinical directors may cause them to reject the help of managers when they are embroiled in a politically unpopular issue with their consultant colleagues. In these stressful circumstances, clinical directors may retreat from what clearly needs to be done, may adopt authoritarian stances with their managerial associates, threaten withdrawal of their participation, and retreat back to the protection of their clinical associates.

What can be done ?

Conflicts across organizational interfaces are inevitable in all institutions. Good organizations learn that such tensions are exactly what the organization needs to address in order to remain successful. Too little conflict leaves deep-seated problems to fester and saps the creativity and efficiency of an organization. Too much conflict can destroy an institution. Conflict handled constructively can generate creative solutions, produce new working relationships, and re-energize an organization's commitment to excellence.

The role of clinical director, if properly supported and carried out, is the key to effective management of the conflict between doctors and management. The following are some practical suggestions to overcome the barriers that inhibit the recruitment or effective action of those few consultants who can bridge the two cultures.

Clarify the responsibility of clinical directors

Hospital doctors need to understand why it is in their best interest to support clinical directors to work on management–consultant conflicts. When resources become limited, hospitals that fail to achieve greater efficiency and effectiveness will no longer be attractive or even viable institutions to consultants. To improve their hospitals, consultants and hospital managers must find a way to resolve their differences and work together to common purpose. They can resolve conflicts either by bargaining/ negotiation or conjoint problem solving. In the first model, management and physicians participate in a highly structured process to negotiate their differences. The latter approach, by contrast, invites doctors to join management in seeking solutions and participating in their implementation. Neither process lends itself to the participation of large groups, so consultants must delegate responsibility under either circumstance.

Negotiation appears superficially to fit best with the doctors' model of power and authority but can be rudely shocking when power is relatively balanced between the two parties: each side stands to lose as well as gain. Results are often suboptimal, since illogical trades-off may be made as part of the horse-trading of negotiations. The least satisfactory solutions occur when negotiating takes place informally and piecemeal.

Conjoint problem solving is a more rational and participative process in which both parties commit to achieving a joint understanding of the problem and then work to generate ideas for its solution. By joining management in solving the problem, consultants will generally gain higher-quality solutions to complex problems. The overall needs of the institution and its clinicians are likely to be best integrated through problem solving.

Open discussion of these alternatives may help develop acceptance of the process and create an environment more supportive of clinical directors. Consultants should be able to recognize the difference between a negotiating process and conjoint problem solving. In the former, strict representation of consultants' interests by clinical directors would be appropriate. In the latter, the clinical director is a key participant in collaborative problem solving and must work closely with the managers for the benefit of the entire organization.

Recruit those with interest and talent

In most hospitals, a few consultants will be interested and willing to cross cultural and organizational interfaces and work with their opposite numbers in management. Often these are the same individuals who seem naturally to have a managerial perspective. That is, they are able to see both sides of an issue and to work comfortably with the ambiguity and give-and-take needed to find collective solutions. Both parties should seek to recruit these more "bi-cultural" consultants as clinical directors. If consultants choose and support colleagues who only represent the doctor's view, they are actually implementing a negotiating rather than a collaborating strategy. If this is the case, they would be better served to make this explicit and utilize the formal rules and process of union-type negotiating.

Agree to support the clinical director's 'learning curve'

Clinical directorships are new roles and incumbents need time and support from both sides to learn how to be effective. As suggested by Grossman, training can be useful. Too often, however, such programmes are superficial or too fact based. Doctors are all too ready to assume that good management is easy—merely finding the right technical answers and applying them. As I have argued, clinical directors need to learn process as well as analytic and strategic skills. This type of learning requires a very sophisticated, interactive, and challenging educational design, followed by critique and coaching of their own work on site. Doctors are fortunately very action oriented, so they are quick to learn, apply their knowledge, and generate their own experiences for teaching. But both sides must grant clinical directors the support to learn on the job and the leeway to make a few mistakes along the way.

