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# ***Initiative and inertia***

Case studies in the NHS

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## ***Prefatory note***

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The Nuffield Provincial Hospitals Trust's interest in health care policy is of long standing and well documented through its publications. It has covered many aspects of policy-making and from different viewpoints. Thus a request in 1981 from the then Secretary of State for Social Services (Mr Patrick Jenkin) and the then Permanent Secretary of the DHSS (Sir Patrick Nairne) to promote further studies and research on the implementation of policy from a somewhat unusual angle, found an immediately sympathetic response in the Trustees.

The novel nature of the suggested approach lies in its concern with failure as much as success. Its objective was to identify and explore the reasons why, on occasion, policy initiatives can apparently be implemented without difficulty while, on others, even when the objectives are known to command widespread support, barriers are encountered which at best slow down implementation but at worst frustrate it entirely. Even though the suggestion emanated from the Department, not all initiatives which become official or practical policy originate from that source. The range and complexity is such that selection of specific issues was necessary to probe this rather unusual question concerned with policy analysis and to that end the Trustees set up a Study Group charged with examining what seem to be common factors in success or failure of policy implementation.

Investigations and research have taken a variety of forms and inevitably those groups distinguished as having official priority, were among the first to be studied. Thus, a seminar on the 'Care of the Elderly' was held in September 1982 and attended by Ministers and senior officials. Arising from this seminar, the Trust published in 1983, as the first of its Nuffield/York series of Portfolios an essay *The Elderly—Who Cares? Who Pays?* by Alan Maynard and John

C. C. Smith. This essay highlights the critical significance of social security provision to health care policy in respect of this vulnerable group and urges steps to ensure harmony with other policies concerned with the elderly in the pursuit of common objectives. Above all this aspect of policy should be given the attention it deserves in the Government's current comprehensive review of social security provision.

The Trustees concurrently commissioned studies concerned with general policies on the elderly, and the mentally ill and handicapped. Thus Sir Ivor Batchelor has surveyed the major aspects of DHSS policy for the care of the elderly and his well argued comments have been presented by the Trust in a pamphlet *Policies for a Crisis?* Again, Professor Fred Martin was invited to undertake a comprehensive review comparing, over time, achievements with initial expectations in the field of community care for the mentally ill and handicapped. This fascinating and illuminating study has recently been published by the Trust under the title *Between the Acts*.

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But not all change—for the better or worse—in the NHS springs from policy initiatives that have been centrally inspired, either politically or professionally. Many have more humble origins, often beginning with a single individual's ideas which have attracted widespread support. How these ideas mature and influence policy and practice is clearly important to understand. A proposal put forward by the University of Sussex to study the process of innovation in the NHS was welcomed and supported by the Trust and this book is the outcome.

Under the general guidance of Professor Stuart Morrison and Dr Roy Rothwell the study was undertaken by Miss Barbara Stocking who, in this work, uncovers and examines the many factors which influence the process of innovation and change in the health service. Her choice of title *Initiative and Inertia* aptly encapsulates the state of play.

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## ***The members of the Study Group***

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# ***Acknowledgements***

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This study is about the workings of this NHS and it is only because of the willingness of NHS and DHSS staff (as well as a number of people in health care related organizations) to be interviewed and to open their files to me that it was possible at all.

I am very grateful for the interest and helpfulness shown and I only hope that the results presented here go some way towards thanking those people. My thanks must go also to Professor Stuart Morrison and Dr Roy Rothwell who originally suggested the idea of this study and in supervising the project gave much support throughout. Finally I am grateful to the Nuffield Trust's Steering Committee who provided important insights from their own NHS experience, to Mr Gordon McLachlan and to the Nuffield Trust for financing this project.

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## ***Abbreviations***

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A and E	Accident and Emergency
AFP	alpha feto protein
AHA	Area Health Authority
AMO	Area Medical Officer
ANO	Area Nursing Officer
BMA	British Medical Association
CAMO	Chief Administrative Medical Officer
CAPD	Continuous Ambulatory Peritoneal Dialysis
CHC	Community Health Council
COMA	Committee on Medical Aspects of Food Policy
COHSE	Confederation of Health Service Employees
CRC	Community Relations Council
D and C	Dilatation and Curettage
DA	District Administrator
DGH	District General Hospital
DHA	District Health Authority
DHSS	Department of Health and Social Security
DMT	District Management Team
DNO	District (now Chief) Nursing Officer
DNS	Director of Nursing Services
DOE	Department of the Environment
GP	General Medical Practitioner
HAS	Health Advisory Service
MIND	National Association for Mental Health
MOH	Medical Officer of Health
NHS	National Health Service
NUPE	National Union of Public Employees
OPCS	Office of Population, Censuses and Surveys



<b>RAWP</b>	<b>Resource Allocation Working Party</b>
<b>RCGP</b>	<b>Royal College of General Practitioners</b>
<b>RCN</b>	<b>Royal College of Nursing</b>
<b>RHA</b>	<b>Regional Health Authority</b>
<b>RHB</b>	<b>Regional Hospital Board</b>
<b>RMO</b>	<b>Regional Medical Officer</b>
<b>RNO</b>	<b>Regional Nursing Officer</b>
<b>RSU</b>	<b>Regional Secure Units</b>
<b>SCM</b>	<b>Specialist in Community Medicine</b>

# ***PART I***

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## CHAPTER

# ***I***

## ***The background and methodology***

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### **Why the concern about innovation?**

Not all innovations are necessarily good: but even those whose effectiveness can be demonstrated sometimes have a hard time gaining acceptance in the NHS. Why does change seem to be so difficult to bring about? Some think size and the inherent inertia of large organizations to be a root cause. Some think that structure and management style are to blame. There also seems to be a feeling that it has become much worse since reorganization in 1974, with more bodies entitled to be consulted, more committees to review and modify an idea, and more teams who must reach some sort of consensus. Thus, a seemingly good idea may remain perpetually on a conveyor belt of committees and consultations, without actually emerging into the light of day. Whether this is true and whether it has been changed by the 1982 restructuring is still open to debate. What is abundantly clear however is that decision-making in the NHS is always likely to be complex because of the presence of many powerful, and not always compatible, individuals and interests.

Despite the complexities, a great deal of change takes place in the National Health Service. Visit almost any of its nooks and crannies and there will be individuals who have heard about new ideas and are trying them out or who are the initiators of new ideas

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themselves. Some innovations spread through the NHS surprisingly quickly. So what is it that makes one innovation diffuse rapidly while another becomes completely blocked? What is it that makes it possible for one hospital or district to take up an innovation while a neighbouring one rejects the idea entirely? Why is it that an idea which seems good when viewed from the centre does not 'take' on the ground while others, for which there is perhaps little evidence of effectiveness, are taken up rapidly?

These are the questions examined in this study, which aims at a better understanding of the innovation process and examines what can be done to encourage the uptake of effective innovations. A whole range of innovations were studied, to assess the extent of their diffusion, the underlying reasons for their acceptance or rejection, and to reach some conclusions about the process of diffusion in the Health Service. There is no suggestion that a particular innovation should have been accepted throughout the Health Service: the purpose of the study is rather to investigate what actually happened and why. It is hoped that the study will both provide some insights into the workings of the NHS and be useful to those at all levels who are seeking to bring about change. Understanding the process of acceptance or rejection of an innovation may help individuals to see not only why they are meeting resistance but also how to get around some of the stumbling blocks which they may meet.

### **The scope of the study**

The classic work on the diffusion of innovations by Rogers (1) defines an innovation as 'an idea, practice or object that is perceived as new by an individual or other unit of adoption'. This is a very broad definition and allows a range of changes to be included, for example changing the times patients are woken when in hospital, which might not at first sight appear very innovatory. Although this study is concerned with innovation in the Health Service, to make the task manageable it was decided only to include innovations which have a direct bearing on patient care. Thus innovations in administration, catering, and supplies, for example, are not considered. Within the area of patient care an attempt was made to include different types of innovation, some technological, some involving technology and organization change, some organizational

change only. Technology is used to mean not just equipment but therapies and procedures as well. Innovations which are in effect broad pronouncements of current policy have not been included. This may provide a background against which particular innovations can be assessed but there is no attempt at exegesis of government policy or its outcome. However, where central policy specifically concerns one of the chosen innovations, this is discussed.

The study had to concern itself with innovations which could be defined. This may sound obvious but it is not quite as easy as it first appears. With some innovations it may be very difficult to decide whether the innovation is going on or not. Even if those involved say they are now carrying out a new procedure, it is sometimes questionable whether the originators would even recognize it. For example, the idea of 'the nursing process' was omitted because it would have been extremely difficult to judge whether what was going on was 'the nursing process' or whether adherence to the form rather than the content of the innovation amounted to its acceptance. Even by limiting the study to innovations which could be defined, there are many examples where the idea has been modified in different places and, of course, this is quite appropriate. It may even be that innovations which are capable of adaptation are more likely to diffuse. Nevertheless this all makes the researcher's task harder and also means that many changes which are difficult to define, but which may in total make up much more of the movement of the Health Service, were omitted from the study. For some innovations comments are made about their continuation, that is whether they have good staying-power or whether they slip away if their main supporters move. However, this study does not concern itself with the impacts of the innovation except in so far as this affects the process of adoption.

Finally, something needs to be said about the timespan of the study. Although some of the ideas date back for many years, the innovations which were chosen were ones which have been discussed in the period since reorganization in 1974. If an innovation had a longer history attempts were made to go back to that earlier history. It was decided to restrict the study to this fairly limited timespan partly to ensure that individuals who were influential in decisions about whether to adopt or reject an innovation were still available (as well as documentation) and partly also because this is a study of the Health Service and its

**Table 1.**

<b>Geriatrics and Psycho Geriatrics</b>	<b>Community and Primary Care</b>
Day hospitals	Computers in general practice
Geriatric orthopaedic units	Diabetic clinics in general practice
Five-day rehabilitation ward	Nurses as first contact in general practice
Reality orientation therapy	Asian rickets
<b>Mental Illness and Mental Handicap</b>	<b>Acute Hospital Services</b>
Regional secure units	Continuous ambulatory peritoneal dialysis
Mobile crisis intervention teams	Mobile coronary care
Travelling day hospitals	Day surgery
Good practices in mental health	
Portage scheme for home teaching of mentally handicapped children	
<b>Nursing</b>	<b>Perinatal Care</b>
Incontinence nurses	Neural tube defect screening
The in-patient day (waking times)	Neonatal intensive care
Support teams for the terminally ill	Electronic fetal monitoring

current workings and the political, social and economic context for the diffusion of innovations has changed over time. The study gives us a view of how well an innovation has diffused up to late 1982 for most of the cases, and mid 1983 for the four detailed studies. Because the climate of opinion can change rapidly, it cannot be safely assumed that innovations which are currently having a hard time will not blossom in the future and, of course, vice versa.

There was no shortage of candidates for study! The first question was how to select a range of innovations which included technological and organizational aspects or a mix of both; the successful and the unsuccessful (in terms of diffusion); those with central policy interest and those without. In the event it was decided to canvass opinion on the basis of six broad areas covering most of the work of the service viz:

Acute hospital services  
Primary and community care  
Nursing  
Geriatrics  
Perinatal care  
Mental illness and handicap

Leaders in these fields and officials at the Department of Health and Social Security were consulted as well as other health professionals and interested bodies. In the event this produced a list of over 50 innovations and a short list of 22 were selected. These are listed in table 1.

The method of selection has obvious limitations. Even if the innovation had not diffused successfully, it had at least achieved sufficient prominence for leaders to be aware of it. Innovations which had started but had yet not achieved general awareness would be excluded by the selection process. The total number of 22 was constrained by the amount of time available and the need to secure a wide coverage. This undoubtedly led to the exclusion of some interesting possibilities but not, it is believed, to the detriment of coverage as a whole and the balance of the study.

## **Methodology**

The study was divided into two phases.

In the *first phase* for each of the 22 selected innovations, the originators or main proponents were interviewed as well as leaders in the particular field and DHSS staff who had been concerned with the innovation. For each innovation a summary was prepared which included:

- a description of the innovation, its origins, evaluation (if any) and any policy statements made relating to it;
- information about the extent and spread of its diffusion;
- an analysis of the factors which were thought to have encouraged or initiated its diffusion.

The objectives of the first phase were:

- to attempt to identify and define the characteristics which make innovations more or less likely to diffuse

to identify the factors which influence the acceptance or rejection of innovation

From this analysis it was hoped that the outlines of a blueprint for successful innovation would begin to emerge.

The *second phase* was more concentrated, detailed and specific. Using the criteria emerging from the first phase, it was decided to undertake detailed case studies of four innovations only. It was clearly not possible to include both successful and unsuccessful innovations and it was decided, in consultation with the Study Group, to select those which seemed likely to be of interest from a policy analysis perspective and which had failed to live up to expectations in that they had not diffused as rapidly or as widely as expected, or had been accepted in some parts of the service but not others.

**The four innovations selected were:** (note that these statements about why the innovations were interesting contain many assumptions, some of which turn out not to be valid once the innovation is more thoroughly investigated).

***Regional Secure Units***—mental illness. The interest here is why with both government policy and direct funding of both capital and revenue it has taken so long for secure units to be established.

***The inpatient day, waking times***—nursing, acute and long stay hospital services. The interest here is why when one of the major complaints of people in hospital is that they cannot get enough sleep, it is so difficult to change waking times to hours which might be considered normal at home.

***Asian rickets***—community and primary care. The interest here lay in why a problem which was identified as long ago as 1962 and which requires relatively simple measures to correct (Vitamin D supplementation) has not been tackled earlier and why there is still resistance to supplementation and educational campaigns.

***Day surgery***—acute hospital services. The interest here is why something which seems to benefit both the individual patient as well as the Health Service as a whole has met so much resistance or been ignored in so many places.



It will also be seen that the major points of decision-making are different for these four cases, ranging from region to district to community and hospital, although, for any one of them, different levels may become involved at different times.

The methods used for each of the case studies was slightly different and are described.

**1. Regional Secure Units.** Following discussions with DHSS officials, four regions were selected to include one region where secure unit development had gone relatively fast, one where activity had begun fast but where there is still no permanent secure unit, and two which had been particularly slow in getting the developments underway.

Visits were made to each of these regions, in each case the regional files on secure units were read, and interviews were held with regional and district officers, and hospital staff in those places where secure units had been under consideration.

**2. Inpatient day—waking times.** A rather different approach was taken to the waking times case study, because it was extremely difficult to find out what waking times are nationally or where attempts at change had been made, it was decided to use community health councils (CHCs) as the first point of contact, based on the view that CHCs were one of the groups most likely to take an interest in patient welfare. In 1982, a survey of all CHCs in England and Wales was carried out, to find out whether there had ever been an investigation of waking times by themselves or others in their district and whether they themselves had ever made any efforts to change waking times. In 1983, the 43 CHCs who had said they had attempted change were interviewed by telephone to find out what had made them become involved, what attempts they had made at change, what success they had had, and the reasons for their success or failure. More details are given about the questionnaire and telephone interviews in Part II, Case 2.

From the 43 interviews, four districts were chosen for visits. In three of them the CHC had a fair degree of activity in trying to change waking times. The three were chosen to include both the successful and less successful, as well as a geographical spread. A fourth district was visited because, although the CHC involvement had been fairly low key, the district had shown considerable

determination in bringing about change and yet had not achieved much success. Again visits were made to the four districts to interview the main people involved.

**3. Asian rickets.** Glasgow was the first city to recognize Asian Rickets in 1962 and a visit was made there to try to interview all those who had been involved with the problem from 1962 until the Glasgow rickets campaign which began in 1979. Files were also used where possible.

In addition, four English districts with substantial Asian populations were selected based on their response to the national Stop Rickets campaign. The selection was made with the Stop Rickets campaign director to include districts which had taken up the campaign whole-heartedly, those which had been fairly lukewarm in their response, as well as one which had rejected the campaign entirely. Again, visits were made to these four districts to investigate the past and current history of rickets there, by interviewing the main individuals involved.

**4. Day surgery.** Because of time constraints it was decided to limit this study to one region. In conjunction with the regional medical officers, four districts within the region were selected which had shown a range of interest in day surgery and again visits and interviews took place.

Overall then, the work was based on data from files and on interviews with the various actors in the decision-making process over the period of time the innovation was an issue. Initial reports were sent back to all individuals interviewed for correction.

### **Limitations**

Various caveats about the scope and methodology of this study have already been noted. Two particular points need to be emphasized. From the methodology it will have become obvious that the twenty-two innovations or the four detailed studies are not a random sample of all patient care innovations in the Health Service. It would be impossible to know what the total population of innovations was over a period of time. Nevertheless, despite these limitations the innovations are a broad mix and should at least

illustrate something about how new ideas and procedures diffuse throughout the Health Service.

The second major drawback is subjectivity. There is first of all the subjectivity of those interviewed and the points they chose to emphasize. It was attempted to get over this problem by checking information against files and also by interviewing as many different people as possible so that opinions about events could be cross-checked. In the event there was surprisingly little disagreement. People were forthcoming about their activities and views, perhaps because they were often very convinced about what they were doing, even though others in their hospital, district, or region might have thought they were entirely wrong.

There is also a great deal of subjectivity in the analysis, particularly in assessing the importance of particular factors in influencing events. As much of the factual information as possible is given in the case studies so that readers can reach their own and perhaps different conclusions. Finally it can only be said that this study must be judged in the light of the reader's own experience of the Health Service and whether the analyses and conclusions fit the events which they see going on around them day by day.

### **Publication**

The four detailed case studies appear in Part II of this book. Summaries of the remaining studies which also give more detailed references are available on application (to the author)—the data obtained for these studies however forms part of the background to the analysis presented in later chapters and used for purposes of conclusion. A brief definition of these additional 18 innovations is however necessary to understand the discussion. The additional 18 innovations are:

**Geriatric day hospitals:** Day hospitals are adapted or purpose built units where the activities common to inpatient care including physio- and occupational- therapy can take place, but where the elderly patient is only present during the day.

**Geriatric orthopaedic units:** Patients with fractured neck of femur or for joint replacement are admitted to orthopaedic wards, but with geriatricians advising on their medical care. Patients who cannot be

discharged fairly rapidly are then moved to a joint geriatric-orthopaedic unit under the joint care of the two medical specialties.

**5-day rehabilitation ward:** The idea is to take elderly patients either from the community or from other wards and carry out an intensive rehabilitation programme during which the patient will be returned to his family, home, or old people's home each weekend.

**Reality orientation therapy:** This therapy aims to stimulate elderly, usually demented, patients by continued orientation to their environment. Some groups emphasize the continuous 24-hour nature of the therapy (all staff interact with the patient by using the patient's name and mentioning other facts about reality), some others use special rooms and therapists.

**Mobile crisis intervention teams:** Such a team is made up of psychiatric workers (often including a psychiatrist, psychiatric nurse, and social worker) who can be called out to visit a person or family on a 24 hr basis and who will assess the psychiatric emergency. They may admit an individual but more likely they will work with the person and their family to identify the problems resulting in the crisis and to find ways of coping with these problems.

**Travelling day hospitals:** Psychiatric day hospitals are well established, but this innovation transports the psychiatric team from a base hospital to various small towns for day sessions. The idea is particularly suitable for rural areas with widely dispersed populations.

**Good practices in mental health:** This scheme aims to describe and publicize local mental health services which have been found to work well. A core group of local people with wide mental health experience is set up to carry out the study. They do not undertake formal evaluations of schemes and services, but use their experience to decide which are making a useful contribution. The final report describes local schemes which have been judged to be good.

**Portage scheme:** The portage scheme uses precision teaching methods for the home teaching of mentally handicapped children.

Home teachers such as health visitors, show parents how to teach a particular task or skill. The parent works with the child on this task until the next visit when the home teacher assesses the learned behaviour.

**Incontinence nurse advisors:** These are specialist nurses who work in urodynamic clinics and in hospital departments or the community, to advise patients or health workers on the management of incontinence.

**Support teams for the terminally ill:** These are teams, mainly of nurses, who give advice about and sometimes direct care of the terminally ill in their own homes. The advice may be to the patients, their families or those responsible for their care. The teams may be free standing or associated with a hospice. Symptom control teams for the terminally ill also operate in some hospitals.

**Computers in general practice:** Some early systems linked terminals in general practices to larger central computers, now the emphasis is on individual practices having their own computers mainly for the maintenance of age/sex registers, disease registers, repeat prescriptions, drug interaction advice, recall and appointment systems, and practice management.

**Diabetic clinics in general practice:** Some GPs are beginning to share or take over the care of their diabetic patients from hospital consultants. The care may be given through normal appointments or the doctor may establish a separate clinic where a number of diabetic patients can be seen on the same day.

**Nurses as first contact in general practice:** This innovation involves the use of practice or district nurses to assess patients either at home or in the surgery, and give advice including whether or not the patient needs to see the doctor.

**Continuous ambulatory peritoneal dialysis:** This is a recently developed method for treating end stage renal failure. An indwelling catheter gives access to the peritoneal cavity and several times a day fresh dialysate fluid is introduced into the cavity and the old dialysate fluid is drained off. The dialysate fluid equilibrates with the blood, allowing unwanted compounds to be removed, so substituting for renal function.

**Mobile coronary care:** This approach aims to get skilled staff and equipment, particularly for electrical defibrillation, to a patient suffering from an acute heart attack as quickly as possible through the use of mobile coronary ambulances. Sometimes these coronary ambulances are manned by doctors, sometimes by specially trained ambulance personnel.

**Neural tube defect screening:** Prenatal screening for neural tube defects usually begins with the measurement of alphafeto protein (AFP) levels in maternal serum at 16–18 weeks of pregnancy. Raised levels may lead to ultrasound investigation and the measurement of AFP levels in amniotic fluid obtained by amniocentesis. Women with abnormally high AFP levels may wish to terminate the pregnancy and counselling may be required.

**Neonatal intensive care units:** These units have been defined in a number of different ways. They may be taken to mean units which have the capabilities for mechanical ventilation of newborn, especially very low birthweight babies, for total parenteral nutrition and with advanced monitoring techniques available.

**Electronic fetal monitoring:** Electronic fetal monitoring allows the fetal heart rate to be continuously monitored throughout labour using either internal electrodes attached to the fetal scalp or an external ultrasound device.

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CHAPTER

**2**

***Innovation in the NHS:  
Theories about diffusion  
and change***

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At this point it may be useful to examine briefly some of the theories advanced on the diffusion of innovations, particularly where this has been studied in the context of health services. The literature on organizations, including power and decision-making, and also the management of change, have a bearing on this study but are not fully discussed here, being important subjects in their own right. The interested reader may find it useful to turn to the references mentioned for more thorough analysis of these questions.

**The individual as acceptor or rejector**

Diffusion takes place as the information about an innovation is disseminated through the appropriate social system and individuals, groups or organizations decide to accept (or reject) the innovation. As one by one more members of the system adopt the innovation, the well known S-shaped diffusion curve shown in figure 1 is produced (the rate of adoption will affect the steepness of the curve). There are a great many publications on diffusion: a recent work (1) summarized the findings from 3100 of them. The large majority concern the individual as the acceptor or rejector of an

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innovation and, in fact, much of the early work concerned farmers. What was known about farmers made a lot of sense in terms of how individual doctors take up innovations, and these results have subsequently been confirmed for doctors.

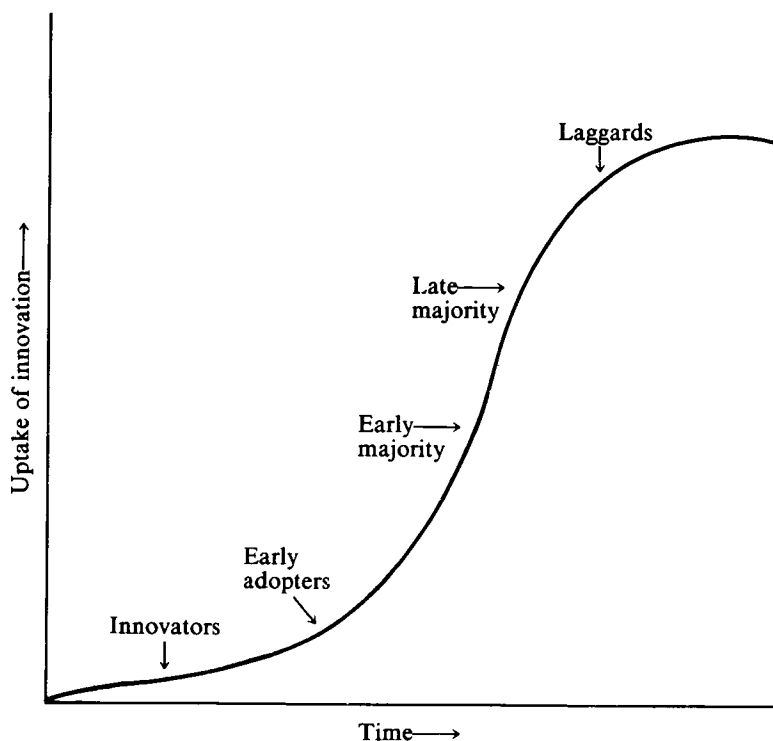


Fig. 1. Diffusion of Innovations.

The earliest adopters have been classified as venturesome. They are innovators and active information seekers about new ideas. The early adopters are respectable and act as opinion leaders, the early majority are deliberate, the late majority sceptical and the laggards traditional. Research has shown that the earlier adopters are different from the later adopters in socio-economic status, personality variables and communication behaviour. To give some examples, the early adopters tend to have more education, higher



social status, and larger sized units (e.g. farms). They tend to have a more favourable attitude towards change and a greater ability to cope with uncertainty and risk. They tend to be part of a more highly interconnected social system and have networks outside their own social system as well as having greater exposure to mass media channels. This influences where they get information about innovations and by what they are persuaded. Mass media channels play a more important role with the early adopters, as do non-local channels (e.g. visits to urban centres for farmers and out-of-town professional meetings for doctors). The later adopters are more influenced by local experience and by interpersonal contact. All of which makes sense since the early adopters cannot be influenced by local colleagues: by definition they will be amongst the first to adopt the innovation.

One of the most important studies which confirmed the relevance of these generalizations to the medical profession was done by Coleman, Katz, and Menzel at Columbia University in the 1950s (2). The study analysed the diffusion of a new drug 'gammanym' amongst a sample of 125 general practitioners, paediatricians and internists in four cities. The study focused particularly on the characteristics and social networks of the doctors. The finding, mentioned above, that the early adopters attended more out-of-town meetings came from this study. The researchers classified opinion leaders from sociometric measures and found that these opinion leaders were early adopters and that only when they had adopted the innovation did the S-shaped curve take off. Though there were scientific evaluations of the drug and these were communicated to doctors by drug company representatives and in journal articles, this information was not enough to make doctors adopt the drug. Subjective evaluation based on experience by a doctor's peers were the key to influencing the typical doctor to adopt the drug.

Recently a study of the reverse of this process has been carried out by Finkelstein and colleagues (3), that is they have looked at the abandonment of two groups of drugs: cholesterol lowering drugs such as clofibrate, and oral antidiabetic drugs such as tolbutamide. In these cases they were looking at the effect of late negative clinical trials rather than at the characteristics of doctors or their communication network. The trials of both sets of drugs were supported by the US National Institutes of Health. The conclusion of the diabetes

study was that a combination of diet and tolbutamide therapy was no more effective than diet alone in preventing or slowing the longterm consequences of diabetes. Thus, there was no evidence of efficacy and in fact some evidence of toxicity, though the latter finding was disputed. Similarly the coronary drug trial found that clofibrate did lower triglyceride and cholesterol levels but did not improve mortality and side effects were reported. Despite the controversy, especially over the antidiabetic agents, doctors behaved as if they were convinced by the trials and use fell off dramatically. In this study the decline did not appear to follow the reverse of the S-shaped curve for take up of drugs but dropped off immediately and steeply, perhaps illustrating the fear of malpractice litigation so common in US medical practice. The study has been described here in some detail because of its relevance to the question of whether clinical trials influence the uptake of innovations.

### **Innovation in organizations**

Studies like those described above provide useful information about how individuals make decisions about innovations. However, in the Health Service, although individuals may be influential in decision making about innovations, it is commonly groups or units within the organization which decide their fate. The literature on the diffusion of innovation in organizations and particularly health services is much thinner on the ground. At first, the research focussed on organizational attributes. Innovativeness of an organization was measured, perhaps by its adoption of as many as twenty innovations, and tested to see if there was any correlation with organizational variables such as centralization, formalization and so on. Unfortunately, often there was no correlation. Kervasdoue and Kimberly (4) carried out such a study on hospitals and concluded that attributes of organizational structure are by no means the sole determinant of innovation adoption. Their studies were useful in pointing out that characteristics of the individuals concerned, the organizational structure, as well as the context and environment all might play a part in the uptake of innovations (5).

Other researchers, mainly in the US, have also looked at the diffusion of medical technology in hospitals, in particular illustrat-

ing the effects of third party payment on the uptake and use of technologies. Russell's study (6) also looks at hospital characteristics in relation to diffusion. She found that the scale of a hospital's activities (as measured by beds) was important in influencing the uptake of seven technologies, as was the involvement in teaching and research. Differences between profit and private non-profit hospitals were fairly limited, despite the earlier finding about the importance of economic issues in uptake.

A study by other workers (7) also concluded that 'a major factor affecting the adoption and use of new equipment embodied technology is the prevailing methods of reimbursing providers for health services'. Though these results are interesting they are probably culturally specific to the US and may not necessarily apply to diffusion in the publicly financed National Health Service. This same study did note that 'equipment embodied technology used in hospital, clinical and ancillary services is subject to strong pressures for adoption and use whereas coordination technology such as medical information systems... focus pressures against adoption and use'. They also noted that preventive technology is also subject to barriers to adoption. These latter conclusions seem to fit the NHS rather better and there are good examples of the rapid diffusion of equipment in the NHS such as CT (computed tomographic) scanners (8) or electronic fetal monitoring in this current study. Thus the characteristics of the innovation itself influence diffusion.

Researchers are only now beginning to be interested in the process of innovation in organizations and not simply organizational attributes. The present study takes up this approach in the context of the Health Service.

## **Characteristics of innovations**

Apart from the adopter characteristics and the dissemination of information to adoptees, whether as individuals or in organizations, another strand of research, as just noted, has been the influence of the characteristics of the innovations themselves. It has been concluded (1) that five particular attributes affect the rate of adoption:

1. Relative advantage: the degree to which an innovation is

perceived as better than the idea it supersedes (as perceived by the potential adopters);

2. **Compatibility:** the degree to which an innovation is perceived as consistent with the existing values, past experiences and needs of potential adopters;

3. **Complexity:** the degree to which an innovation is perceived as relatively difficult to understand and to use;

4. **Trialability:** the degree to which an innovation may be experimented with on a limited basis;

5. **Observability:** the degree to which the results of an innovation are visible to others.

All are positively related to rate of adoption, except of course, complexity.

If these ideas are stripped of jargon they seem to have considerable relevance to the NHS and the 22 innovations have been looked at to see if these factors did influence their diffusion. Other characteristics are also important and some of these have already been mentioned such as the effects of clinical trials, economics and whether the innovation is an item of equipment. A part of this current study looks at the relative influence of various innovation characteristics on their diffusion, discussed particularly in chapter 5.

## **Organizations and decision-making**

Decision-making has a great deal to do with the diffusion of innovations: after all each innovation must be accepted (with or without modifications) or rejected at each region, district, hospital, clinic, or practice. Who makes the decisions and how they are made are important influences on diffusion, thus theories about power have a bearing on the discussion.

There are various theories about power but the two which seem to have the most to offer concerning the sorts of innovation covered in this study, are the pluralist and elitist approaches (9). The pluralists argue that power is widely distributed among different groups and each is able to exert some influence, though there is a great variability amongst the groups in their ability to exercise power. However, others (10), have argued that in health services there are dominant groups, specifically the medical profession. The interests

of the dominant group are best served by the existing structures and social institutions and so they are only active when their interests are challenged. In the Health Service they may be challenged by planners and administrators, who are the 'corporate rationalizers', or by the 'repressed' interests of the community. This latter approach verges towards the elitist theory of power (11). There have been studies on policy and decision-making in the Health Service which have taken up these power issues. For example, both Ham (12) in his study of the Leeds Regional Hospital Board, and Hunter (13) in a study of resource allocation in two Scottish hospital boards, have pointed out the influence of the medical profession on decisions (not only directly but also through their position as primary decision-makers taking clinical decisions and so committing resources) and the comparative lack of influence of community interests. In the current study, particularly the regional secure units case study, the community has been more actively involved in decision making, though not necessarily with ultimate success.

In the current study, neither of the two theories described above has been taken as exemplifying the whole truth about power in the Health Service, in fact both seem to have something to offer. Rather, the approach has been to look at who has been involved in putting the innovation on the agenda (or keeping it off), in other words who has acted as gatekeeper to new ideas and who has played what part in the decision making process. However the theories about power are useful since they do provide some insights into why particular people have become involved and why particular outcomes have resulted.

In the most rational view of decision making the whole system might be looked at in detail and problem areas identified, alternative solutions would be evaluated (which might include innovations) and one solution selected and implemented, not on the basis of who exerted the most influence, but on a rational analysis of its benefits for the system. Ideal decision-making does not exist however. The belief in rational, scientific management probably had its heyday in the Health Service in the late 1960s and early 1970s and in fact the 1974 reorganization of the NHS was to provide a structure in which such rational planning could take place. There is now more of a recognition that there are different groups in the Health Service whose interests may not be compatible and that decisions will be the result of negotiation and compromises. There is

also acceptance that the rational comprehensiveness model may not fit what happens in the NHS but that 'muddling through', or in the jargon of the literature 'disjointed incrementalism' (14), is a more accurate description. It is not merely that different interests are involved that rational planning fails, it is also that assessing every alternative from zero-base is just too complex and time consuming. It is also rare for 'perfect' information to be available on which purely rational decisions could be made.

This has some relevance to the uptake of innovations. First of all, unlike the fully rational approach, an innovation may not arrive on the agenda because a problem has been identified. Instead, it may be that people undertake a degree of scanning (for example the literature, colleagues, etc.) about what is new and suggest the innovation in an area where there was no previous view of a need. Innovations, and this is particularly true of new technologies, may also be looking for an application and so will be 'sold' to potential users, who again may not necessarily have been aware of a problem.

Then there is the question of which innovations will be more easily handled in the decision-making process. This will depend on where on the spectrum of rational planning through to muddling through, a particular institution or health authority lies. Where there is an emphasis on incremental decisions to solve one aspect of a problem at a time, then more radical innovations will be most threatening, whereas simple add-on measures will be more acceptable. The model of negotiation and compromise also implies that often many different groups will take part or influence decision-making and it has been pointed out that in such a complex environment it is much easier to prevent change than to achieve it (12).

### **Management of change**

It has been argued that people, on the whole, do not like change. Schon (15) expressed this as dynamic conservatism, with people fighting like mad to stay where they are. This resistance is not necessarily innate conservatism, there may be good reasons for opposition. In the Health Service for example, staff may not be convinced that change is necessary; they may have invested a great deal of time and energy in the established order and change is then

an implied criticism of all they have worked for; change may mean much uncertainty and may even be against the personal interests (such as status, work patterns, etc.) of those affected. Perceived impacts may also be different from actual impacts.

A number of the people interviewed in this innovation study are fairly unusual then in that they have either personally instigated or supported change. Who they are and their reasons for going against the stable state are therefore of interest and will be discussed in chapter 3. Of course, it must be recognized that those promoting change will not usually be the ones to be adversely affected by it.

But how does change come about in organizations where many people, for various reasons, would be expected to resist it? One approach is the top-down authoritarian mode where the top or centre orders the periphery to change. An example of this mode occurred with both reorganization and restructuring of the NHS. How well it works will depend in the degree of compliance necessary at the periphery and the extent to which those at the periphery are persuaded that the change is appropriate. Even in situations where there is little room to subvert the intentions of authority, if there is little acceptance of the change then morale is likely to be badly affected. On the whole the innovations in this study are not such that government has said they must be done. In the one or two places where the innovation has been a central policy then there is plenty of evidence of non-compliance with and adaptation of the original intentions.

Rather than top down innovations, changes in patient care may be more likely to start from the periphery where the need is seen: that is, to come from the service providers. However, as in any large organization the problem for managers is 'how far to allow modifications and manipulations to go so as to increase total effectiveness while maintaining the organisation on course' (16). In other words though innovation might be allowed or even encouraged, chaos must not result.

Most of the implementation of patient care changes in the NHS are probably neither entirely top-down or bottom-up but rather a working together of managers and staff somewhere in between. A consultant may wish to undertake new procedures but apart from those involving no expense and no organizational change he will probably require the support of managers and colleagues. Managers may also wish to bring about change but they will not be able to

bring it about without the support of staff, particularly the medical staff, if changes in patient care are to be made. Some examples of the power of managers and professional staff to bring about change are illustrated in the cases in this study. They have been illustrated elsewhere by Haywood (17) who points out that different groups vary in their ability and opportunity to innovate.

Organizational development, particularly using the action research model, concerns itself with this intermediate working together mode of change. In action research, an outsider, perhaps a management consultant or a researcher, works with staff not just to help analyse the problem which exists (perhaps by collecting data and feeding it back to the groups concerned) but to develop solutions with staff which the staff can implement themselves. In the Health Service some of the early work was done by the Brunel University group (18). Revans and colleagues (19) carried out action research in a number of hospitals some of which accepted the approach while others rejected it. More recently Towell (20, 21) and Cope (22) have worked in long-stay settings as action researchers. Towell emphasizes the importance of developing the innovations from within, using the good ideas of staff, with the change agent's role being mainly to assist them. In all these studies the participation of staff is seen as most important so that the changes are in fact *their* changes not something imposed from above or outside. The method seems to work best in situations where there is already a positive environment for change. The positive results in some of the work was also aided by changes in the outside environment, for example in attitudes towards the mentally ill.

The approach seems to have a good deal of merit but it is slow and requires a lot of input of time from staff and outside researchers. It is also unclear precisely in which situations it is most useful. It is unlikely to be the route by which most innovation and change takes place in the Health Service; most will be brought about by insiders without the aid of external change agents.

So what is known about how change occurs in organizations without the use of external third parties? A great deal has been written about this by those concerned about organizations. Handy has listed (23) what a manager can do to implement change:

1. Create an awareness of the need for change (preferably not by argument or rationale but by exposure to objective fact).



2. Select an appropriate initiating person or group (appropriate in this context refers to sources of power as perceived by the recipients of the strategy).

3. Be prepared to allow the recipients to adopt the final strategy (that-which one adopts one can easily call one's own...)

4. Accept the fact that like the good psycho-analyst, the successful doctor gets no credit but must let the patient boast of his own sound condition.

5. Be prepared to accept a less than optimum strategy in the interests of achieving something rather than nothing.

Other writers e.g. Watson (24) list other conditions which reduce resistance to change, for example the whole hearted support of the top administration. They all acknowledge the need for real discussion with the participants (in part because information can reduce resistance based on uncertainty) and allowance for adaptation of the strategy. As noted above in point 3, the purpose is to make the change the participants own. Handy points out that the response to change may be compliance, identification or internalization. With compliance the recipient agrees to the attempt at change because it is worth his while to do so but only because of force, rules or procedures. This is often the situation when 'top-down' change is enforced but compliance means no commitment and the need for maintenance or checking. With identification, the recipient adopts the idea because he admires or identifies with the source, the initiator, of influence. This response has the drawback that the source of the idea has to maintain this 'magnetic' influence and the particular person becomes indispensable. The idea or change can easily evaporate if the person moves or situations change. Internalization is the most lasting form of change when the recipient adopts the idea as his own. But, as Handy points out, such internalization is the hardest to obtain and takes the longest time. In fact the recipient must be free to reject the idea, since if he is forced to accept it, his response can really only be one of compliance or identification.

Writers on organizations accept that internalization is most lasting but note that it will not be possible to bring it about in all situations or even to have the time for long discussions. As Child (25) has written, though participation may be viewed positively, it is

not wise to expect the conflicts to go away. Participation has its costs, too, in the time that will be involved. Thus, though the characteristics of internalization and the way to bring this about are usually those recommended in texts to managers concerning change, there is realism that in many situations instructions to do something, resulting only in compliance, may be the most that can be achieved.

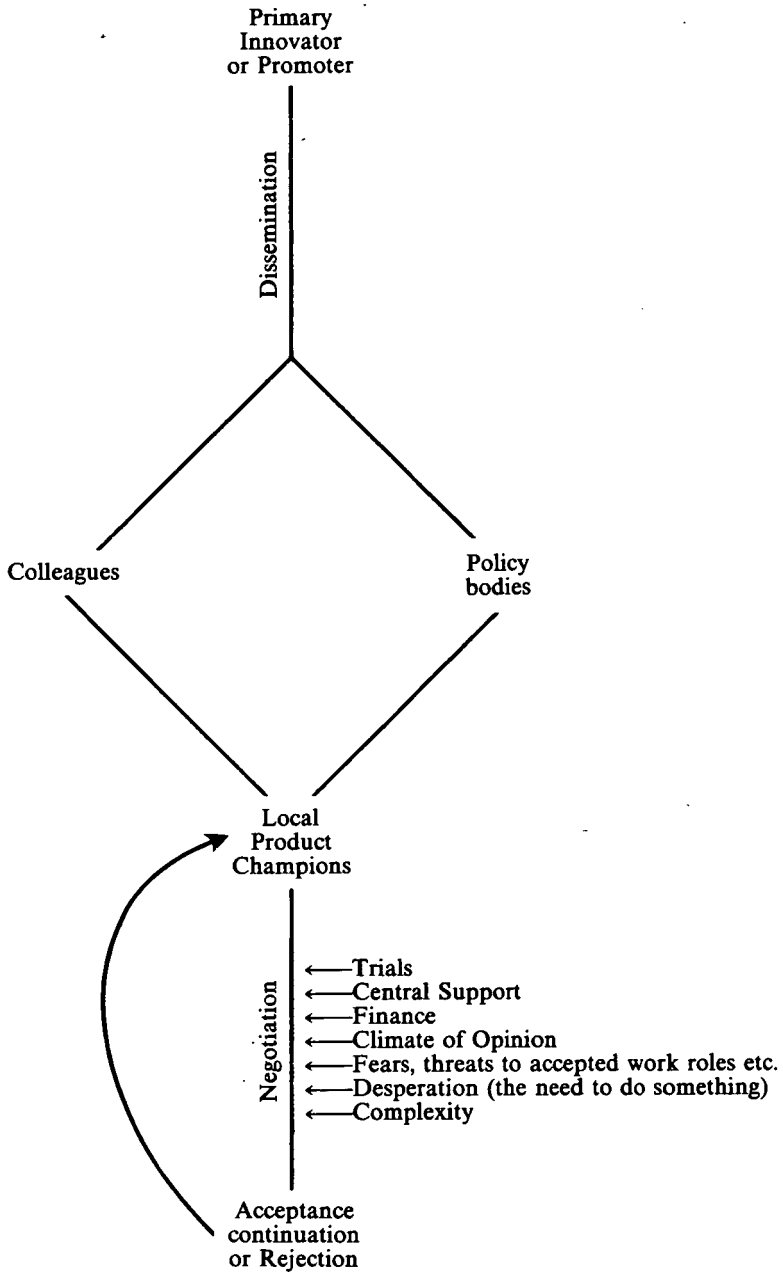
These theories about change give some insights into the diffusion of innovation and the resistances which emerge. For example, if no adaptation is allowed, workers cannot identify the innovation as their own and will only comply with the change. Perhaps these theories are most illuminating about why so many innovations gradually slip away even once started. For example, if an innovation is brought about by an individual whose charisma allows ward staff to identify with him or her, it is unlikely to be self sustaining if the individual moves.