Clinical directors are in a vulnerable position. If the clinical director is being effective, he or she will be an exposed emmissary between two points of view that need reconciliation. The messenger should not be killed. It is all too easy for managers or the group of consultants to blow the whistle when they perceive that the clinical director may be making peace with the other side on a sensitive issue. Both groups should avoid forcing the clinical director into a position that looks untrustworthy to the other.

Leave time for formal processing of issues

Delbecq and Gill point out that doctors have a strong commitment to justice, a personal value that can be utilized to facilitate teamwork and agreement. While clinical directors are working with managers to develop an optimal course of action, they can present the alternatives and their pros and cons for discussion to their consultant group. By inviting critical commentary and adhering to the principle that all should be heard, the clinical director increases the chance that all ideas and points of view will be considered. This approach enhances the possibility of adherence to the outcome. If the process seems just and respectful of their opinion, a group of consultants is likely to accept that the final conclusion has been the best possible.

The more contentious or difficult the problem, the greater the amount of time that should be left for gaining input to the decision. Non-controversial decisions may require little formal process involving the managers or consultants, and increasing experience and trust may well change the degree to which an extensive and formal discussion must take place.

Conclusion

The major justification for clinical directors is their potential ability to improve the cost, quality, or effectiveness of hospital services. Such improvement is especially important when the resources to pay for hospital care are limited and can be spent elsewhere. If including consultants on the management team does not improve performance, hospital managers should be reluctant to share their managerial authority with clinical directors. If consultants do not perceive that the clinical director's actions have helped them as well as the institution, they will withdraw the trust and support that make the director effective. Therefore, clinical directors must earn their position by consistently demonstrating that they can bridge the gap between the two cultures. They must take on the difficult issues and show that they can bring them to a successful conclusion that benefits the institution and its medical professionals. Such performance will not be easy, given the wide differences in orientation and values between managers and doctors. Those consultants who undertake such roles deserve their colleague's understanding, tolerance, respect, and support.

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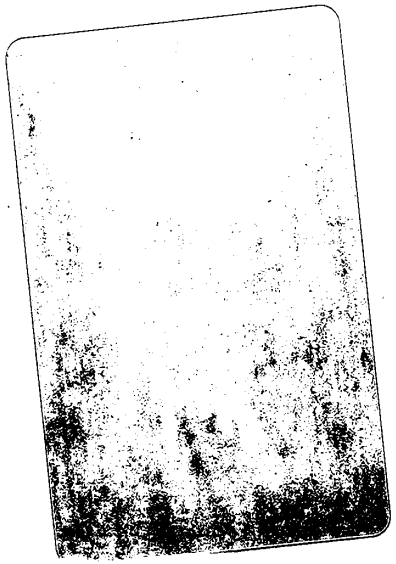

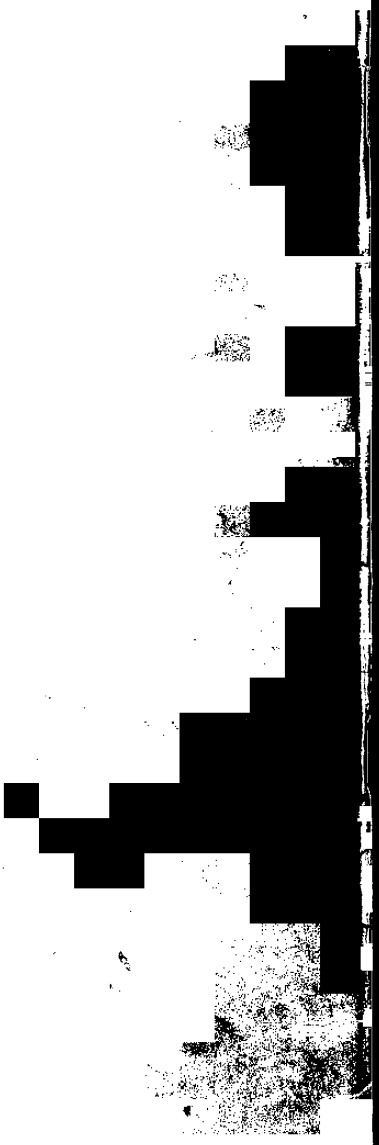

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