This section has given a very sketchy account of some of the studies and theories which form a background to the current study of the diffusion of innovations in the NHS. The study does not, however, hang on any particular theory, it is instead empirical, looking at what has actually happened and the factors influencing events. Some framework for the study was, however, necessary and this is presented below.

## **The diffusion of innovations in the NHS**

Diffusion takes place as the information about an innovation is communicated through a social system and members of that social system decide to accept or reject it. This basic model has been adapted to fit the more complex system of the Health Service, as shown in figure 2. Even this is a very oversimplified version of the process. There are likely to be many feedback loops and other interconnections.

In the simplest terms the idea must come from somewhere, and in chapter 3 some information is given about the origins of the 22 innovations in this study. The innovator or primary promoter must communicate the idea around the system, perhaps directly to colleagues or through conferences and journal articles. Perhaps he or she will try to persuade policy bodies such as the DHSS or the



**Fig. 2** Diffusion of Innovation.

Royal Colleges to give their seal of approval to the idea. Then, in each local situation where the idea may be accepted, rejected or modified, there has to be an individual or group who have some enthusiasm for the idea because, in the NHS, they will have to go through a period of negotiations and persuasion to get the idea accepted. These individuals have been labelled in the figure as 'product champions' which is a term adopted from industrial innovation studies (26) where researchers found that one of the main influences on whether a new product reached and was successful in the market was whether it had a champion within the firm to support its development. The term seems to fit NHS where there is much experience of enthusiasts bringing about change. The product champions are an interesting group and in chapter 3 the effects that their status in the system and their enthusiasm have on the acceptance of an innovation are discussed.

During the period of negotiation, until final acceptance or rejection, a whole range of factors will influence the discussions. The figure only illustrates a few of these factors. They may include characteristics of the innovation, such things as its complexity or observability, whether it is a technology or organizational change, whether it requires finance and so on. Other factors may include the expected effects of the innovation on various groups of people and whether each of them perceives this as a benefit or disadvantage. The local or national environment may be important in determining whether there is receptivity to change in the particular area of concern. The focus of much of the current study has been to tease out which of these particular factors seem to have been most important in influencing the rate of diffusion of the innovations in the study. The national and local context is taken up in chapter 4 and the characteristics of the innovation in chapter 5.

Once the innovation is accepted, rejected, or modified (and as noted earlier whether it can be adapted to local circumstances may influence its acceptability) this is not the end of the story. The acceptors/rejectors may influence others either giving positive or negative feedback about the innovation and, of course, the idea may be discontinued if it does not seem to work out or if the product champions leave or lose interest.

This study looks at the extent and speed of diffusion of 22 selected innovations and assesses what has influenced the situation. In the four detailed case studies, reported fully in Part II, efforts

were made to find out in depth what happens when an innovation is discussed at local level.

The next three chapters analyse the results of the studies in terms of

The people in the process (chapter 3)

The influence of the environment (chapter 4)

The characteristics of the innovations themselves (chapter 5).

In the final chapter attempts are made to bring together the main themes and see what predictions can be made about the acceptance of new ideas and what lessons there are for improving the uptake of innovations in the NHS.

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## CHAPTER

# 3

## *The people in the process*

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Using the framework first presented in Chapter 2 (figure 2), this chapter analyses the role of individuals and groups in the diffusion process and looks first at the role of individuals in the initial development of an idea and its dissemination and then at the role of individuals and groups at local level.

### **The glimmering of an idea**

Where did the 22 innovations come from and why did they happen at the time they did? If the ones involving sophisticated technology are considered first, then it can be asked whether it was the technology looking for an application or the development of technology in relation to a perceived need which stimulated the invention. In other words was it technology-push or need-pull which was the force behind the development? Amongst the 22 innovations there are examples of both processes. Electronic fetal monitoring, neonatal intensive care (specifically mechanical ventilation of very low birth-weight babies), and continuous ambulatory peritoneal dialysis provide examples of the need-pull phenomenon, whereas the use of computers in general practice illustrates the application of an existing technology.

Taking computers in general practice first, in the mid 1960s there

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was much talk about what computers could do for the Health Service, and consequently the question of what computers could do in general practice (1). There was, and still is, the belief that computers will revolutionize society, so enthusiasts and planners began to ask what they would do for that particular area.

The need-pull technologies have quite different histories. If electronic fetal monitoring is considered, concerns about the well-being of the fetus led to research on the measures that could be used to make this assessment. In the 1950s and 1960s, at least three groups were trying to monitor fetal heart sounds (2, 3, 4,) and at least two others were using fetal blood sampling to try to assess well-being (5, 6). Thus there was a need and, given the developments in electronics occurring round about the same time, it was merely a question of time before a method was developed. As is common in the history of many projects, developments were required in a number of different disciplines before the idea could come to fruition. This requirement has been illustrated in other studies, for example by Comroe and Dripps (7) for advance in cardiovascular and pulmonary care, and by the Battelle Columbus Laboratories for several technologies including the computed tomographic scanner (8).

Neonatal intensive care is rather similar. Again the underlying background was there: premature, low birth-weight and sickly babies had been given some form of 'intensive care' for many years. During the post Second World War period some progress was made in saving babies but often with the result that the children survived but were handicapped (9). The advent of modern neonatal intensive care came with the ability mechanically to ventilate babies. In the UK, one of the pioneers was a paediatrician who felt that mechanical ventilation could provide a way to avoid the development of handicap resulting from oxygen lack. He began by adapting adult mechanical ventilators, and eventually, using the specification his group developed, manufacturers produced ventilators suitable for neonates. Thus, both for electronic fetal monitoring and for mechanical ventilation of neonates, the basic principles were worked out by clinicians before being taken up by industry; a common phenomenon in much of medical technology development.

These, then, are some examples from the more technological innovations. Many of the organizational innovations, or ones which may involve new medical knowledge or procedures as well as

organizational change, also developed out of perceived needs. For example, the Good Practices in Mental Health scheme was begun because the primary innovator was tired of hearing about all the bad things that were going on in the mental health and felt that good practices should be highlighted too. The primary UK innovators of both reality orientation therapy and the Portage scheme perceived the needs of the client groups but in these cases spotted the innovation going on in the United States and saw its relevance for the client groups in the UK. Sometimes the need has been the problem of organizing services rather than individual client needs. For example, day surgery was stimulated by the concerns over long waiting lists and was a further step in the shortened hospital stays and early ambulation practices which were becoming accepted.

Sometimes new needs arise out of prior developments. For example, once the open-door philosophy had become accepted practice in psychiatry, there arose a need for special units of medium security for patients who could not be managed in open hospitals. The perceived need was generally accepted, there were enthusiasts but no one person set the innovation going. In this case central government's departments and committees, prompted no doubt by individual representations, played a major part.

Several innovations in this study are off-shoots of earlier developments, sometimes just formalizing an activity which was already taking place. For example, support teams for the terminally ill were an off-shoot of the hospice movement. Those running hospices found they were called upon to provide support to their patients during periods at home and GPs were also asking for help in the management of patients who were unable for one reason or another to go into hospices. There were also more patients requiring special care than could be treated in hospices. Formalizing an already existing activity is also illustrated by geriatric day hospitals, which were a way of coping with the many elderly patients who were coming back to attend outpatient or occupational therapy units after discharge.

Sometimes innovations develop out of a chance opportunity which the innovators recognized as a way of meeting a need. For example, though the travelling day hospital was initiated to meet the needs of patients in rural areas, the reason it began was that a set of consulting rooms in a small town became available and the



consultant wondered what could be done with them. Though for the geriatric orthopaedic unit the underlying problem is the number of orthopaedic beds blocked by elderly patients, the first unit was established because of friendship between the geriatrician and orthopaedic surgeon.

Although not all have been discussed, it is clear that many innovations develop as a result of a perceived need, sometimes directly client-based, sometimes of a more organizational nature. Sometimes the technique is spotted as a way to solve a problem, for example those which were initially developed overseas; sometimes the innovation is more gradual or only formalizes what was already happening. Many of the innovations are dependent on some previous approach or development. Despite being based on a need as perceived by the primary innovator, they have not all diffused successfully. Who were the innovators and how much influence did they have on the rate of diffusion?

### **The innovators and disseminators**

In some of the 22 innovations it is clear that there was one central person who had the idea, developed it, and was central in promoting it. In other cases the origins are more diffuse or the person who was the source of the idea has had little to do with its dissemination. Table 2 shows the profession of the primary innovator or central promoter as far as can be surmised from the case studies. In the majority of the innovations the person with the original idea, or who first took up the idea in the UK, was a doctor. Perhaps this is not surprising given that all the innovations are related to patient care. But a different sample of innovations might have produced different innovators. The innovations where the primary innovators have been from other professions include reality orientation therapy where two clinical psychologists (acting independently) were the active disseminators of the idea. Good Practices in Mental Health where the primary innovator was a senior administrator in one of the pressure group charities; incontinence nurse advisors where a physiotherapist was central; and support teams for terminally ill where nurses were active. In the waking times study, and for regional secure units, central committees in fact played the part of the primary innovators.

**Table 2. The primary innovators.**


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<i>Innovation</i>	<i>Professions of initial UK innovators or promoters</i>
Day hospitals (for elderly)	Unclear if central figure existed Several geriatricians active in early days
Geriatric-Orthopaedic unit	Orthopaedic surgeon and geriatrician
Five-day rehabilitation ward	Geriatrician
Reality orientation therapy	2 clinical psychologists (independently) and psychiatrist (less active)
Regional secure units	Central committees and DHSS played role
Mobile crisis intervention teams	Psychiatrists
Travelling day hospitals	Psychiatrist
Good practices in mental health scheme	Administrator in voluntary sector
Portage scheme	Consultant in mental handicap
Incontinence nurses	Physiotherapist
The inpatient day (waking times)	Central committee, thrust from nurses
Support teams for the terminally ill	Terminal care: doctor. Support teams: nurses, doctor and charity
Computers in general practice	Some GP enthusiasts, no clear promoter. Industry. Now central government initiative
Diabetic clinics in general practice	GPs involved but no real promoters
Nurses as first contact in general practice	GPs involved but no real promoters
Asian rickets	Physician. Minister played role for national campaign
Continuous ambulatory peritoneal dialysis	Industry
Mobile coronary care	Cardiologists
Day surgery	Surgeons, but promoting activity fairly limited
Neural tube defect screening	Various medical specialties, no central individual
Neonatal intensive care	Paediatrician
Electronic fetal monitoring	Obstetrician and industry

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If doctors seem to have been in the majority as the primary innovators have they been amongst the senior members of the profession? In several cases the answer seems to have been 'no'. Some of them are now very influential but at the time they began their innovations they were often fairly junior, in some cases not having reached a consultant position. Some of them admit that they have often been viewed by their colleagues as 'maverick'. The central person promoting the Portage scheme commented that this innovation had only been accepted because he had put it forward at a time when he was becoming a more respected member of the profession. Previously many of his suggestions had been rejected because his views considered to be too 'way out'.

Where ideas have been initiated and disseminated by particular individuals, the impression these people give is of dedication and great enthusiasm for the particular innovation. How well the idea has been received seems to have depended partly on their status locally or in their professional group and on the amount of time they were able to divert from their regular work to promoting the idea. However, even this may not be sufficient to get an innovation accepted. There are examples such as crisis intervention teams, travelling day hospitals, and geriatric-orthopaedic units where the innovators put some effort into disseminating their ideas and yet the diffusion of the innovation is limited. A respected and enthusiastic primary innovator may help, then, but other factors may be more important in influencing acceptance of an innovation.

### **Dissemination**

There are many channels for dissemination of information concerning an innovation: the idea may be discussed at professional meetings, or informally with colleagues; it may be presented in journal articles or newspapers; if it involves the use of technology it may be disseminated by sales representatives of the industry and if the primary innovators can influence policy bodies they may make some statement or reference to it. The focus of this study has not been primarily about how ideas have been disseminated; nevertheless, the 22 innovations illustrate some interesting aspects of the process. Table 3 gives examples of a number of methods of disseminating an idea, including examples of innovations where

they seem to have been of particular importance. Many primary promoters will have used not just one but many of these methods, so the table merely provides some illustrations.

**Table 3. Getting the idea known.**

<i>Some methods of dissemination</i>	<i>Examples where used</i>
Articles in journals, presentations at professional meetings.	Most, probably all, innovations.
Personal professional networks	Most, probably all, innovations
Voluntary sector networks and conferences	Reality orientation therapy, crisis intervention teams
Government statements, committee reports and statements in other reports at national level.	Regional secure units Incontinence nurse advisors Coronary ambulances (Royal College and Society) Computers in general practice (Royal College and BMA)
Industrial salesmen	Continuous ambulatory peritoneal dialysis Electronic fetal monitoring
Taking teams on visits	Travelling day hospitals Crisis intervention teams
Designating innovation site as demonstration centre	Geriatric-orthopaedic unit
Workers leaving initial site and carrying idea with them	Portage scheme
Local dissemination to neighbours	Good practices in Mental Health

In chapter 2 it was noted that other studies have shown that innovations requiring equipment diffuse more rapidly than procedures and this must, in part at least, be due to the activity of industry in making their product known. In the innovations here, electronic fetal monitoring spread very fast and industry must have played a considerable part. The same is true of continuous ambulatory peritoneal dialysis, although in this case the number of centres who needed to be informed of the idea was much more

limited, and the information about the innovation also diffused speedily on their grapevine.

With some innovations the primary innovators have made great efforts to get their idea disseminated by taking their teams on visits to other centres. This was particularly evident with crisis intervention teams and travelling day hospitals. Sometimes, though, making the idea widely known may not have the desired effect. For example, the geriatric-orthopedic unit at Hastings is part of a DHSS Rehabilitation Centre and is visited by many people at open days throughout the year. However, as a consequence, the Centre is better financed than most units could expect to be. Visitors may be put off the idea of a geriatric orthopaedic ward, which is only one aspect of the Centre and which in its basic form does not require finance as much as cooperation, by thinking that they will never get adequate funds.

Some innovators have used other bodies to try to publicize their ideas. For instance MIND (National Association for Mental Health) has held conferences where crisis intervention and reality orientation therapy (amongst other innovations) have been discussed. Pressure groups and associations of patients or relatives of those with particular conditions may, besides their lobbying activities, also provide a channel for dissemination. Reports of government and other prestigious bodies, such as the Royal Colleges of the various medical specialties, should be added as a method of disseminating an idea widely. It seems to be rare that anything is said about an innovation in its very early days in such reports. However, once diffusion starts, the innovation may cause controversy or just interest and often will be mentioned.

Once diffusion of an innovation has begun then there are more sources who are able to disseminate the idea. Some of the early adopters may join with the primary innovator in disseminating the ideas or they may become a focal point for more local geographical spread. Local spread is illustrated in several innovations here including Good Practices in Mental Health and crisis intervention teams, where districts close to the originators have been the ones to adopt the innovation. Geographic spread is by no means the main process of diffusion in this study, however, and perhaps that should not be expected in health care where there are professional networks which are tightly knit and yet geographically dispersed.

It is known from other innovation studies that the channels by which individuals hear about a new idea are not necessarily the same ones which finally persuade them to adopt the innovation. Rogers (10) has pointed out that interpersonal channels are more important than mass media channels for the uptake of innovations. An important point made by several writers, including Hagerstrand (who carried out some of the most detailed work on geographic diffusion (11)), is that individuals cannot be expected to accept an innovation after initial contact with it. They will need repeated exposure to the idea. Thus reading about an idea in a journal followed by a conversation about it at a professional meeting, and seeing it adopted in a nearby hospital, may together have much more impact on the potential adopters than any one individual channel of information. Not surprisingly then enthusiastic primary innovators will try to use a variety of channels to disseminate their ideas.

In summary then, an innovator must discover or invent a therapy or approach to a problem, then have the status to get the experiment underway. He or she may then leave it to others to disseminate the idea or may be very actively involved personally. When the innovator is reasonably well respected and has the drive and enthusiasm to promote the idea, this seems to give the innovation a better chance of being accepted. However this leaves many questions unanswered about the dissemination process, especially in health care where organizations rather than individual adopters are concerned. For example, what are the best channels of communication? How do ideas reach the policy bodies and how do they decide which ideas warrant some statement at what point in time? With the particular professional networks available in medicine, is the dissemination of health care innovations any different from those in other public services such as social work or education?

### **Acceptance or rejection at local level**

Product champions, as discussed in chapter 2, are identified in the industrial innovation literature to describe the key role of individuals who champion an idea through research and development to final production. The term seems to fit well with what is known

about the NHS and also receives some support from work on innovation in collaborative projects between the NHS and local government (12) where for 8 out of 12 innovations a single individual was identified as having a key role in development. This section considers whether the 22 innovations in this study have had local product champions, if so, why they took up an idea, who they have been and what influence their status has had on the diffusion of the innovation.

In the simplest situation where the individual is the adopter no product champion is required. The single handed GP has no one to convince: when he hears about a new idea he can implement it when he likes (barring legal or organizational constraints). In a group practice there are already complications: a GP keen to take up a new idea may have to persuade his partners and staff. If he wants to run a diabetic clinic and that does not interfere with his partners' work, this may be relatively easy. If he wants to install a computer for which his partners have to pay, and which they also must use if the system is to be viable, he may run into more difficulties. Even in the simplest situations where individuals are the potential adopters there may still be a need for a product champion, for example if the aim is to get all local GPs to join in a scheme.

The next simplest situation is in a consultant unit when a patient care innovation impinges only that unit and therefore the consultant's policy may determine practice. He may of course, encounter other blocks such as finance, however. The most complex situations are those where the local product champion has to influence many people to change their work and attitudes; for example, in a public health programme, such as the treatment of Asian rickets, a whole range of health workers will need to be involved, or, in the case of changing patient waking times this may require many workers in a hospital to alter their patterns of activity. The more people there are involved the more difficult the local product champion's job will be. Any change may be a threat to one group or another. The greater the number of different groups that are involved, the greater the chance that some will be temperamentally opposed to change or will see a disadvantage in the innovation for their personal roles and status.

### Is it necessary to have product champions?

There is considerable evidence from the innovations, particularly the detailed case studies, that, even if not the only factor, the presence or absence of a product champion is important in determining whether an innovation will be taken up. Table 4 summarizes the information on product champions and their influence on events in three of the detailed case studies. For example, with the regional secure units, the regions who took up the idea and began planning early were those with enthusiastic psychiatrists promoting the idea. (See Part II, Case 1) In Region C this person was a forensic psychiatrist already in post; In Region A it was a consultant with an interest in forensic work. Looking at all 14 regions in England, the presence or absence of a forensic psychiatrist already in the region has greatly influenced the speed of secure unit development.

*Table 4. Local product champions in the detailed case studies.*

<b>Secure Units</b>	<i>Product champion</i>	<i>Influence on events</i>
Region A	Consultant with interest in forensic work.	Influential in getting planning underway. Less important later.
Region B	No champion at Regional level. Several active at local level later.	Lack of champion apparent.
Region C	Active forensic psychiatrist.	Influential in getting planning underway. Role later equivocal.
Region D	No champion. Later, planner partially filled role.	Lack apparent in delays in planning.
<b>Asian Rickets</b>		
Glasgow	Very active clinician.	Central reason for campaign.
District A	No champion.	Very low key campaign.



<b>Asian Rickets</b>	<i>Product champion</i>	<i>Influence on events</i>
District B	No champion.	No campaign.
District C	School doctor then Asian GP.	School doctor initiated early campaign. Asian GP very influential in second
District D	Community dietitian.	Active but status not adequate to get campaign accepted.
<b>Waking Times</b>		
District W	Various interested people no obvious champion.	Change went through as result of managerial action of director of nursing services.
District X	CHC and commissioning team partially filled role.	Enough people interested to bring about change.
District Y	No champions except one senior nursing officer.	Little change.
District Z—acute hospital wards	Divisional Nursing Officer	Active but not adequate status against consultant resistance.

In the Asian rickets example (See Part II, Case 3) two districts had no obvious product champion, although several people expressed some interest. In these two districts the response to the Stop Rickets campaign was minimal or it was rejected. The other two districts did have product champions; however, these districts also illustrate the point that simply to have a product champion is not enough, the status of that person must be adequate for the issue in hand. In District C, the Asian GP was an effective product champion and the District had a major campaign, whereas in District D the community dietitian appeared not to have adequate influence.

The waking times study (Part II, Case 2) used as a starting point CHCs. Though they had often been active in keeping the waking times issue on the agenda, few appeared to champion the issue very

enthusiastically. Their position as outsiders to NHS management made it difficult for them to be effective champions. They were only successful in bringing about change when the issue became of concern to the managers at district or hospital level. In the four districts studied in detail, sometimes it appeared that the nursing managers had taken the initiative in championing change. An interesting example was in District Z where the divisional nursing officer had been encouraging change but then had to back down, again an example of the status and drive of the product champion not being sufficient for the problem in hand.

In the day surgery study, clearly defined champions were not so obvious. In the four districts studied, each consultant was carrying out day work as determined by his own beliefs and the facilities available. None of them seem to have felt it appropriate to 'sell' the idea strongly to colleagues, though consultants may have been influenced by each other's practices. Nor did individuals appear within the administration who had taken up day surgery as a cause to promote, though again many of them would have liked to see it increase. Perhaps the lack of apparent product champions in this case study is because the consultants are acting as individual adoptants of the change.

In the other 18 innovations it appears that some of them suffered because there was no obvious professional group likely to be committed local product champions. For example, with travelling psychiatric day hospitals and crisis intervention teams, it is not obvious who should be the product champions for innovations taking place in the community. It could be argued that it should be consultant psychiatrists, but many of them may not be interested in these innovations because they do not see the community as their sphere of activity.

Though doctors have often played the part of the product champion, this has not always been the case. For example, with reality orientation therapy it has usually been occupational therapists, clinical psychologists, and ward sisters who have got the innovation going. However, in the setting of the innovations (psychogeriatric wards and old people's homes) they too have considerable status and can direct what is to happen. Some innovations have diffused successfully, it seems, because although the product champions have had relatively little power in comparison to the consultant groups, those innovations have not been

within the consultants' sphere of influence. For example, CHCs and MIND local associations have been the main local product champions for Good Practices in Mental Health schemes. It has been possible for these schemes to be successful because they can go ahead without the psychiatrist's involvement, even though this would be preferable.

### **But why do product champions take up issues?**

If a person or group is to promote an idea locally they must make some judgement about its costs and benefits to them, even if this reckoning is only carried out intuitively. The benefits may be to patients or clients: the champions recognize a need, hear about a solution, and so decide to promote it. Some innovations may not have had enough possible benefit for champions to feel it worth while to take on the role. Altruism may be mixed with a judgement that promoting this innovation will increase their status locally or perhaps in their professional peer group. Their decision to take up an idea will be a balance between its perceived benefits and the costs to them, in time, energy, perhaps even money and the problems involvement may cause.

Though prestige is not the only reason for acting as a product champion it is clearly an influence. In chapter 2, the characteristics of different adopter categories were described. It was noted that early adopters tend to be opinion leaders in the professional group. At an early stage in the diffusion of an innovation some individuals will hear about it and feel they should promote it in their own setting to maintain their status in the hierarchy. Thus, even though they cannot act as individual adoptants, since the change will involve more than just their own acceptances, powerful consultants, may well get their ideas accepted.

However, there is another side to this issue of peer group status. There is often much kudos gained by being amongst the very first adopting a new idea: papers can be written, talks given, and so on. Copying an idea may not bring so much reward and diffusion may be blocked or slowed because there is little prestige to be gained from taking up someone else's idea. For example, this factor seems to have had importance in the spread of innovation in care of the elderly. Geriatrics is a specialty which has developed since the

Second World War and amongst the leaders of the specialty it clearly attracted a number of innovators. These people may have been much more interested in setting up a service which used their own new ideas than in simply copying what someone else suggested. Now that the specialty is more established, it seems that the basic elements of a service are becoming common. Complete diffusion of an innovation, such as the geriatric day hospital, then becomes a matter of it not being acceptable to be left out.

Another point to be made about product champions is that the professional group or body in this role may change over the course of the diffusion process. It has been noted that in many of the innovations the medical profession were either the individual adoptants or were the product champions. The profession or position of the product champions will, of course, vary from place to place, but also may change over time. Initially, managers may be happy to leave an issue to the individual consultant, relatively few of them actively promoting the idea. As the innovation becomes accepted nationally, they may begin to feel that it is important that their hospital or district takes it up. An example of this may be seen in the day surgery case studies. For a period of time it was left to consultants to define their own practices with regard to lengths of stay and specifically day surgery. Now that there are severe economic pressures, and with many examples of the success of day surgery now in the literature, management, as illustrated by at least one district in this case study, may be prepared to exert much more pressure to change practice. Thus though early on the role of the product champion may be taken mainly by the professional group concerned, managers may be more involved once the idea has passed through the opinion leadership stage.

The conclusions which can be drawn from the innovations in this study can only be tentative but it seems that if there are no local people who have enthusiasm for an idea, keep it on the agenda and actively promote its cause, then diffusion of the innovation will be hindered. If local product champions exist they must have adequate status for the type of innovation they are trying to promote otherwise they may be blocked. This status will vary according to the innovation under discussion.

## **Gatekeepers and facilitators**

Once an innovation is in the process of negotiation many people may be for or against it.

However, there are some groups of people whose influence is more general: it may apply to more than one innovation and even in areas in which they are not directly affected. The term gatekeeper has been defined (10) as the communication behaviour of an individual(s) who withhold or reshape information that they control as it flows into the system. Here it is used more broadly as a description of any individual or group who controls what items go on the agenda, or has the power to allow or block an innovation taking place. Consultants and managers, for example, may act as gatekeepers. The most overt example of gatekeeping in this study was the role of the consultants in the waking times case study. Although consultants were not directly affected by a change in waking times, they had the power to block the change. The nursing manager in District Z was blocked from changing the organization of the inpatient day by the chairman of the medical executive committee who objected to his junior doctors not being allowed on the wards at certain times. His power not only related to the specific objection but he was able to block the whole experiment and its extension to the rest of the hospital.

A different role and one often played by managers is that of facilitator. In this case the manager may help product champions to present their ideas in an appropriate form, shepherd them through committees and so on. Regional secure units provide an example of the importance of this role. One psychiatrist commented that, although he did much of the groundwork, if he had not been supported by the regional medical officer he would never have got his interim secure unit off the ground. Similarly in the Glasgow Asian rickets story, the product champion had little success until the Administrator at the Board took up the issue and facilitated its passage through the appropriate committees.

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## CHAPTER

# 4

## ***The influence of the environment***

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New ideas must spring from somewhere. They develop out of needs, opportunities, and prior developments, so it is not too surprising that the same invention may appear spontaneously in several places at once. Similarly, as illustrated in figure 3, the diffusion process may be strongly influenced by societal attitudes and trends, by the prevailing philosophies about health care, by developments in the medical specialities and in other professions and by the local environment. This chapter brings together some of the ways in which environmental factors have influenced the acceptance of the innovations in this study.

### **Societal views: the climate of opinion**

Societal views not only about health, illness and the NHS but also about much broader social and economic issues can affect the acceptability of innovations. For example, the increasing number of women at work lessens the chances that there will be someone at home to care for an ageing relative, or a spouse, or child, who has undergone day surgery. Thus societal changes may influence which innovations are feasible, though initially the relationship (as between women's liberation and day surgery) may not be obvious.

There are illustrations in the case studies of very direct influences

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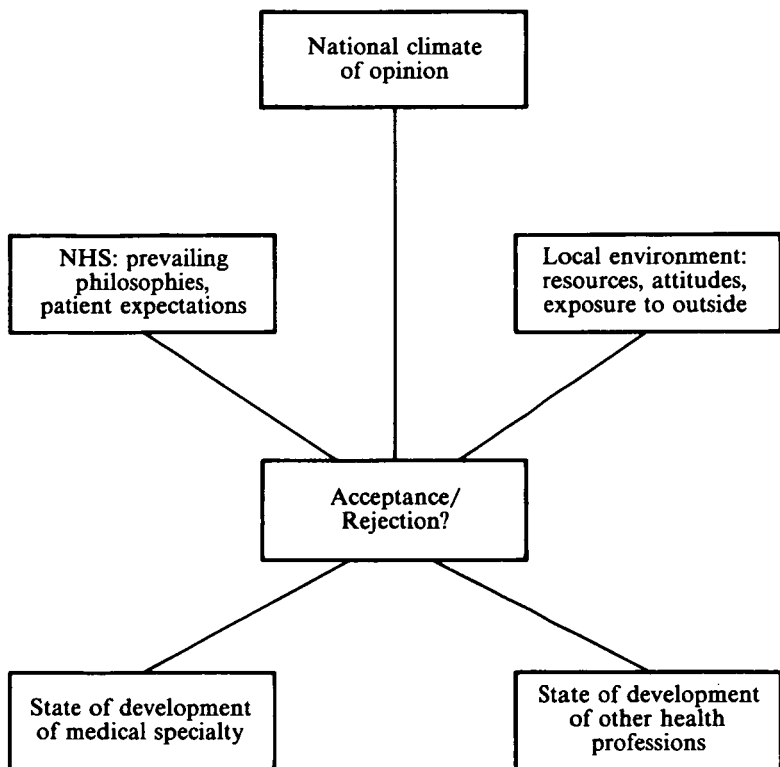


Fig. 3. Some environmental impacts on diffusion.

of the climate of opinion on innovation, for example, in the Asian rickets study. Although the problem was identified in 1962, it took until 1981 for it to be tackled at national level. Amongst other reasons, it seems that there was fear both at central government and at local level about the political implications in singling out an ethnic minority. By the mid 1970s, it had become acceptable to talk about the special health needs of ethnic minorities so paving the way to the eventual Stop Rickets campaign.

Of course, societal views are not static and may be changed considerably by enthusiasts for particular causes, by medical developments, and by the way the media handles issues. For example, care of the terminally ill is now an acceptable subject for discussion. Its acceptance was fostered by the product champions of

the hospice movement but the acceptance of the problem has now fed back to encourage the development of support teams for the terminally ill. Similarly incontinence has changed from a 'taboo' subject to something that is acknowledged as a problem for which something can and should be done. As a result further advances in its management might be expected.

Medical developments have also altered societal attitudes, particularly the changes which have brought about high technology care. It is difficult to assess the public view of medical technology but willingness to support fund-raising appeals suggest that even now there is a firm belief in the wonders of medical science. In perinatal care there have been questions raised, however. In the 1950s and 1960s, as developments improved the safety of childbirth for both mother and baby, there was much acceptance that birth in hospital was appropriate and that the newest technologies were necessary. Then there began a reaction against the technologization of childbirth with induction being one of the main areas of attack. Currently, there are a number of pressure groups ranging from the Radical Midwives Group to the Maternity Alliance who are expressing concerns about the overuse or misuse of interventions in childbirth, and the diffusion of electronic fetal monitoring may be one innovation in this study whose use will be affected by these pressures.

An interesting example of the effects of technology on the acceptance of innovation, occurs with neural tube defect screening. Saving babies with neural tube defects was regarded as a major technical breakthrough in the 1960s. Then the costs, in terms of suffering to these children and their families, began to be recognized and a more cautious approach fostered. This provided the background for the screening programmes of the 1970s. It began to be seen that a 'technological fix' was not the answer, but that prevention would be a much preferable alternative. The preventive measure itself, of course, requires the use of highly sophisticated techniques.

Another interesting area is what the public expects of the NHS and the way this influences an innovation. For example, many of the CHCs interviewed concerning patient waking times commented that they received few complaints about early waking, not because people liked being woken so early, but because this was what they expected to happen to them when they were in hospital. Public



expectations in this case were limiting the pressures for change. In other areas what the public thinks has turned out to be rather different from those who argued for or against an innovation. For example, the use of nurses as first contact in primary care was felt to be satisfactory when the recipients were questioned directly, even though it had been argued that patients expect to see a doctor. Various views are put forward about what patients feel about day surgery. On the one hand it is argued that many would prefer to be at home than in hospital. On the other hand it is said that after an operation patients expect the NHS to look after them. Two or three days in hospital after an operation gives the appropriate seal of approval to the seriousness of the operation. When patients were questioned about day surgery some, but by no means all, would have liked to stay in hospital for 24 hours after hernia operations. Individuals, of course, vary depending on home circumstances, their attitudes towards health and illness, and the particular procedures they are undergoing. Now outmoded practices in keeping patients in hospital for long periods after operations have, however, moulded societal views about what to expect after surgery. Thus, diffusion of innovations can be influenced not only by public attitudes and societal structures, but also by what decision-makers in the adoption process believe to be the public's views. But just because there is an early public reaction against an innovation does not mean that this climate of opinion will not change or cannot be changed by deliberate action.

## **The NHS**

Within the Health Service there are also overall constraints, philosophies, and fashions which influence what changes are seen as possible or appropriate. For example, over the years covered by the diffusion of innovations in this study, there have been changes in NHS structure, changes in policy concerning more or less centralization of decision-making, changes in emphasis about accountability and efficiency and, at least as perceived by health authorities and NHS employees, a tightening up on the resources available in comparison with the demands to be met. The centralization and accountability dichotomies are particularly likely to influence the local environment in terms of how much advice is

coming from the centre and to what extent this advice has to be accepted.

There have also been broad health policy developments: for example, the emphasis on the so-called Cinderella services for the elderly, mentally ill, and the handicapped of the last decade, and the drive towards care in the community. Then there are the enthusiasms for prevention and health education. So what examples are there of the ways in which these developments have affected the diffusion of innovation?

Secure unit development has been influenced at different times and in different ways by these NHS environmental factors. The case studies illustrate the way that decision-making was slowed by the need to consult with so many different groups. This factor cannot be blamed entirely on the complexity of decision-making procedures following reorganization in 1974, since there was, in any case, a general philosophy that more and different groups had a right to be consulted than had been the case in the past. Secure units also suffered by being perceived as a regional resource, not long before the prevailing philosophy in the NHS, and particularly in the mental health services, changed to emphasizing local services meeting local needs, (along with the 'small is beautiful' concept). An illustration of this problem occurred in Region C where a regional unit was opposed, but once Region accepted that hospitals could cope with their local catchment population and not act as a regional resource, there was a much more positive response. The change from institutional to community care gave secure units an unexpected boost. Many hospitals with their open door policies had initially opposed secure unit development as a retrograde step, but, by the late 1970s/early 1980s, there was much more receptivity to having a secure unit. Amongst other reasons, this was because the threat of closure was hanging over a hospital and a secure unit was seen as a way of ensuring its future.

Day surgery is an innovation which may currently be being stimulated by larger events in the NHS, in particular by the current financial constraints and by the emphasis on measures of performance. Finance will be taken up again in chapter 5, but it seems that cuts or constraints can encourage some developments as much as hindering others. A number of managers interviewed mentioned that tightening resources had provided opportunities to exert pressure for changes which they had wished to bring about for some

time. Performance indicators (1) are also influencing day surgery. Previously, surgeons may have been left to organize their work according to their individual beliefs, but the inclusion of day case work in the performance indicators is beginning to highlight some of the major disparities amongst districts. Since districts are having to account for these disparities to regions, and regions to Ministers, a certain amount of pressure is being generated.

A number of other innovations have been aided by fitting in with current philosophies in the Health Service. For example, travelling day hospitals and crisis intervention terms fit in with the aim of taking the service to the patient, rather than the patient to the service. The Stop Rickets campaign was based on health education and preventive measures both of which are currently popular approaches to health care. However, since not all of these innovations have diffused fast, compatibility with currently popular NHS philosophies is not sufficient, perhaps because not all those involved necessarily go along with these philosophies, or perhaps because other factors are of overriding importance.

### **Developments in the medical specialties**

The innovations in this study, as well as the conversations which led to the selection of the 22 described here, suggest that the traditionally well endowed specialties are more conservative. They do take up new procedures and technologies quickly, particularly if they enhance status, are 'add-on' developments and do not conflict with beliefs about the role of the specialty. Changing organizational arrangements, however, may be resisted strongly. For example, day surgery requires a great deal of change and commitment and it has been difficult to persuade surgeons to organize this form of care. Similarly with geriatric-orthopaedic units, one of the major blocks has been the unwillingness of orthopaedic surgeons to work with geriatricians and possibly even to share beds with them. If their attitudes are gradually changing, this is probably because of their concern about beds blocked by the elderly.

Amongst the more established specialties, the idea of providing a service to the population as a whole rather than to the individual presenting patient is new and threatening. (Though of course there are probably many individuals who do take this broader view). It

may be acceptable to geriatricians, or those in mental health concerned to provide a community psychiatric service, to think about whole populations but the older specialties are rooted in the individual doctor/patient concept. Thus the driving force for some organizational changes, for example the concern about unmet needs in the community, may not be felt strongly.

Specialties which are in state of development and have less tradition (and probably less resources) attached to them tend to be more innovative. The lack of resources may lead them to finding new ways to deploy what is available, especially in the face of desperate needs. Some interesting points come out of the analysis of innovations in geriatrics. What seems to have happened is that in the early days of the specialty innovative people were attracted into it and there was a great deal of innovation to match needs to the local resources available. However, many of these innovations seem to have diffused fairly slowly, perhaps because they did not fit the requirements in other localities. It is only now that geriatrics is becoming established that there is a more unified view of the various facets of care which a geriatric service should provide. Psychogeriatrics is in its early days as a specialty, it is certainly attracting innovative individuals and it will be interesting to see how much they prefer to develop their own brand of service rather than copying ideas from elsewhere.

Psychiatry is not new itself but concern with community care has developed some momentum recently. There seem to be many interesting experiments going on, and while all these ideas seem to have had some degree of acceptance and moderate diffusion, few have diffused widely to become the norm. Community psychiatry seems to be in a state of development when the ideas have sprung up, but many workers are now waiting to see which ones seem effective before taking them on board.

General practice is also in a state of development dating back from the GPs' charter in 1966 (2). The background requirements for a great deal of change was provided then, including the employment of ancillary staff such as nurses, group practice, health centres, and subsequently attachment of Health Authority staff. These were innovations in themselves, but they also provided the framework which has made many other innovations possible, including two in this study: computers in general practice, which is most feasible in a group practice, and the use of nurses to assess patients at home or in

the surgery. Partially out of the structural changes has grown the idea of looking after the practice population as a whole, and worrying about their problems (such as high blood pressure or rubella immunization) even if they do not present at the surgery. These trends fit in well too with the emphasis on prevention. Given that diabetic clinics fit in well with all these aspirations as well as the traditional view of provision of continuing care for a patient, it is perhaps surprising that more doctors are not monitoring their diabetic patients or running diabetic clinics. It is apparent, though, that not all GPs have yet taken on these ideas about health promotion and the population view of health care propounded by the leaders.

These examples illustrate how the state of development of the specialty may influence the diffusion of an innovation, but this is not a one-way system. Innovations are very important in the development of specialties. In this study neonatologists and forensic psychiatrists illustrate this direction of change. As neonatal special and intensive care became more complex, some paediatricians began to make it their special interest and appointments of neonatal paediatricians began to be made. Neonatology has not yet been accepted as a specialty in its own right but it was strongly endorsed by the House of Commons Social Services Committee (3). The development of forensic psychiatry has been stimulated by the development of secure units. As discussed earlier though, the existence of a forensic psychiatrist in a region in the early days also had the affect of pushing that innovation along.

### **Developments in other professions**

Innovations may influence or be influenced by developments in professions other than medicine. Some of the many influences on professional roles have been discussed elsewhere (4), but advances in medical procedures is one of them. In the present group of innovations this is illustrated by the relationship between mobile coronary care and professional development of ambulancemen. In most of the coronary ambulance experiments, ambulancemen were given training in defibrillation and sometimes other procedures such as intubation. These ambulancemen were usually given higher rates of pay. Health Authorities argued that the payment was for

manning the special ambulances, but the ambulancemen argued that it was a training award (which, incidentally, led to problems when the ambulances were phased out). These differences were more than local problems since the ambulancemen's trade unions became concerned, arguing that they did not wish to see an 'elite' group of ambulancemen develop. Despite this earlier resistance by the unions, there is considerable support amongst ambulancemen for additional emergency training, not merely for coronary care, but for a range of emergencies, such as accidents. The Association of Emergency Medical Technicians has been set up which encourages these ideas and which organizes training for ambulancemen on a local basis.

The innovation has then, stimulated changes in a profession, although it has not diffused widely itself. The reverse: innovation being influenced by professional developments; is well illustrated by the involvement of clinical psychologists in psychogeriatric care. The Trethowan Report (5) in 1975 encouraged the expansion of clinical psychologists' activities into working with groups other than those in psychiatric units. As a result, the number of clinical psychologists involved in care of the elderly has risen from 3-4 in 1975 to 100 or more in 1982. Clinical psychologists on psychogeriatric wards are probably keen to promote reality orientation therapy. Because its primary innovators are clinical psychologists they are likely to hear about it through their own professional network, and because they are new to these wards they are keen to show that they do have some specific skills to offer and this is a therapy they can promote. Reality orientation therapy may also be instituted by occupational therapists, psychogeriatricians, and nurses, but a major stimulus to its diffusion has come from clinical psychologists in their new roles.

Some innovations are themselves professional developments, for example incontinence nurse advisors. This innovation has caused a great deal of controversy. The underlying debate concerns whether or not there should be nurse specialists, and if so, what should they do and how should they relate to ward and district nurses. Stoma therapists have already been accepted but for a problem as common as incontinence, the question is raised about whether all nurses should not be more alert to the problem and its management, rather than developing specialists. Even if it were accepted that some sort of specialist advisors were necessary to support district nurses and ward

sisters, many of the incontinence nurses who exist now do not fulfil this role, but rather are acting as assistants in urodynamic clinics.

Thus there is growth of this specialist group on the ground but considerable controversy about it within the profession. The Association of Continence Advisors has been formed and the heated discussion this has provoked has certainly drawn more attention to the problem. It has also forced the DHSS and Royal College of Nursing to take action, for example, in organizing regional work-shops on incontinence and in advocating the way that they believe that incontinence advisors should develop at district level.

Support teams for the terminally ill also raise the question of the role of the specialist nurse advisor. Few of the existing teams give practical nursing care but see their role in giving advice to primary care workers about symptom control and other aspects of the patient's care, as well as counselling the patient and family. Where these teams exist, the GPs and district nurses seem to find them a useful resource. Others comment that care of the dying is central to the role of the GP and district nurse and they do not wish to be usurped by special teams.

Appropriate role development of nurses is also illustrated in primary care, particularly the question of nurses making first home visits or assessing patients in the surgery. To what extent the nursing and medical professions will allow this to happen is questionable. There is much resistance from higher policy bodies yet it is taking place surprisingly frequently according to several surveys (6, 7).

From these various examples it can be seen that an innovation may promote the development of a profession or a specialty, or its diffusion may be influenced either positively or negatively, by changes which are happening in a profession. Central to much of the debate is the conflict between the need for more specialized and technical skills, which innovations often encourage, while at the same time managing the patient's care as a whole and not subjecting him or her to a barrage of different people representing many professional or specialist groups.

### **The local environment**

Local facilities and resources influence what is possible, and this has been described quite fully in some of the case studies, particularly

day surgery and patient waking times. In the day surgery case, the balance between operating theatre time, surgeon's time, ward beds and recovery beds, as well as their physical proximity to each other, influence whether day surgery is taken up relatively easily or seems to have impossible obstacles. If patient waking times are to be altered, the physical layout affects whether one patient will disturb another and whether ward procedures necessary for only some patients mean that all patients are woken. It is easy to see the problems of nurse managers trying to change waking times in long Nightingale wards, for example.

Local facilities, though important, are less intriguing than the influence that local mores and attitudes can have on innovation. The waking times case study illustrates the effects of the local attitude to change. In District Y, many of the nurses had been in post for long periods of time and had worked out routines which suited them. Management saw these nurses as working hard under very difficult conditions and was loathe to take steps which might 'rock the boat'. In District Z there was a much more positive attitude to changing the inpatient day, though the experiments were not entirely successful and there were many resistances. But what was it that engendered this more positive approach? It was said that there were many new, younger staff, particularly staff nurses and ward sisters who had new ideas. The main teaching hospital is also very open to health professionals from outside, of particular relevance to the inpatient day are its links with the University Department of Nursing. Thus, a number of different experiments in nursing care were going on and the staff were used to the idea of experiment and change.

It may be easy to see what the differences are between one district and another which influence attitudes towards change, but it is much more difficult to see how to get institutions out of a rut. External pressures may be influential, major staff changes may help, as long as the new staff do not themselves become depressed at the inability to make changes, or as in Towell's studies (8) external workers may provide a stimulus for change. An interesting example of the effects of staff changes occurred in Region B in the secure unit case study. About 1979 there were a set of new appointments of managers at hospital B1 and at District level. They were able to shake up the hospital, with secure unit developments as part of the package of changes.



This also illustrates the point that an innovation may be quite so shocking if it comes as part of a package, which was also seen in the waking times study. District X is commissioning a new hospital and so all the operational procedures are under discussion. Old routines cannot be transferred automatically to the new hospital because they will not fit the physical layout, so there is opportunity for all sorts of change including altering waking times. Major changes may be very threatening to all concerned, but they do seem to have the advantage that an individual innovation may be less noticeable and less resisted.

Examples have been given that suggest that when new, younger staff come into a hospital or district they come with new ideas and so bring about change. There is one example though where the very opposite seems to have helped an innovation take place, and that concerns the first secure unit in Region A. Despite local, union, and CHC opposition this Region was one of the first to have a permanent secure unit open. One factor seems to have been the stability of staff during the whole planning period. Though none of the NHS officers involved showed great enthusiasm for the secure unit, all the way along the line there seems to have been an acceptance of the idea and a willingness to keep the machinery moving. The officers at all levels had been in post some time and were known and trusted by each other. Thus new brooms may be helpful in getting over resistances, but particularly for innovations where many levels of the hierarchy are involved and planning is complicated, stability in staff may be preferable. Of course, these are generalities and what actually happens in practice will no doubt depend on the individuals concerned, their management styles and local history and attitudes.

Another aspect to the local environment is the local public which is served, the extent to which they make demands on the local Health Service and what they are willing to accept. What the elderly in social classes IV and V will put up with in one area, say for instance in the organization of the inpatient day, may be quite different from a predominantly social class 1 area, where knowledgeable sons and daughters may be vociferous in their complaints. An interesting example of the effects of the local community was seen in the Asian rickets case study, see Part II, Case 3. The Asian population in District A were seen as posing real problems because of their poverty, language, and cultural differences. The problems

were viewed as overwhelming, there was little drive for new attempts to reach the Asian population and little response to the Stop Rickets campaign. In comparison, the Asian population in District C are well educated and sometimes influential citizens. The Health Authority has had comparatively close links with the population and, as a result, undertook the Stop Rickets campaign enthusiastically, even though it was perhaps the city in least need of it.

Though the case studies provide examples of the influence of the environment on innovation they are not enough to draw conclusions about the characteristics of groups or institutions within the Health Service which are more likely to accept change. For example, the effects of more or less centralization, or management styles or the degree of bureaucracy have not been studied, yet these are known, from other studies, to influence receptivity to change. Perhaps the best known of such studies is by Burns and Stalker (9) who find two quite contrasting management systems: mechanistic and organic ones. The mechanistic system was seen to be appropriate to stable conditions and involves the specialized differentiation of practical tasks where the individual will have clearly defined functions, methods, responsibilities, and powers. The organic system was seen to be appropriate to changing conditions which give rise to fresh problems and unforeseen requirements. This system has a less rigid hierarchy, responsibility can no longer be shed to someone else up or down the line and individual tasks are being continually adjusted and re-defined. Relating this to the Health Service gives some insights but no clear cut answers. For example, doctors tend to work in a much more organic system compared to say the administrators. One hospital may act much more mechanistically than another, and as circumstances and managers change an institution may shift in emphasis. However, an underlying point is that mechanistic organizations are not good at adapting to change. Yet the NHS has many characteristics of that system, while at the same time being buffeted by medical developments and changing demands from the public and government alike. Perhaps it is not too surprising that attempts at change and innovation often create a great deal of frustration.

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CHAPTER

**5**

***Characteristics of  
the innovations***

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This chapter discusses the characteristics of the innovations themselves and considers the extent to which those characteristics both created appeal or, hindered their acceptance.

Several characteristics were by no means obvious in advance but came out of the interviews. Others, it turned out, had more or less influence than might have been hypothesized *a priori*. Thus the characteristics discussed below are the results of open ended questions about factors influencing diffusion and no attempt was made in advance to draw up a set of potentially important influences and ask those interviewed to rank their importance. In other words, efforts were made not to bias the responses of the interviewees.

To judge what effect various characteristics had on diffusion requires some assessment of the speed with which the innovations diffused. This is shown in table 5 which classifies the innovations in three groups: fast, moderate, and slowly diffusing innovations. Some justification for the assignments is shown alongside the innovation so that readers can judge for themselves how fast the innovation diffused and, of course, they may disagree with some of the judgements. Several of the fast diffusing innovations are relatively recent and eventually their diffusion may turn out only to have been moderate.

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**Table 5. Diffusion of innovations.**

<b>Fast diffusion</b>	<i>Evidence for assessment of diffusion rate</i>
Continuous ambulatory peritoneal dialysis	Became practical in 1978, by 1982 the European Dialysis and Transplantation Association reported that all UK renal dialysis centres carry out CAPD. (Note diffusion limited to centres)
Electronic fetal monitoring	First machine used in UK in 1968, by 1973-4 most consultant units had them, confirmed in 1978 survey. (1)
Good practices in mental health	Began 1977, by early 1982 at least 27 studies (2).
Portage—home teaching of mentally handicapped children	First experiment evaluated by 1977, by 1982 Wessex Health Care Evaluation Team estimated at least 50 schemes in operation.
Reality orientation therapy	Reported in the UK in 1975, by 1978 at least 100 people at a conference on reality orientation already carrying it out.
Support teams for the terminally ill	Begun 1977, 32 teams by 1980 (3) and charities have agreed to fund more since then (4).
<b>Moderate rate</b>	
Day surgery	Slow start from descriptions in 1955 (and even earlier), moderate diffusion in 1960s and 1970s (5).
Geriatric day hospitals	First described mid-1950s, slow start but by 1977, 302 in Great Britain and still increasing (6).
Incontinence nurse advisors	Gradually developed from 1974 but recently more interest, difficult to assess actual numbers but about 100 nurses attended the conference of the Association of Continence Advisors in April 1982

<b>Moderate rate</b>	<i>Evidence for assessment of diffusion rate</i>
Neonatal intensive care	In early 1970s spread fairly fast through specialized centres, but nationally provision is still limited (7).
Neural tube defect screening	Described 1972, practicable by 1974, by 1982 60 per cent of health districts offering screening (8)
Nurses as 1st contact in general practice	First described in 1960s, by 1977 12 per cent of GPs said occasional first home visits by nurses, 33 per cent occasional first contact in surgery (9)
Regional secure units	Very slow start but funds provided in 1975, more development since then and DHSS assess that most Regions now planning units
<b>Slow rate</b>	
Asian rickets prevention	Problem first described 1962, little happened anywhere until mid-1970s, now a national campaign
Computers in general practice	Macrosystems available for some time but micros suitable for general practice only since late 1970s, since then the Central Information Service for General Practice estimates that up to 100 practices may have bought computers
Crisis intervention teams	First described in UK in 1970, at a MIND conference in 1981 it was known that at least a dozen established
Diabetic clinics in general practice	First described in 1971, still appears that a very limited number of practices are involved
Five day rehabilitation wards for the elderly	Described in 1971 but no record of diffusion other than experiments in one or two other centres
Geriatric orthopaedic units	Began late 1950s, even now probably only a few units (but ideas may have diffused)

Table 5. *cont.*

<b>Slow rate</b>	<i>Evidence for assessment of diffusion rate</i>
Mobile coronary care	First described in 1966, perhaps 10-15 other cities joined in, several now dropped out again
Travelling day hospitals	First established in 1974, by now perhaps half a dozen in England and Wales (may only be relevant in certain areas).
Waking times in hospitals	Received boost by report in 1976 (10) but since then still a major complaint of patients (11)

### **Benefits: effectiveness in patient care**

It might be expected in the Health Service that benefits to the patient would be of overriding importance in determining whether an innovation diffused or not, so this seems to be a good place to begin. The first problem is to separate out the claims that an innovation benefits patient care from the evidence that this is in fact true.

How much is diffusion of an innovation influenced by evidence of its effectiveness in terms of patient care? There are examples of all the combinations of effectiveness in trials and speed of diffusion: marginal benefits but rapid diffusion; effectiveness shown but slow diffusion; less effective and slow diffusion; and effective with fast diffusion. Two which have fairly marginal benefits to the patient/client but which have nevertheless diffused fairly rapidly are the Portage scheme (12) and reality orientation therapy (13). Both have been subjected to fairly thorough evaluation and some small improvements for patients have been noted. Similarly with electronic fetal monitoring randomized controlled trials showed little benefit for this technique compared with auscultation by a midwife (14-18). Admittedly the trials have problems with small numbers and different ways of measuring outcome, nevertheless even without evidence of benefit, especially for low-risk women, the technique is wide-spread. Clearly the reason for the rapid diffusion of such techniques must lie elsewhere than just in terms of evidence of their effectiveness.

There are several examples where safety and effectiveness has been shown yet the innovation has not spread widely. Day surgery has been shown to be safe, yet data from the Office of Population Censuses and Surveys indicate that although various conditions are now treated by day surgery, hernia repair which is perhaps the one which has had the most careful trials is rarely (3.3 per cent of cases) treated by day case surgery (5). Similarly in general practice, the use of nurses as first contact for new episodes of illness is not commonly accepted, yet there have been trials (19) showing that there is little difference in decisions made by doctors and nurses at initial home visits under defined circumstances. In other words, evaluation may give positive information, but this is not necessarily sufficient to stimulate diffusion.

Clinical trials are difficult enough to carry out, but evaluation of organizational arrangements for care is even more problematic. Evaluation of geriatric day hospitals showed them to be effective, especially in terms of obviating or shortening the need for inpatient stay (6). However, even in this case where positive evaluation matches positive diffusion the evaluations came comparatively late in the day. The current study did not really pick up totally ineffective innovations; to reach even the level of consciousness to have been mentioned by professionals for possible inclusion, at least suggests that the innovation has something which makes it worth discussing. Some, however, did not seem to have diffused because of their marginal effectiveness. For example, the five day rehabilitation ward for the elderly seemed to be effective at the site where the idea originated (20) (perhaps because of a combination of building and staffing possibilities which suited the site). When evaluated elsewhere the idea did not seem to hold particular promise and has never diffused (21).

These findings fit with what is known from other studies about the effects of clinical trials on the diffusion of innovations. It is well known that many new ideas are taken up rapidly, well before clinical trials to establish their effectiveness are complete. For example, coronary artery bypass graft operation had become common before trials in the US (22) and Europe (23) had begun to provide data on the indications for the operation. Medical technology is notorious for diffusing rapidly in advance of clinical trials, and the whole body CT scanner is an example of this phenomenon (24). Other examples are given in a recent review of

the impacts of clinical trials on clinical practice carried out by the US Office of Technology Assessment (25).

This is not to say that clinical trials, if they do take place, have no influence. If they are done early in the diffusion process and are positive they may provide a strong stimulus to some of the more sceptical members of the professional group to take up the idea and may be particularly influential if they convert opinion leaders. Early negative trials may also be influential, particularly if the innovation requires large scale funding or organization, for example, the diffusion in the UK of both gastric freezing and hyperbaric oxygen techniques were stopped by the evidence for their lack of effectiveness (26). However, as illustrated above, with some of the innovations in this study evidence that benefits are only marginal may not inhibit diffusion.

If innovations diffuse very rapidly for whatever reason, then if trials take place they will have to influence established practice. However, even where no benefits of a technology or procedure are shown, this may not always be adequate to change practice. For example, there is little evidence to substantiate benefits to patients of stays in coronary care units (27) yet these units continue to be in widespread use.

So why are innovations taken up if the evidence shows that their benefits to patients are marginal? The answer seems to be varied. It may be that clinicians are convinced that there are benefits to the patient and are only proved wrong subsequently. As Audley has put this (28) in the more general context of decision-making: 'Minds appear not to need making up: it is unmaking them which requires time and evidence'. It may also be that there are many other sorts of benefit to be achieved by accepting an innovation than clinical effectiveness and some of these are discussed in the next section. Finally, if trials do not change practice it may simply be because practising doctors are not convinced by them. Julian has recently summarized a number of reasons why this may be the case (29): that there are doubts about the scientific merit of the trial; that they may be dealing with a problem that is clinically non-existent; that the end-points used may not be relevant; that patients in trials are not treated in the same way as they would be if they were being treated by their own physician in daily practice; that although a small percentage of patients may be shown to benefit from a drug or procedure, trials do not help the clinician pick out in advance the



patients most likely to benefit; and finally that there are problems in equating side effects with benefits, particularly if the treatment is to go on for many years, when the clinical trials have been relatively short. Thus though randomized controlled trials are scientifically the best that is on offer in evaluating new techniques and therapies, they may not always answer the clinicians' questions. As Dudley has summarized the problem: they (trials) are easiest when they are least needed and hardest when they are most required (30). The debate continues then about how best to ensure that reliable and relevant knowledge is obtained and how best to ensure that this is translated into clinical practice. The latter issue of course comes back to the issue of what other factors than clinical evidence do influence the uptake of innovations.

### **Other benefits to those involved**

Perhaps one of the strongest pressures to accept an innovation is the need to do *something*, a kind of 'desperation' syndrome, especially if there are hopes that the something might just benefit the patient or client. Reality orientation therapy and the Portage scheme provide good examples. In the case of the former, the therapy mainly applies to psychogeriatric patients. It is obviously difficult for staff to work with such people day after day and to find things to say to them. Reality orientation structures their conversation and gives some purpose to their communications with patients. In circumstances where it is so difficult to know what to do to help patients, the therapy provides a limited answer at least. With the Portage scheme, parents, health visitors, and other professionals were at a loss to know how to help mentally handicapped children to learn. Parents are often keen to do a great deal but do not know what to do, and the professionals do not know what to advise. The scheme gives very precise and defined tasks to parents and the supervisory professionals, and so provides the sort of structure which must be reassuring to those working in such difficult situations. If quite a different topic, that of renal failure, is considered, desperation seems to come in again. Continuous ambulatory peritoneal dialysis spread quickly throughout all the renal units in the UK, whereas in other European countries its being viewed much more cautiously. The answer seems to lie in the very low acceptance rate for

conventional dialysis for new patients in the UK compared to these countries, and the desire of those in renal units to be able to take on more patients.

Of course, need may not be quite so extreme as in these examples. But a general acceptance of a need may not only get an innovation started, as discussed in chapter 3, but may also help its diffusion. A problem with need, particularly where it is of a more organizational nature (difficulties in staff recruitment, for example) is that it may be site specific. The five-day rehabilitation ward for the elderly seems to fall into this category. Similarly, travelling day hospitals met a local need. The need for them is only likely to be felt in rural areas and even then there may be ways to take psychiatric care to patients other than the day hospital approach.

Another benefit may be that an innovation gives reassurance. One of the major reasons for the diffusion of electronic fetal monitoring seems to be the reassurance of having done everything that was possible, particularly as litigation is growing in this area. The continuous monitoring seems to give midwives and patients a sense that all is under control, although there are many anecdotal accounts of how the machine went wrong or was ignored (31).

Other forms of benefit may accrue to those involved, simply through their involvement in an innovation. For example, Good Practices in Mental Health seems to have brought benefits because of the encouragement it has given to workers who felt very isolated and unrecognized. This may not have been the initial reason for the early schemes, but recognition of this benefit seems to have helped its diffusion.

All of the 22 innovations in this study have been argued by their inventor/promoters to have benefits. Not all of them diffused rapidly however, so it is now time to look at some of the characteristics which may have been constraints on their diffusion.

### **Financial and other resources**

It seems unlikely that many innovations are stifled at the start by lack of funds. If a primary innovator is keen enough to try out his idea there may be blocks but there will be ways to find the resources to do it. To try it out on a small scale often requires little money, and staff and equipment may be squeezed from other uses. When

the innovation concerns equipment it may be possible to obtain funds or even a prototype from industry. Other innovations may be funded through research projects.

If the primary innovator can obtain funds or equivalent from one source or another, what about the early adoptants of the innovation? They too may benefit from research funds. For example, funds for research projects and funds from industry provided the financial support for nurses to work as incontinence advisors. Charity and trust funds also seem particularly important in the early stages, for example a number of the early electronic fetal monitors were provided by hospitals' Leagues of Friends. Again, a charity, this time the National Society for Cancer Relief, has provided the initial finance for the majority of support teams for the terminally ill (3). For some innovations these sources of funds have only been important in the early stages of diffusion and once the idea is accepted health authorities have tended to pay for the innovation in their area. For other innovations the charities have continued to be important throughout the diffusion process. The National Society is continuing to set up new support teams for the terminally ill (4), though the funding of a particular team is of a limited duration. An interesting example of charities continuing to play a role even after an innovation is accepted is in the case of intensive and special neonatal care where a charity (BLISS) has recently been established expressly to provide funds for equipment for these units.

If funds can usually be found somehow for the early stages of the diffusion, how much does the need for finance inhibit generalized diffusion? This is not easy to assess. It is certainly true that some of the fastest diffusing innovations, for example, Good Practices in Mental Health schemes and reality orientation therapy require little explicit finance. The former relies a great deal on voluntary effort and the latter does not require funds, although of course it has costs in the different use it makes of staff time.

Some of the innovations, though costly, may have diffused readily because there was no need to define explicitly the uses to which staff and equipment were being put. For example, neural tube defect screening with its various components of blood tests, amniocentesis, counselling, and abortion is costly. However, it seems to have able to diffuse relatively rapidly because in its initial stages in any particular locality, no new equipment or funds needed to be requested. It is only as the service builds up that it becomes

necessary to ask for additional laboratory equipment, etc. Continuous ambulatory peritoneal dialysis provides another example of the way in which costs may be hidden. Most of the costs of the procedure are not in capital but in the disposable items; the bags and fluid. Some units managed to 'hide' these costs in pharmacy budgets, though this became obvious fairly rapidly. A new move by a health authority, is to attempt to get over the financial problem by passing the costs over to the family practitioner committee budget. The extent to which resources can be manipulated so that explicit decision-making on an innovation is not required, will depend on the product champions control of resources. Since clinicians control the use of resources to a considerable extent this is another factor going some way towards explaining why they often act as the product champions for successful innovations.

To return to this question of finance and generalized diffusion, it was shown in a study by Kervasdoue in France that diffusion rate was partially determined by costs (32). In the present study it seems, too, that some innovations may have been blocked because of the requirement for funds, though once again this tends not to be the only factor. Day surgery is a good example. The costs per case can be shown to be significantly lower than corresponding inpatient treatment with longer length of stay (see Part II, Case 4). But overall costs to the Health Service may nonetheless rise if inpatient beds are not closed as a result. Instead, they are filled by other patients requiring surgery. Thus, even though it can be argued that day case surgery is more efficient it adds to the total costs of surgical services. Administrators have probably been well aware of these additional costs and therefore have not tried to persuade surgeons to undertake day case surgery with great enthusiasm. Though lack of funds may be detrimental to the spread of new add-on procedures or therapies, finance may not be so obviously a problem with organizational change. Several NHS managers interviewed during this study noted that economic constraints had given them the opportunity to bring about some changes which had been resisted for some time.

Other organizational innovations may not require finance but may be inhibited by the lack of other resources. Beds loom large in the ethos of the NHS, especially concerning consultant status. Some innovations may have been blocked because the consultant could not find beds or space for beds. For example, geriatric-orthopaedics

requires some bed-sharing and neither specialty may be willing to release their beds. On the other hand some innovations have positively benefited from a lack of resources. Geriatric day hospitals mushroomed because geriatricians were finding it so hard to get beds and providing them with some space for a day hospital may in many places have been a 'sop' to the consultant.

How much has provision of funds from central resources stimulated diffusion? Regional secure units provide the example of an innovation which has been substantially funded from central government. If provision of funds was not the only stimulant to development, after a period of total disinterest on the part of the regions, it was certainly influential. Apart from other considerations it gave the DHSS, MPs, CHCs and others an opportunity to ask explicitly what had happened to the money which had been provided. Finance was by no means the only persuasive tool used by the DHSS; the increasing resistance to transfer to special hospitals which was a feature of the mid 1970s, also influenced regions into thinking that something should be done.

Financial incentives to general practitioners to take up particular innovations also need to be considered. This is the only area of the Health Service where financial incentives have been used commonly, in this case in the form of fee-for-service payments for particular items. For a particular service there are, no doubt, many GPs who would provide the service anyway but the incentives should encourage the majority of GPs to adopt the practice. This is not always entirely successful: for example, it is still the younger, higher social class women who undergo cervical cytology screening even though the incentives concern the over 35s and those with more than three children. Recently this type of incentive has taken on a new form in the provision of computers to 150 general practices in the UK with the government paying half the capital costs and covering maintenance for a three year period. Although the scheme is in its early stages it has had a high response. The question remains, however, as to whether the 150 computers will act as a sufficient stimulus to many more GPs to take up the innovation.

In conclusion, the need for finance for an innovation and the more general effects of the current economic climate, are not clear cut. Direct financial payment for an innovation by central government does seem to help diffusion, however.

## **Complexity and compatibility**

If effectiveness in terms of patient care is not necessarily sufficient to cause widespread diffusion, and if the need for financial and other resources are not sufficient to block it, what are some of the important characteristics determining diffusion? Two characteristics seem to be particularly important 'complexity' and 'compatibility'.

An innovation may be complex in itself: for example, neonatal intensive care units require sophisticated technology and specialist skills. A number of other innovations appear quite simple on the surface yet are in fact quite complex to organize because of the number and diversity of people who need to be involved in a concerted programme. Wildavsky and Pressman (33) have put this in a different way by saying that there is a diminishing mathematical probability of clearance over a number of decision points. For example, although providing vitamin D supplements to Asian children sounds simple, many different professional groups need to be involved and each of them would have to decide to go along with a campaign. The complexity of organizing such a campaign must have been a deterrent to many community physicians who might have felt it to be their job to set up a supplementation campaign. Wildavsky and Pressman also point out that lack of priority can be as influential as opposition, and this statement fits extremely well with what happened concerning Asian rickets when some, or all, of the profession groups involved felt it was of low priority.

Another change which can be labelled as complex because of the number of people whose cooperation it requires, is the change to later or more flexible waking times for patients in hospital. It would seem simple to change waking times, say from 6 am to 7 am, but as discussed in Part II, Case 2 this affects the whole day. It involves changing the duties carried out by night shift nurses to the day shift; it may involve changes in times for doctors ward rounds, or at least an acceptance that the ward will not be quite as spic and span as was traditional; it has repercussions into times that patients can go to other departments such as radiology, occupational or physiotherapy and so on. Such change is complex to organize and again may not be viewed as of high priority by the nursing managers who might institute change, or by CHCs who might lobby for change.

The problems of complexity tend to arise more for organizational

changes than when the innovation involves a single item of equipment or a direct change of medical practice, which goes some way towards explaining why organizational changes seem to be slower to diffuse. Other innovations in this study which proved complex were mobile coronary care and day surgery. Although the basic idea of mobile coronary care seems sound—to get highly skilled ambulancemen or doctors and equipment to the patient with a heart attack as fast as possible, it is actually exceedingly difficult to organize. The controllers responding to 999 calls cannot tell which calls require a coronary ambulance and if calls from GPs are the basis for its deployment then only the lower risk cases seem to be found (34). Thus an individual coronary ambulance seems to be in the wrong place at the wrong time. Though the approach may be resurrected in new forms, the initial enthusiasm for coronary ambulances seems to have evaporated partly because of these logistical problems. Day surgery also seems a good idea at first glance but there is no doubt that it too takes a great deal of organization. It may deal with more patients in the time available but to do this it intensifies the work of many staff and requires good management to ensure that suitable patients are selected, prepared and not subject to unnecessary risks.

Compatibility is another important factor. Some innovations may just not be compatible with the way people see their work and roles. People get used to doing their work in a particular way and are not necessarily keen to change, so that the easiest diffusion will be by those innovations that do not affect people's established procedures too greatly. Resistance of ward staff to changing waking times, and often subversion of the change even when a policy is agreed, is a way of staff saying that the change is not compatible with the way they like to do their work, the tasks they regard as their duties, or even the routines established to fit in with personal wishes, such as the fitting of shifts to bus schedules.

A more fundamental lack of compatibility is seen when peoples beliefs about their work roles are threatened. Crisis intervention teams, and nurses as first contact in primary care, both raise issues about appropriate work roles and interactions. Mobile crisis intervention teams seem to have run into a number of philosophical problems. In the early days, the idea of a psychiatrist going out into the community to see patients was not well accepted, nor was the idea that the psychiatrist should only be one member of a team with

perhaps a community psychiatric nurse having an equal say. Both these views have gradually been changing but they seem to have been a block to the diffusion of crisis intervention, especially mobile teams. Then there is the fundamental difference in attitude about how to treat a 'patient'. Crisis intervention teams emphasize the need to confront the crisis and to learn from it and to involve the whole family rather than just abstracting the designated 'patient' and admitting him or her to a psychiatric hospital. The approach has risks, it may not be acceptable to the GPs who remain with the problem, and it requires great commitment from the crisis team. On almost all fronts then it diverges from traditional psychiatric practice and it is perhaps not surprising that it has not diffused more widely. Attitudes are, however changing and it may be that some aspects of crisis intervention, if not necessarily in the form of the mobile teams, will become a part of psychiatry in the future.

In primary care a divergence from currently accepted work roles occurs when nurses are the first person to see and assess the patient and decide whether they need to see a doctor, either at home or in the surgery. It is not only doctors who seem to be ambivalent about this, the nursing profession is also in two minds. Diagnosis is regarded as one of the fundamental characteristics of the medical profession and handing this over, even in limited circumstances, and even if it is labelled 'assessment', is not accepted lightly.

The extent to which the fears and concerns of those involved will affect the adoption of an innovation will depend on the power of those groups to resist. Power is not always as obvious as might be expected. For example, it might be expected that putting a computer into a general practice would be decided by the doctors in the group and that practice staff would just have to adapt. There are examples though of where practice managers and receptionists have said 'no' to a computer, seemingly on the basis that it was not compatible with their work and activities, though also presumably because they were afraid their own skills might be redundant or that they would not develop the capability to use this new and somewhat frightening innovation.

Some innovations are very compatible with the roles, attitudes, and work routines of those involved. For example, it was suggested that the Good Practices in Mental Health schemes have spread so easily because they are non dogmatic; they allow a whole range of beliefs about mental health to be accommodated. Where innova-



tions are incompatible to some or all those involved, then resistance to the innovation is certain to occur.

### **Observing, trying out, and adapting the innovation**

In chapter 2 it was noted that five characteristics had been identified as influencing the adoption of innovations: relative advantage to adopter, compatibility, complexity, observability, and trialability. The first three of these characteristics were found in the current study to influence uptake in the NHS where adoption is of a more organizational rather than individual nature. The last two features do not seem to have been of major importance though some examples of their influence will be described below. Another characteristic which does seem to be important is whether the innovation can be adapted to suit the local environment and resources.

Can the innovation be observed? Diffusion has in some cases been helped because the innovation could be observed. For example, geriatric day hospitals had the advantage that psychiatric day hospitals already existed and could be observed. Regional secure unit take-off had to wait until enough interim units and some permanent units were established. There was a pattern in many districts that those who might be involved in secure unit development, or residents with fears about secure units, were taken to visit the early units to persuade them that the concept could work.

Some changes are easy to recognize because a new unit is built or an item of equipment is purchased. Visitors from neighbouring hospitals and districts or from further afield can then see the innovation and take the idea home with them. In part this goes some way to explaining the popularity of medical technology: it is an easily observable status symbol. Some changes may suffer though by either being relatively hidden or having taken place in locations well off the beaten track. For example, changing the inpatient day to give patients more flexible waking time is not very observable. Patients may not notice the difference if they had not experienced previous practice and, unless visitors are very diligent (for example unannounced night visits by Health Authority or CHC members), it may be difficult to find out whether change has taken place.

Observability is not absolute however. Keen product champions can make their innovation known by informing the local press or by taking the innovation to other people, as for example the propaganda visits by crisis intervention teams or the travelling day hospital group. Without these active methods, which are probably only likely to be undertaken by the national product champions, many innovations, particularly the organizational changes, may not be highly observable and may have diffused slowly as a result.

Can the innovation be tried out before the local adopters accept the full innovation? Often the answer has been 'no'; once the equipment has been purchased or the organizational changes negotiated the innovation has in fact been adopted. Regional secure units provide an example where trial was possible by setting up interim secure units, and, helped to dispel many fears.

In several hospitals in the waking times study, managers had promoted experiments to see if reorganization of the inpatient day would work. This had the problem though that the wards or units where the changes were tried were seen as special cases by the rest of the hospital. Staff were able to say that it worked 'there' because they had less dependent patients, or only one sort of surgery was done on the ward, so that there was not such a mix of patients etc. and that the changes were not feasible in their ward or unit. As noted earlier geriatric-orthopaedic units seemed to have suffered by being labelled as a designated centre since that meant they had additional facilities which visitors felt they had no hope of attaining. Thus the underlying innovation, which does not depend on the existence of the centre, may have been seen as impossible. This problem of 'specialness' is known from other studies, Sapolsky (35), discussing innovation in department stores, points out that the pilot units were seen as special and different and therefore what happened in them was not seen as relevant. The point is an important one to take into account when thinking of establishing demonstration centres in any specialty.

The other characteristic to be discussed here is whether the innovation can be changed to suit local circumstances. Some innovations were omitted from this study precisely because they were so adaptable that it would have been difficult to assess whether the innovation as such was going on or not. In several innovations included in the study what seems to have happened is that the innovation itself has not diffused but the underlying concept is

gradually being accepted. Taking geriatric orthopaedic units again, there are few such units in the country but the idea of joint care of patients by consultants in the two specialties is taking root. Similarly mobile crisis intervention teams may not take off, but some of the methods used may become part of psychiatric practice. There may even be much more reality orientation therapy going on than individuals who claim they are doing it, because the basic ideas have been accepted by so many of the people who work with psychogeriatric patients. There is some evidence that rigidity in the approach allowed may have inhibited diffusion of some innovations, for example the early phase of regional secure unit development. More recently DHSS seems to have accepted more variety and, as local people have felt they could develop the forensic service to meet local needs, diffusion has increased.

It was noted in chapter 2 that if workers take part in discussions about change and are allowed to make modifications then they are more likely to accept and identify with these changes. The lessons for innovation-diffusion may then be that if the innovation is defined too explicitly with too many restrictions on its modification, then its diffusion may be hindered.

### **Policy-maker and pressure group support**

It has already been noted that policy statements and reports may have positive effect by disseminating the idea and, of course, by its mention, giving it some endorsement. Sometimes government has stepped in with financial incentives to take up an innovation and an example has been discussed. But what has been the overall extent and influence of policy-makers?

In several examples central government has played the part of the primary innovator in taking up an idea and promoting it strongly. In the example of regional secure units this was a result of two influential reports, Butler and Glancy. In the case of the Asian rickets, the national supplement campaign was instituted at the direction of the, then, Minister of Health. He was very keen to show the Asian community that, although fortification of chappati flour had not been accepted, the problem would still be taken seriously. Both DHSS initiatives seem to have had considerable influence; the directives and provision of funds seems to have unblocked the

development of secure units, though progress is not fast; and an active Stop Rickets campaign took place.

Other innovations have benefited from more moderate DHSS endorsements and financing. Some monies for minor capital developments probably helped the diffusion of geriatric day hospitals although money for minor capital developments to reduce waiting lists seem to have had a more limited effect on day surgery. For other innovations the funds have not been provided for the diffusion of the innovation but DHSS research or development funds have been used to support the first or early adoptants: for example, DHSS funds support the central office of the Good Practices in Mental Health Scheme, and DHSS has supported the trials of mobile coronary care units. Initial DHSS financial support is, then, no determinant of whether an innovation will diffuse or not since some of these ideas have diffused while others have not. Sometimes support has been given when the DHSS has endorsed committee reports, though in recent years often with the caveat that no additional money will be made available for a particular development. A recent example of such a statement occurred following the report on neural tube defect screening (36). The report was endorsed but it was left to Health Authorities to determine whether and how the report's recommendations should be met in relation to local need. Not all DHSS recommendations or requests to Health Authorities have the desired effect however. For example, in 1977, a letter from the Chief Nursing Officer said that each district should have nursing officer incontinence advisors (37). This has been taken by some to mean endorsement of all incontinence nurse advisors wherever they were working, rather than the district based advisory and organizational service (without creation of new posts) that the DHSS envisaged. Very few districts in fact followed the advice to provide such a district service, in part perhaps because there was little follow up from the DHSS. It is not hard to see that the amount of staff work which goes on to support policy through visits, meetings and so on is perhaps as important a determinant of whether an idea is taken up as the actual issuing of a report or circular itself.

Whether DHSS recommendations are accepted by the field not only depends on the particular innovation but also on the extent to which the guidance or instructions are considered mandatory. Providing finance may be a reasonable indication of endorsement

by government but when it comes to reports and circulars it is not always so clear, and the centre-periphery relationship on policy guidance has shifted over time.

Then, of course, there are other bodies which may encourage diffusion. One of the most influential of these concerning change in psychiatric and geriatric services is the Health Advisory Service (HAS). Their visits around the country are a way of disseminating ideas about new practices, and encouraging members to take up these practices. Even this contact between the knowledgeable and the workers on the ground may not be enough to cause change. An interesting example is that the recent director of the HAS was also the primary innovator for travelling day hospitals. This idea does not seem to have taken up in many places, though, of course, it is much more appropriate for some geographic areas than for others.

Parliament is also now making direct statements through the Social Services Committee. One of its most widely discussed reports was that on perinatal care (7). Nevertheless, despite advocating that neonatal care cots should be increased and that electronic fetal monitoring should be available to all women, there is little evidence that these statements have had major effect.

The medical profession is also influenced by what its leaders are saying through the BMA and the Royal Colleges, but even this will depend on the ideas that are proposed: endorsement of mobile coronary care units in 1975 (38) has not led to their diffusion.

In summary, the influence of policy bodies and policy statements has been quite variable. If the DHSS believes strongly enough that something should be done and is willing to provide funds then it does influence diffusion as evidenced by regional secure units and Asian rickets. More moderate enthusiasm seems to have unpredictable effects, in other words it probably depends more on the current state of thinking within a particular specialty or in the NHS more generally. In any case, reports and advice tend to be issued rather late on in the diffusion process when people have made up their minds. Reports may be used as weapons by other groups, an example is the use of the Report on the *Organisation of the Inpatient Day* by CHCs to lobby for change.

Pressure groups who have had some influence in the present set of innovations include CHCs, patient/consumer organizations for specific diseases or client groups and staff associations or unions. The perinatal care area seems to be the one where there has been

most pressure group involvement. The pressure groups are not all pointing in the same direction however. The Maternity Alliance is advocating increased availability of neural tube defect screening while other groups such as Life may have objections because of the abortion issues involved.

At local level CHCs can act as powerful pressure groups particularly when organizational change is involved. Because they are a permanent body they can keep track of an idea and keep working at it until change occurs. Of course their interests will depend on their membership and view of priorities. For one innovation, Good Practices in Mental Health, CHCs and local MIND organizations have successfully acted as local product champions. On the whole though, in this group of innovations, rather than being directly innovative, their role has been much more to put pressure on Health Authorities and management teams.

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CHAPTER

**6**

***Innovation  
in the NHS***

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Is the NHS good at innovating? Does it pick up the effective innovations rapidly and discard the poorer ones without too much cost? This study has disclosed a number of problems in the process and confirms what many people would say intuitively of the NHS: that while some innovations diffuse rapidly, often without much evidence of their effectiveness, others, especially those which are role threatening or which require considerable organizational change, meet much resistance.

Perhaps an even more fundamental question to ask is whether there should be quite as much innovation. After all, change can be wasteful and divert resources from other services. It can be disruptive and demoralizing, especially if imposed from above with no prior commitment from those who have to carry it out. Many would welcome a period of less change and greater stability.

However, innovations seem likely to continue to appear, whether from research and development in industry and academia or in the minds of individuals anxious to try out something new. Change can be beneficial and help to break through the staleness of established systems and improve morale. It is not so much a question, then, of whether innovation and change are appropriate as in getting the right balance between initiative and inertia: selecting the right innovations and managing their introduction and diffusion successfully.

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### **What makes an innovation diffuse?**

To diffuse rapidly a patient care innovation would probably need to exhibit some or all of the following features:

**Identifiable enthusiasts:** those who invented or discovered the idea, who are keen to disseminate it, who have reasonable status in their professional or specialty groups and who are prepared to put in considerable time and energy into promoting it.

**Not in conflict:** with current national policies or established climates of opinion among professional and other groupings.

**Local appeal:** to those who have the power to promote change.

**Meets perceived needs:** of patients or of staff. 'Adds-on' and does not require major role or attitude changes, and is simple to organize.

**Adaptable:** to suit local circumstances.

**Little finance or other resource required:** unless such requirements can be hidden or increased resources made available.

Though innovations would be unlikely to diffuse if they lacked *any* of these features, it would be difficult to use them with any certainty to predict the likelihood of success for a new innovation. Innovations with characteristics like these are most likely to have some chance of succeeding but, as the study showed, there are many other influences at work in particular instances which can have a decisive bearing on the outcome. These influences—both positive and negative—are analysed, for each innovation studied, in table 6. below.

Again it is difficult to apply these 'criteria' to future analysis. Circumstances can change quickly and yesterday's frustrated innovation suddenly blossoms as today's success. This was likened by one, now retired, senior civil servant to be 'rather like banging on a stable door, until one day it suddenly falls open and you fall flat on your face'.

Finally, a comment is needed about technological versus organizational change. The study tends to confirm that equipment related technologies diffuse more readily than organizational change. The factors determining successful innovation illustrates why this should be so: dissemination of the idea is often done by industrial



Table 6. Major influences on diffusion.

Fast diffusion	Factors involved
Continuous ambulatory peritoneal dialysis	Desperate need (+), initial costs hidden (+), grapevine already established (+).
Electronic fetal monitoring	Need (+), technology, sales representatives involved (+), primary innovators active (+), pressure group activity more recent (-).
Good Practices in Mental Health	Active primary innovator (+), active local proponents (+), need (+), non-dogmatic view of mental health care (+).
Portage: home teaching of mentally handicapped children	Active primary proponent (+), not complex to organize & little funding required (+), need (+).
Reality orientation therapy	Active central proponents (+), active local proponents (including influence of clinical psychologists (+)), need (+).
Support teams for the terminally ill	Terminal care gets popular support (+), charity involved provides initial funds (+), fits in with care in community philosophy (+), specialist role for nurses ( $\pm$ ).
<b>Moderate rate</b>	
Day surgery	Need—waiting times (+), complex to organize, intensifies work load (-), may require funds (-). Concern over quality of patient care (-).
Geriatric day hospitals	No conflict over bed space (+), perceived need (+), supported by opinion leaders & government (+), requires good organization and/or funding (-).
Incontinence nurse advisors	Funds from research and industry (+), ambivalence, from professional bodies (-), but specialist role for nurses (+), major health problem (+).

Table 6. *cont.***Moderate rate**

Neonatal intensive care

*Factors involved*

Primary innovators active (+), backlash against saving handicapped babies (-), intensive and special care very demanding on staff (-).

Neural tube defect screening

Fits in with preventive philosophy (+), complex to arrange especially good take up (-), unclear whose responsibility to arrange (-), could be set up with little finance (+).

Nurses as first contact in general practice

Professional ambivalence (-), meets GPs needs (+).

Regional secure units

Central proponents including government funding (+), complex to organize (-), much community and union opposition (-), need (+), where exist, forensic psychiatrists champion (+), went against open door philosophies (-).

**Slow rate**

Asian rickets

*Factors involved*

Societal attitudes to special services for ethnic minorities (-, now +), complex to organize (-), active central promoter (+), government active (+).

Computers in general practice

Acceptable hardware/software only recent (-), costs to practices (-), ambivalence about computers (-), government initiative (+), some enthusiasts (+).

Crisis intervention teams

Active primary innovators (+), state of community psychiatry (-), requires major changes in philosophy about mental health care (-).

Diabetic clinics in general practice

Additional work for GP, no incentive (-), fits in with continuing care, preventive philosophies (+), potential conflict with consultants (-), quality of care equivocal (-).

<b>Slow rate</b>	<i>Factors involved</i>
Five day rehabilitation wards for the elderly	Complex to arrange (-), benefits small (-), opinion leaders in specialty not supportive (-).
Geriatric orthopaedic units	Active innovators (+), requires two specialties to collaborate (-), need for beds (-), perceived need for funding (-), improves blocked beds problem (+).
Mobile coronary care	Logistically complex (-), ambivalence of ambulancemen to more training (-).
Travelling day hospitals	Primary innovator active (+), need not perceived (-), does not fit well in organization (-).
Waking times in hospitals	Extremely complex (-), local product champions often low status (-), government reports (+).

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representatives who make sure that potential adoptants do hear about it; sales are often based on the argument that the technology will be of great benefit to patient care, even if later this turns out not to be justified; technologies are often 'add-on' procedures posing no threats and often enhancing the prestige of adoptants; and, even if finance is required, there are often sources of funds outside the NHS. Once new technologies start to involve organizational change or pose role conflicts then, of course, they begin to run into the same resistances as the organizational innovations.

### **How to choose innovations?**

A major problem emerging from this study concerns evaluation. The problem is two-fold: there is first the fact that many innovations diffuse before they are shown to be effective, the trials are not done or are done very late in the process; secondly, even if some evidence is available, it often comes from the national product champions' own units or districts, precisely the places where the innovation is most likely to work and the results, especially for organizational innovations, may not apply more generally.

Of course, it is easy to say that innovations should be evaluated before diffusion, but much harder to achieve. There are difficulties in holding back the enthusiasts and opinion leaders for the length of time required to carry out the necessary trials, though financial constraints and greater alertness on the part of managers about what innovations are in the offing should help. It may be difficult to evaluate some innovations, particularly technology, in the early stages because they are in a process of modification; effectiveness may change over time. Nevertheless, the best chance of influencing the diffusion process is before the S-shaped diffusion pattern (see figure 1) has taken off, that is at the opinion leadership stage. Thus evaluation must be started early on, if it is to have the most impact.

Another problem with evaluation concerns the trials themselves. Randomized controlled trials are widely accepted as the best, scientifically; but as earlier discussed are not perfect. They are complex and often expensive to organize; there are often ethical concerns; and all too often they do not come up with the answers to the questions posed by clinicians or managers. When organizational innovation is at issue and the benefits are to the system, or client group overall rather than to the individual patient, then knowledge about how best to evaluate becomes even more sketchy. There is a great need for work on evaluation methods, especially work in conjunction with managers at all levels (clinicians to ministers) to understand what information it is that they need to make decisions about new procedures and practices.

Supposing though that sound trials of a new medical procedure or organizational arrangement have been carried out in one or two places. Why is there often such dismay at local levels when this effective approach is made policy? The answer is that the trials often take place in ideal settings where they are most likely to be successful. The people running the trials are often strong product champions who lobby actively. If these people have evidence as well as considerable personal status, their arguments may be very persuasive. Before long the innovation is accepted as 'a good thing' by the centre and there is some surprise when a great deal of resistance emerges at the periphery. Though sometimes the reasons are excuses, often local people may be right that the innovations will not work in their particular setting in the form it is being promoted.

This situation was illustrated to varying degrees in all four

detailed cases in this study (See Part II). The field had a great deal to contribute about why the innovation needed modification (as now seems to be taking place with regional secure units) or why, for example, the Asians rickets campaign was appropriate in some areas but not others. To get over, or at least improve, this situation the innovation needs to be tried out in a variety of settings (different geography, facilities, populations) before being promoted as an innovation to be taken up uniformly across the country. It may be that a uniform approach is not the answer and that different local solutions will produce better results.

In retrospect the evidence makes it clear that Regions were right to experiment and ignore central direction when they found it impossible to implement government policy on secure units as it stood in 1974/75. In consequence, there emerged a range of secure provision from the large unit serving the whole region through to those serving only the local catchment population of a hospital. Fortunately these 'natural' experiments in secure unit provision are now being evaluated. In general, it seems that much more experiment is needed before innovations are recommended enthusiastically to the field and even then more feedback about the problems or constraints is required. This should not be construed as a negative comment about innovation generally. Innovation is important. The problem is, as said before, the need to identify the right innovation.

If some innovations are promoted without adequate evaluation (even though they may in the end be shown to be effective) the other side of the equation concerns whether all good innovations are picked up by the system. Although by its nature this study did not investigate them, it seems certain that many good ideas are not disseminated at all. Perhaps the workers do not recognize that they are doing something innovative or perhaps they do not have the time and status to promote their ideas. Partly this may be helped by managers acting as facilitators, encouraging workers and helping them find the means to promote their ideas. Apart from the benefits to the Service, such encouragement may be a good morale booster. But the remaining problem concerns those innovations which reach some level of consciousness, are judged to be good, and yet seem to have a hard time in being accepted by the system. The need for good management becomes particularly apparent when these sorts of innovations are considered. They are innovations which usually

have a mixture of positive and negative characteristics and which may benefit one group while detracting from the others. Managing change in these circumstances is discussed in the next sections.

Finally, this study did not consider how innovations came to have central support but it is obviously of major importance who influences that process. The impression is that the input is fairly narrow and that the medical, and sometimes other professions, have considerable power. A number of countries, have begun to be concerned about getting perspectives from a broader range of people when it comes to deciding whether an innovation should be accepted nationally. For example, the US attempts this through its consensus development conferences. While this mechanism may not be an appropriate one for the UK, analysis of how policy towards an innovation gets made is important and almost certainly mechanisms are required to broaden the debate.

### **Managing change**

The management of change in the NHS is always likely to present problems particularly when change is promoted from the centre. This study has highlighted a number of points for consideration. It has already been noted that better evaluation of effectiveness is needed. The innovation also needs to be looked at to see whether it is consistent with other policies or recommendations or whether they are in conflict. There also needs to be realism about the constraints at the periphery and flexibility in the uptake of the innovation. But is more than this needed? Are appropriate channels being used to disseminate innovation, for example? It may be possible to learn some lessons from the pharmaceutical and medical technology industries, since a part of the success of diffusion of innovations in these areas is undoubtedly due to their marketing skills. There are usually no sales representatives for organizational change apart from those innovators who take it upon themselves to 'sell' an idea. An approach worth considering is whether these individuals could be used more effectively by buying their time for a limited period and providing them with some resources to promote their ideas; assuming, of course, that the innovation has been judged to be 'good practice'. Someone who has already tried the idea, especially if a respected member of the peer group, is likely

to be more credible than an outsider even if a member of the same profession. However, agricultural extension workers have been used successfully to disseminate good practices, so more general development workers might be effective. To some extent the Health Advisory Service has performed this sort of role.

Recently there has been discussion about whether the Health Service needs some sort of developmental group of broader remit than the HAS to disseminate new ideas and to help in the process of managing change. The idea of Regional Development Agencies was the subject of a conference held jointly by the Royal Institute of Public Administration and the King's Fund Centre (1, 2). It was proposed that a trial agency be set up in one region with a steering group from its Regional and District Health Authorities. Eventually it was proposed that perhaps four or five development agencies would be needed to cover all the regions and that they would have a core group of staff but would second in others from academia and the health care professions, depending on the needs of particular projects. Though the need for, and the difficulties surrounding innovation were accepted by participants at this conference, the conclusion seemed to be that managers felt that their job was to innovate and promote change and that another institution was not necessary.

But assuming many managers do become more proactive and more willing to promote particular changes, with leadership from the top, there will still be the question of their accountability for getting change achieved. Putting it in a way more specific to innovation, what can be done to get the slow or cautious movers (individuals, units or districts) to take up the innovation? Currently both carrot and stick are used. If the Government wants an innovation enough, money can be specifically allocated, as was the case for Regional secure units. Incentives other than finance are also probably used in particular cases. The newer mechanisms of accountability through regional reviews and the use of performance indicators are also mechanisms for bringing change about. If the issue was important enough no doubt penalties could be enforced. Again a much preferable environment would be a positive one where local managers could explain their problems with the innovation and if it were still desirable, get help and support from higher tiers.

There is a growing literature on the management of change.

Johns (3) has said that 'the ability to introduce change with minimum resistance is a key managerial skill'. It is a talent that some managers seem to have naturally, but there are some clues for those who do not. Perhaps the most important aspect which has come of this study is the need to understand why there are likely to be resistances to an innovation. On that basis it may be possible to find ways to reduce the disadvantages, as perceived by those involved, or at least to bring those people into discussions early on and give them a chance to modify and adapt the innovation to suit local needs and circumstances.

A further lesson from this study is the need to identify product champions. This does not imply that managers should become the innovators themselves but they need to know which innovations are being promoted in their department, unit or district. Managers may know that the time they personally can devote to an innovation is limited or that their views will not be accepted by a particular professional group. It may be appropriate then to identify someone who is respected and who has an interest in the innovation, to take responsibility to implement it and, for major organisation change, an individual may need to be designated to see the innovation through. Complex innovations may need product champions to get them accepted but equally they may need designated managers to make sure that agreed changes are implemented. Managers may also have a part to play as facilitators supporting the product champions. In this case the manager is acting like the business innovator who has been shown to have a key influence on industrial innovation. Of course in some instances managers may be in the position of explaining to product champions just why what they are promoting is not acceptable.

But what does this study tell us about the product champion who is anxious to bring about the innovation locally? Like the manager he will need to analyse the innovation carefully to assess the range of factors which may encourage or discourage its acceptance and consider all the people who might be involved or affected by the innovation, and the relative benefits or drawbacks of the innovation. The case studies illustrate that it is worth thinking about who the facilitators or gatekeepers to the innovation may be. In other words, just as managers may need to identify product champions so the product champions may need to identify a manager likely to be receptive to the idea who can 'facilitate' the process. It may also be



essential to win over gatekeepers to the idea—or find ways to avoid their particular gate. With some innovations in this study there were problems in getting the idea accepted because the local product champions were not in positions of adequate status to push the innovation through. Perhaps they were external to the committees which make many of the decisions, or perhaps they were external to the NHS and had difficulty even finding out why the innovation was rejected. In such cases local product champions may have to identify people to argue on their behalf, to act as it were as proxy product champions. Though this is hardly a new lesson for many pressure groups, it may not be so obvious to many workers in the NHS and is one reason why they find they are getting nowhere. There is also advantage in searching out others who are promoting the same or similar idea. There is strength in numbers, not just because each group can lobby within their own sphere of activity, but also because the idea is likely to be brought up more frequently. Getting an innovation accepted, as illustrated in the studies, can be a long slow process and there is no substitute for continuing effort over long periods of time. If product champions recognize this as a general phenomenon it may help them not to despair and give up too early, or it may deter them altogether!

### **Maintaining the change**

It is all too easy for an innovation to be set up, then for the charismatic product champion to leave and for the innovation to disappear too. What seems to make an innovation stick is when all those concerned become truly committed and it becomes an integral part of the system. Some of the innovations which are more complex to achieve may therefore have more staying power than the 'add-on' procedures which diffuse most rapidly. Precisely because these complex innovations require more negotiation and reorganization, it is not so easy to resort to the old *status quo*. However, even then if there is no real commitment, slippage, for example concerning a new policy on patient waking times, can be all too common. Such slippage is likely to occur if the innovation is imposed from above. If the workers concerned can be involved and allowed to adapt the innovation to meet the local circumstances then they will have a much stronger commitment to it. Developing

such commitment can be uphill work, but the alternative is that champions or managers will find it necessary to monitor continuously whether the change is being maintained.

Adaptation is an important factor in the acceptability of an idea, but it has problems in that the innovation begins to lose definition. This may be no bad thing, however. A number of innovations in this study have been rigorously defined and the proponents sometimes appalled by what they consider to be travesties of their original intentions. But innovations often come about because a form of care has gone too far in one direction and the innovation is set up to remedy the gap left at the opposite end of the spectrum, the open-door policy and regional secure units being an obvious example. Sometimes what is most needed is not the particular form of the innovation, but a recognition of the gap which exists. If an innovation does not diffuse *per se* and yet succeeds in making people think about an unmet need or a central concept then perhaps it has done good service. However, it has to be recognized, too, that some innovations will only work successfully if there is adherence to the form, too. The concerns of the proponents that a good idea will be discredited because the conditions for its success have not been met are, of course, real and understandable.

### **Termination**

A different study might have been done to look at the resistances and blocks to stopping outmoded or unnecessary procedures and practices. Stopping anything sometimes seems to be seen as an innovatory idea in itself, but there is no doubt that it is essential if the NHS is to have the resources to do new things. The resistances to stopping things are likely to be very similar to those to innovation, if for no other reason than that starting something new often does mean stopping existing practices. Conditions for success are then likely to be similar: an attention to why resistances are likely to occur; incentives for change for those likely to be losers; and an effort to generate understanding of the need for change and commitment to it. Understanding how to terminate practices and procedures whether clinical or organizational is likely to become of increasing importance in the NHS in the next few years.

### **Managing innovation: the future?**

The generation of new ideas and their diffusion within the system are different issues posing different problems. The NHS has shown itself to be a fertile breeding ground for new ideas. Its track record in managing the innovation process and the resultant change is far less impressive. Comparison of NHS performance with health systems in other countries or with industrial practice is difficult. In theory the network to be found in a 'national service' for the communication and promotion of new ideas ought to place the NHS in a favourable position. In practice, the presence and influence of bureaucratic features and the power structures among the many professional groupings can often be shown to inhibit the proper evaluation of new ideas and to erect real barriers to promotion and dissemination of those which self-evidently have much to offer. The syndrome of 'not invented here' is widely recognizable in NHS practice and philosophy. Nor can the political dimension be entirely ignored. It is clear that support motivated by political considerations alone, can be decisive in whether change happens or not. Indeed political considerations have been found in some instances to be both originator and arbiter of change—not always where there has been widespread acceptability.

But there are encouraging signs that some of the managerial problems are at least now being recognized and that solutions may in time emerge. The recent Griffiths enquiry (4) emphasized the absence of a general management function in the NHS and the lack of a 'driving force seeking and accepting direct and personal responsibility for developing management plans, securing their implementation and monitoring actual achievement'. If this driving force is, in the future, provided by the new Management Board, the prospects for effective managerial control of the innovatory process will be greatly improved. Indeed if the NHS is to respond purposefully and positively to changing needs and opportunities the emergence of positive management at both centre and periphery will be essential. And in the process innovation and initiative can expect to flourish in a more favourable environment.

## ***PART II***

### ***The four main case studies***

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CASE

**I**

***Regional Secure Units  
(RSUs)***

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Regions have been asked to provide secure units for psychiatric patients for many years, with specific guidance coming from the DHSS in 1974 including, subsequently, direct funding. Yet, by mid-1983, only three regions had permanent units in operation and two of those opened in 1983 (there are, however, also a number of so-called interim units in operation and some of those are likely to become permanent). To many people the pace of the development seems very slow, to others experienced in capital planning the length of time seems reasonable. Whether perceived as fast or slow, the development of regional secure units provides illustrations of almost all the blocks which can influence innovation diffusion in the Health Service. Many regions have solved one problem only to find another emerging, seemingly *ad infinitum*. In this case study four regions were taken as examples: one proceeding relatively fast and with a permanent unit now open, one which began planning early and with high enthusiasm but which is still without a unit, and two which were particularly slow in getting started but where developments are now taking place. Before coming to the studies of Regions A-D the general history will be described.

**History of the innovation**

Regional secure units are an interesting example of how one series of changes produce the need for another innovation. The

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requirement for secure units for the continuously disruptive and dangerous mentally disordered arose out of the changes in psychiatric practice which occurred in the 1950s. As NHS psychiatric hospitals became more open with fewer locked wards, there developed the problem of what to do with those patients whose condition was such that they could not be managed in open psychiatric hospitals (whether they were criminal offenders or not), but did not require the level of security which is only to be found in the special hospitals (Broadmoor, Rampton, Moss Side, and Park Lane).

Guidance was given on this problem as far back as 1961, by the then Ministry of Health, in a circular issued to regional hospital boards (RHBs) after a Report of a Working Party on Special Hospitals (1). The report recommended that no region should be without secure facilities for the treatment of mentally disordered patients. Very little happened as a result of this circular. Throughout the 1960s, continuous pressure to enforce open door policies resulted in an increase in the number of applications for the admission of patients to special hospitals and many individuals who might have been transferred from special hospitals, if suitable NHS accommodation had been available, were forced to remain there. Thus, by the early 1970s a consensus was developing between the Law Courts, Home Office, DHSS, and NHS that there was a severe problem which needed tackling.

One other development took place in the 1960s which, though it had little effect on the secure unit question at the time, was important in later events. In 1964, a Working Party on the Organization of the Prison Medical Service recommended that there should be joint appointments of forensic psychiatrists in the NHS and in the Prison Medical Service (2). This provided impetus to the development of forensic psychiatry, although those who did eventually get such joint appointments found their position in the NHS weak, usually having no beds, and certainly no secure beds.

In the early 1970s, two separate committees were established to look at the interrelated problems of mentally disordered offenders and security in NHS hospitals. The two committees reported almost simultaneously in 1974 and a DHSS circular (3) was issued based on their findings. The (interim) Butler Report (4) particularly emphasized the problems courts were having in making appropriate hospital orders, as many mentally ill offenders were being refused admission to ordinary psychiatric hospitals. The Glancy Report (5)

examined NHS facilities for disturbed or dangerous patients (whether offenders or not) and also found a lack of appropriate facilities. As a result of these two reports, the DHSS asked each region in England (Scotland, Wales and Northern Ireland have different policies) to establish regional secure units on the basis of 20 places per million population for patients requiring treatment in conditions of security short of that provided by special hospitals. There was little evidence on which to base the level of need and subsequently 20 places/million has been argued to be both an over and under estimate. Regions were also asked to make interim arrangements for the care of such patients by designating 'particular hospitals to provide treatment in conditions of security until such time as proper regional secure units can be provided'.

The regions were not slow to point out their inability to meet the expense of such units and the DHSS made available 14 million pounds (at 1975 prices) for capital costs, either for renovating existing buildings or building new secure units. In 1982 prices, this stood at £52m, and is provided, after approval of schemes, as it is required. So far (1983) about £17m has been provided in capital grants. Since 1976, regional health authorities (RHAs) have also received central revenue support as a contribution to the running costs of RSUs and interim facilities. Despite this clear financial incentive, some regions have complained that the revenue monies do not cover the costs of the highly staffed secure units; but it was never the intention that central revenue support should cover these costs completely. Some regions have pointed out that the particular formula for allocating funds is actually a disincentive to opening secure units. Each region receives a yearly allocation based on its number of target beds. The actual figure has varied with monetary value but currently stands at £11,000 per target bed. Once the region has two-thirds of its permanent target beds in operation the amount increases to £16,500 for each of the beds in operation up to the target number. Thus, until a region reaches this two-thirds figure they get no increased benefit from having any permanent secure beds available at all.

This is not the only controversy over these funds. By the end of 1982, RHAs had received £55m in revenue support and there have been repeated concerns including Parliamentary Questions (6) about how this money has been used. The DHSS asked regions to use this money for the provision of secure facilities and otherwise to

improve psychiatric facilities wherever possible. In fact, a considerable proportion was used for other projects, not just psychiatric care. For example, about 40 per cent was used for other purposes in 1977/78 (6) although the proportion has now declined considerably under government and local pressure, and with the opening of more interim and permanent secure units.

In the years immediately following the government reports and guidelines, planning was fairly slow. Two interim units were opened in 1976 and a third in 1977 but little headway had been made towards permanent units. In part this seems to have been because of considerable uncertainty about who should be treated in secure units, their appropriate size, and catchment area, the degree of security necessary, and so on. For example, one controversy concerned the need for secure units for the disturbed mentally handicapped. It has been fairly generally agreed that only the mildly mentally handicapped could be treated alongside the mentally ill in secure units, yet a study was carried out in one region which suggested that there was a greater need for secure facilities for the mentally handicapped than for the mentally ill (7). This study led to ongoing discussions between the region and the DHSS about how secure unit monies should be spent and also affected thinking in other regions.

Then there was the issue about whether the mentally ill and dangerously disturbed offender should be treated in prison or in hospital and a number of psychiatrists have argued for greater development of psychiatric services in prisons (8, 9). In more than one region, administrators and health authorities have also put forward the argument that such patients are, in fact, the responsibility of the prison service and not the NHS. Finally, even amongst those who accepted the need for secure facilities within the NHS there was considerable questioning about whether one large unit in the region was appropriate or whether the units should be smaller and cover only local catchment populations and also whether the secure facilities should function as a third service alongside the prison and NHS services or whether they should be fully integrated within the NHS (10). Some of these concerns led to the establishment of a Special Committee of the Royal College of Psychiatrists to examine the whole question of secure facilities for psychiatric patients. Their report, issued in 1980 (11) recommended a more comprehensive policy in the mental health services saying that 'a



range of facilities providing varying degrees of security and intensive care is essential to provide for many different categories of patient' and that these facilities should be integrated with the general psychiatric services of a region.

These then were just some of the uncertainties which were the background against which interim and permanent units were developing. There were also more specific resistances such as the opposition to the location of secure units by unions, hospital staff and local people. The first interim secure unit suffered particularly from opposition by the National Union of Public Employees (NUPE) which led to withdrawal of services from the unit, such as portering and catering, by NUPE staff. COHSE (the Confederation of Health Service Employees) took a more positive view of the units and in fact produced its own document *NHS Secure Treatment Units* (12) in 1979. COHSE was, however, particularly concerned about staffing levels and, as described in one of the case studies below, though COHSE was generally supportive, there were problems over the conditions they expected to be met. Because of the union and local opposition, the Secretary of State, then David Ennals, set up a Working Party in 1977 (13) to 'act on the request of any Regional Health Authority as a source of practical help and advice in overcoming difficulties which the Authority may be experiencing particularly with regard to the fears and anxieties of local staff in setting up regional psychiatric secure units and in making interim secure arrangements in the meantime'. While this showed good intent on the part of the government there is little evidence of regions turning to this Working Party for advice.

In summary, regional secure units are designed to cope with mentally ill or mildly mentally handicapped patients, whether offenders or not, who present problems of management because of their continuously disruptive behaviour which ordinary NHS hospitals cannot reasonably be expected to contain. Apart from those for whom there is reasonable hope of improvement from treatment, the units would not normally accept patients suffering from personality disorders. The emphasis is on treatment and rehabilitation into the community, and a report from one of the interim units showed that the length of stay varied from several days to almost two years (9). Although progress was fairly slow, the first permanent unit opened in 1980 and two others are now open in mid-1983. In 1982, the government was able to say that by the end

of 1985 'over 500 places are expected to be available in 11 units with a further 150 beds under construction at the time' (6). In addition, most regions can now identify specific interim facilities. As more units come on stream there are concerns about how to find adequate revenue for them and also whether it will be possible to staff them, because there is a severe shortage of nurses with secure unit experience. Recently an RSU research unit has been funded by the DHSS at Birmingham to carry out a study of secure units to assess the type of patients who have been accepted, or rejected, the treatments offered and to follow up accepted and rejected patients. In this way it is hoped to get a clearer picture of how secure units are functioning in practice. Finally, coming right up to the present, there will be effects of the Mental Health Act 1983 which came into effect on 30 September 1983. For example, there are new powers for the courts to make remands to hospitals and for making interim hospital orders. It seems likely that secure units will have a much larger proportion of patients for assessment and will need to alter their functioning accordingly.

### **The Regional case studies**

Following discussions with DHSS officers about the state of development of secure units in each of the Regions, four Regions were selected, which had shown a range of enthusiasm and speed in their planning and which also provided a reasonable geographical spread. In most cases the histories were explored back to 1974 though if there were records or knowledge of earlier activities these were included. The histories are quite complex and to give readers a guide to the main events simpler tables of those events are included.

#### **Region A (see table 7)**

Following the Glancy (5) and Interim Butler (4) Reports, Region A decided that their requirements for secure beds could be met by providing two units of 30 beds, one in the north of the region and one further south. This decision was mainly based on the geography of the region. There have been no attempts to develop interim units either at the permanent sites or elsewhere. The Region had a policy from early on that intensive care units should be provided in all mental hospitals realizing that many difficult patients, especially

acute admissions, would not be catered for within secure units. Some of the secure unit revenue monies provided by the DHSS were used to set up two intensive care units.

The history of secure unit development hangs on the events concerning hospital A1 in the south and A2 in the north.

**Hospital A1.** A1 is a hospital for the mentally handicapped and from 1969 it had an open (not secure) 60 bedded unit for difficult patients, often including offenders. This unit was run by two consultants and mainly dealt with borderline mentally handicapped patients who were often mentally ill. Because of their experience these two consultants put together a proposal for a secure unit for A1. This proposal went to the RHB in 1972 where it was supported by the principal senior medical officer with a special interest in the mentally ill and handicapped. The proposal was submitted to the DHSS but they said no funds were available.

With the reorganization and the impending Butler and Glancy reports there were some delays but as early as October 1974 the Area team of officers met with Region to discuss the possibilities and an Area working party was formed in November 1974 to look at possible sites. At that time the policy for one unit for the south had been decided but the site was still open. In November, it was agreed that A1 or another hospital were the most suitable sites, by December, the consultant and district administrator (DA) had developed a proposal for A1. There were still concerns at various levels. Not all members of the RHA were agreed about the need for secure units, some felt it should be the responsibility of the Prison Medical Service. There were also concerns about finance and about what sort of units the DHSS actually envisaged. During 1975 a project team met and finally agreed on A1 as the optimal site. The Area approved the proposal in May 1976 after consultation with Community Health Councils and the trades unions. The main argument for A1 was that it is near a local centre of government with courts, prison, and university; that it is not in an isolated spot but in a town, yet has adequate land for building; and that staff, both consultants and nurses, were keen to have the unit and did have forensic experience. The consultant's enthusiasm shows: a proposal was ready for Stage I submission in mid-1976, once the DHSS had made their statement about providing revenue. It was

Table 7. Region A: Secure Unit Development.

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events &amp; main characters</i>
<b>Unit at hospital A1</b>		
1969	60 Bed unit for difficult patients established at A1 (mentally handicapped hospital).	Consultant enthusiastic.
1972	Two consultants submit proposal for secure unit at A1 but no funding available from DHSS.	Support at RHB; already some local opposition.
1974	Butler and Glancy: Region decided on 2 units: 1 in north, 1 in south.	Seems to have been reasonable enthusiasm at Region.
1976	Area agrees A1 should be southern site. Stage 1 submission.	Consultant enthusiastic plus DA. CHCs gave support (with some reluctance).
June 1977	Planning approval by Council then newspaper scare about Broadmoor patients.	Major public opposition including MP, editor of local newspaper. Local CHC no longer supports proposal.
July 1977	Council planning committee reversed decision.	
December 1977	Department of Environment agrees to non-statutory public enquiry.	
October 1978	Public enquiry.	RHA and local NHS managers show commitment to unit.
May 1979	DoE replies positively to DHSS but no decision taken.	
January 1980	Minister of Health visits; final go-ahead.	
November 1981	Forensic psychiatrist appointed suggests changes to design.	Region wanted unit open as fast as possible, dispute changes, but finally agree.

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events &amp; main characters</i>
1982	Building alterations.	
1983	Unit opened.	Controversy about how many beds can be opened with resources available
<b>Unit as Hospital A2</b>		
1974	A2 thought to be possibility for northern unit.	Major problem at A2 with unions. DMT felt initiative had to come from within hospital.
1974-78	Discussions in the hospital, proposal from consultant—union link. Working group set up but abandoned.	CHC and local opposition.
1978	Proposal put by hospital to District.	No support from Area or Region. Area favoured another hospital. Region involved with unit A1.
1980	Area asks for proposals: only A2 responds.	Area still not keen on A2 but accepts.
1981	Major effort of public consultation, CHC very involved.	CHC wanted open discussion. Regional public relations officer did not want information vacuum as at A1
May 1981	New forensic psychiatrist appointed.	Consultant already known and trusted in area.
1982	CHC accepted proposal. Project team established.	Moving fast because of consultant's initiatives, DMT and regional support.
1983	Submission to DHSS for 'Approval in Principle'.	
1983	DHSS comments sent to Region A.	
October 1983		

envisaged that the unit would cater mainly for the mentally handicapped, though not the severely subnormal, and staff side representatives had been consulted. At first, the local CHCs had been opposed to this particular site, but the joint group of CHCs reluctantly gave their support to the project in March 1976. The local CHC (in the town where A1 is actually located) agreed only with the provision that every effort was made to put the residents of the town in the picture. A public meeting was held in September of that year but the publicity was fairly low key.

The planning seemed to be proceeding well with regional approval as part of the capital planning programme in June 1977 and approval from the District Council planning committee in the same month. Events then took a dramatic turn for the worse. At the RHA meeting one of the members said that the unit would take Broadmoor patients. This was picked up by the press and resulted in considerable newspaper coverage. Locally, meetings were planned, petitions organized and it seems that all the local leaders became involved. The Mayor called on the town to unite in opposition, the local MP was involved and the editor of the local newspaper played an active role. The RHA were particularly shocked when in July the planning committee reversed their previous decision, said they wished to object in principle and said they felt they had been tricked by the health authorities. It seems that with something of an information vacuum the residents had begun to believe that these first 30 beds were only the 'thin end of the wedge' and that a mini-Broadmoor was planned. Repeated assurances by the Region that this was not the case were not believed. A specialist in community medicine (SCM) attended a meeting of the parish council in August and the RHA chairman attended a public meeting organized for the residents in September 1977, but by then there was a complete lack of confidence in the health authorities. The unions and CHCs began saying that this would never have happened if the public had been better informed and the local CHC reviewed its position and came out against the unit.

From July, the idea of a public enquiry had been mooted; something which the DHSS and the Region wished to avoid if at all possible. However, in December, the MP and a deputation went to the Department of Environment (DoE) who subsequently agreed that a non-statutory public enquiry should be held.

The enquiry was eventually held in October 1978 and lasted

several gruelling days, gruelling not least because the MP made a personal attack on the integrity of the health authority representatives. There were clearly some grounds for the opposition of the population to the scheme. The town is a seaside resort relying heavily on the tourist trade and the residents were afraid of what would happen with the influx of more mentally disturbed people. They already felt that with patients being discharged from the hospital to live in group homes in the town, they had enough to put up with and were afraid that if more patients came to the unit these patients would again be rehabilitated locally. Although the DoE inspector recognized the grounds for their opposition, she came to the conclusion that the unit should go ahead, mainly it seems on the grounds that wherever the unit was planned it would not be wanted. The Secretary of State for the Environment replied to the DHSS in May 1979 but the final decision was not made until January 1980 when the Minister visited the hospital as well as other potential sites, finally giving approval for the unit at A1.

Another problem, which had arisen meanwhile, concerned who should be in charge of the unit. The consultant proponent had by this time emigrated. At first the consultants thought they might share responsibility but in November 1979 it was agreed that the unit needed a full time forensic psychiatrist and this appointment was made in 1981 and led to another series of delays. The forensic psychiatrist felt that a number of modifications needed to be made: such as a more secure outer perimeter fence and alterations so that patients would be able to 'progress' through the unit, regardless of whether they were male or female. These modifications resulted in about an additional £100,000 worth of works, and considerable time delay.

The modifications were not received with much enthusiasm by the Region but they accepted the arguments. The 30-bedded unit was handed over to the District Health Authority on April 1st, 1982 and opened in 1983.

**Hospital A2.** In 1974, the District in which A2 is located inherited a high concentration of hospitals for the mentally ill and handicapped, serving several districts. From 1974 onwards the services have been studied and attempts made to reduce the numbers of long-stay patients and possibly to close hospitals. The closure of A2 was considered but as it had already had an active discharge

programme, major reductions in numbers would have been difficult. It was clear that there would be a need for this hospital for a very long time to come. Thus the threat of closure was removed from A2 very early on. Funds and staffing released from bed reductions have been used to improve the standards of continuing wards. The District Management Team (DMT) made it clear early on, however, that these improvements could not continue indefinitely and that staff should consider initiatives to improve psychiatric services, otherwise eventually redundancies would come. It was with this background that staff at A2 began to put together proposals for a secure unit.

There were, however, problems at A2 of which District, Area, and Region were aware. Between 1974 and 1979 a major battle for members was fought out at the hospital and between NUPE, COHSE, and the Royal College of Nursing (RCN). As a result, it seems that any proposal from management was opposed by one or other of these unions. The DMT felt that they could not put any pressure on the hospital for secure unit development but that it would have to come from the staff themselves. In fact, this did happen through an unusual alliance between consultants and staff side representatives. Sector management were concerned that the proposals had not come through normal channels and in fact the consultant/staff side alliance eventually broke down over other issues. However, the first step of proposing a unit was taken and a working party was set up. The next stumbling block was local opposition, mainly on the grounds that residents did not want any more patients in their area. The working party was abandoned and the proposal was only finally put to the DMT in August 1978. During this time there was not a great deal of enthusiasm from the hospital. Although there was a forensic psychiatrist in post at the time, he clearly did not feel able to take on the responsibility of a major new development.

Until about 1979/80 there was little interest in the northern unit from Region A. Because of the problems over the southern unit they were concerned about the public opposition which might be aroused at A2. It was not until the southern unit was settled finally, in early 1980, that the Region turned its attention to the need for the northern unit.

It had been agreed since 1974 that A2's Area was the most appropriate site for the northern unit because of the need to be in or



near a centre of population, and to have connections with the university. However, it was still an open question as to where this unit should be. From the early discussions in 1974/75 onwards if there was to be a northern unit the Area favoured another mental illness hospital, A3, rather than A2, mainly because of the problems at A2 described above. However some of A3's consultants were totally opposed to the idea. Following a paper by the Area Medical Officer (AMO) in 1980 the Area asked for proposals and in fact only A2 put forward one, an updated version of the original 1978 proposal. There were some difficulties because the proposal did not meet the requirements set out in the AMO's paper, discussions were held, and the proposal finally did go to the Area Health Authority (AHA) in mid 1981.

The Area agreed that the proposal should go out to consultation and following the problems at A1, the Regional Public Relations Officer persuaded Area that the debate should be as open as possible. The CHC agreed to help in the public relations exercise. Two public meetings were held and, in advance to these meetings, the CHC delivered 3000 leaflets door-to-door locally, explaining the secure unit and inviting people to attend. There was considerable public opposition, mainly on the grounds that there were already several hospitals for the mentally ill and handicapped, and the residents felt they should not have to put up with any more patients. Not all present were opposed to the idea however. As well as hearing what the public had to say and receiving several petitions from them, the CHC also had a meeting with the prison and probation services, magistrates, and police and visited secured units elsewhere. At a special meeting on 19 January 1982 the CHC accepted the Area's proposal to build the unit at A2 though they did ask for certain conditions (e.g. concerning admissions and staffing) to be met.

Meanwhile other changes had been taking place at A2. In May 1981 a new consultant forensic psychiatrist was appointed, first as a locum and a year later on a permanent appointment. Thus it became clear who was to run the unit and the consultant was able to be very closely involved in its planning. In fact, he and a charge nurse drew up the original design, since modified by architects and in meetings of the planning group. At first there was some objection because the design was completely different from that of A1. However, hospital and district staff and the CHC were adamant

that they did not want a copy of the A1 unit and the Region now seem to have accepted this principle. A project team has been meeting since May 1982 and the plans went to the DHSS for approval in principle in 1983, with completion planned for 1986. In mid 1983 the unit has not yet got planning permission and there are still some concerns that public opposition may emerge again when permission is sought.

**Factors influencing development in Region A.** In comparison to other regions, Region A has moved fairly fast. It did have a number of problems with the A1 unit but it opened in 1983. Planning for A2 also seems to be going ahead fairly smoothly. One feature has been the continuing interest from Region. There seems to have been a belief at Region that these units were needed, in part because of the problems in placing patients from special hospitals and prisons. Although there is little evidence of strong enthusiasm from the various Regional Medical Officers (RMOs) who have been in post over the period 1974-83, the SCM responsible for mental health played an active part. Unusually, the chairman and RHA were forced also into playing an important part because of the local reaction and public enquiry. The public enquiry, although an unpleasant experience for those involved, seems to have encouraged 'team spirit' and determination at Region.

At A1 the consultant was a highly effective product champion. He had forensic experience and was able to convince colleagues locally and at Area and Region of the need for a secure unit and the suitability of the site. Some of the subsequent difficulties were no doubt due to his leaving the country because it raised the question of who was to run the unit.

Even without the consultant, the hospital continued to be supportive of the development as were the DMT, perhaps because they could see a prestige project coming to their area but also, particularly on the part of the administrator, because of a concern for mental health and the problems of patient placement. The AMO was also supportive and willing to keep the wheels of the bureaucracy moving. Thus, all the way along the line, there was some support although not necessarily great enthusiasm. Unusually, too, most of the main figures stayed in post throughout the process. The question is why did A1 cause so much public opposition that a public enquiry resulted? Despite the real concerns

of the public, much of the reaction can be blamed on the low key approach to informing them in the early stages. However, at that time there was little experience around the country of how public relations on secure units should be handled.

For various reasons there were long delays before serious planning began at A2: internal politics at the hospital, the lack of a forensic psychiatrist able to promote the unit, fear at district level about pushing the hospital too hard and lack of interest from Region until they had resolved the problems at A1. Once the decision was made to go ahead with A2, there has been fairly rapid progress. In part this is due to the fact that it was originally the hospital who put forward the proposal. Support for the unit has also grown since the appointment of the new forensic psychiatrist. Although a new appointment, the consultant was already well known and trusted locally. Consequently his views are respected and he has been able to push the unit along. There is also an active CHC who were able to listen to the views of residents, discussed the pros and cons and took a clear decision. Finally, the DMT are supportive of the development. If the A2 development has been slowed down in any way it is perhaps because the proposal did not conform to the A1 policies and structure, which Region would have preferred, and this has required negotiation.

One final point should be made about Region A. In some ways they were lucky in their policy. Although the policy of two smaller units was deliberately chosen for geographical reasons it fits in with the currently held views on secure units (that several smaller units scattered around a Region are probably preferable to one large single unit), although at the time the policy was stated, the national policy was more towards large single units. Similarly by not conforming to DHSS policy concerning the provision of interim facilities the Region probably also gained. Several regions have got themselves into complicated wrangles with many of their districts and hospitals in the process of trying to identify suitable sites, either for interim or permanent units. Region A was fortunate in being able to find two hospitals with some enthusiasm for the units from the outset.

### **Region B (see table 8)**

Region B was one of the few regions to make any response to the 1961 government recommendations and in 1968 set up a unit for

psychopaths. Although this unit might have provided the springboard for secure unit development in Region B, by the time the issue arose in 1974-75 the unit had become more specialized along the lines of the consultant's interest and had become a 25 bedded unit for adolescent psychiatry.

**Table 8. Region B: Secure Unit Development.**

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing event &amp; main characters</i>
1974	Butler and Glancy: RMO set up meetings with psychiatrists. Hospital B1 felt to be most suitable site for secure unit.	
1975	Discussions at B1, architects review site.	Little support from consultants (none attended 1974 meeting). Major staff problems at B1. Region felt development unlikely.
November 1975	B1 abandoned (nevertheless local discussions continued). Region asked Areas for proposals.	
Early 1976	Public discussions at hospital B2 & B3. B4 (mentally handicapped) designated as interim secure unit.	Major public opposition but staff interested, some support from CHCs. Hospital administrator opposed at B3.
Mid 1977	B2 and B3 abandoned, decision made to re-explore B1.	
1977-79	Little activity.	
February 1979	Region put pressure on B1.	Parliamentary Questions and pressure from Secretary of State activates Region. Meanwhile changes in management at hospital.
July 1979	Area approved B1 in principle. Public consultation.	No public opposition.

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing event &amp; main characters</i>
January 1980	All areas asked for bids for interim unit. B1 put in proposal: accepted. B3 also put in scheme: rejected as too ambitious.	B3's attitude changed; different staff and threat of closure.
1981	Forensic psychiatrist post advertized, delays in appointment, finally appointment only in 1982 Planning team established	Shortage of forensic psychiatrists. Concerns that post not thought out. Particular individual assigned to planning speeded up events.
November 1982	RHA policy paper setting out policy for one central and two sub regional units.	
August 1983	Stage II (budget cost) submission approved by DHSS, building of permanent unit scheduled to begin spring 1984.	
October 1983	Interim unit opened.	

Following Butler and Glancy the first round of discussions were started by the RMO with letters to AMOs and psychiatrists. In October 1974, a meeting was held where the possibilities for the location of the secure unit were considered. Hospital B1 was suggested as being the most suitable site because of its inner city location and previous experience of housing regional specialist units. However, none of B1's consultants were present at the meeting and it was not clear what their reaction would be. Other hospitals were mentioned but for various reasons such as isolation or position outside the Region they were unsuitable. It was felt a 70-bedded unit at B1 should be explored and also that recognition should be given to the forensic work already going on at the two institutions for the mentally handicapped in the Region.

There were internal problems at B1 and the Regional team of officers felt that the unit would be an unlikely development. Nevertheless, they endorsed further discussions and the framing of an operational policy. A meeting was held at B1 in December 1974 and there appeared to be some support for a unit, providing it was purpose built and smaller, perhaps 30 beds. During 1975 an architect visited B1 and it gradually emerged that there were various problems with the site. In November 1975, the Regional Planning Group suggested that the B1 site should be abandoned. Instead, the Region asked for proposals (in the first instance for a 30-bedded unit) from Areas.

The press release on this request for proposals caused quite a stir around hospital B2 with the parish council quite opposed to the idea. The villagers seem to have been more concerned about patients being released into the local area than about security in the unit itself. The staff at B2 were interested but there was some ambivalence from the two CHCs concerned. Nevertheless the AHA did set up a working party which put forward its proposals in March 1976. Meanwhile elsewhere, the CHCs and the RHA felt that a unit at B3 might be possible. The CHC said, however, that the unit should be much bigger so as to have a full range of facilities. In June 1976 a team from Region visited both B2 and B3. They felt that there was no agreement at B3 (in part because the hospital administrator lived locally and he opposed the idea) and therefore encouraged consideration of B2.

At the two mental handicap hospitals, nurses had already been lobbying to obtain the lead payment as they were already dealing with difficult patients. The consultant at one was concerned that the work they had been doing there for years was being ignored. The AHA set up a Working Group in December 1975 to see if proposals could be put forward for a secure unit at either hospital. At one there was no consensus between medical and nursing staff, the nurses in particular were afraid that patients would be 'unloaded' from Broadmoor. The other hospital, B4, finally did propose a 40-bedded purpose built unit but this did not meet with much favour at Region who continued to try to persuade them to consider adapting a building. The proposal was shelved.

In July 1976 the RHA decided the following:

1. That the idea of a joint unit with another Region, which had been discussed should be dropped.

2. That the mental handicap hospital B4 should consider an adapted building.
3. That a conversion at B2 should be explored as well as the feasibility of a new unit at either B2 or B3.

No progress was made on a permanent unit at B4, although it was agreed in August 1976 that 6 wards there should be designated as an interim unit, to reduce to 4 wards and 65 beds in 1977. It was agreed that this would be the only centre in the Region to provide secure facilities for the mentally handicapped.

Both the B2 and B3 proposals caused further local reactions. Residents near hospital B3 said that they would be as opposed as B2s residents if B3 were considered. In addition the local Council said they would oppose a secure unit at either hospital. Thus, by mid 1977 the two hospitals were dropped as potential sites. For a few months the idea of a joint unit with another neighbouring region seemed to be one option but this was also dropped by November 1977. It was then decided that hospital B1 should be re-explored. There was little or no enthusiasm there, although a meeting was held with the consultants in July 1978.

During the period 1976-early-1979 it is clear that there was not a great deal of pressure from Region to achieve a secure unit. Late in 1978 the pressures began to change, however. There were Parliamentary Questions asking which regions had not submitted proposals for a secure unit and, in January 1979, 19 MPs tabled a motion expressing concern that there were no proposals from Region B. Local CHCs also were writing asking what had happened to the secure unit monies and pressures were also coming from local magistrates. Patrick Jenkin, the then Secretary of State, also emphasized to the RHA chairmen that secure units were a priority. At this point the Regional Medical Officer became more active. B1 was felt to be the most suitable site for a unit because it was in an area of high population density and was also next to a district general hospital. For both reasons it was not likely to be threatened with closure. The other factor was that hospital staff were becoming more receptive to the idea, partly because of the negotiations which had been taking place locally between 1974 and 1979.

**Discussion at hospital B1.** Following the abandonment of B1 in 1975 the issue was not entirely lost locally. The SCM covering

mental illness at Area made sure that the Psychiatric Working Group kept secure units 'on the agenda'. At first the discussions were informal but, by November 1977, there are records of preliminary discussions between the Area and some of B1's consultants about a unit there. It was decided that visits should be made to some of the other units around the country but unfortunately this was at a time when the early units were recovering from union and local opposition. Thus, although some of B1's medical staff were in favour, another group were quite opposed, on the grounds that it would change the nature of the hospital and change relationships within it. There were also difficulties because of the poor industrial relations at B1, with nurses feeling that they could only get any change accomplished by union action. It seems that the proponents of secure unit development were fighting a very uphill battle. Nevertheless, a great deal of ground work had been done both with consultants and with nursing staff and a draft operational policy had even been written.

The reopening of discussions in 1978 and the pressures from Region coincided with a period of change at B1: a new Administrator, District Nursing Officer, and Director of Nursing Services were all appointed over a short period of time (some later than the 1979 discussions, however). This team were keen to see changes and accepted the secure unit as part of the change. At the same time it seems that industrial relations also improved considerably.

In February 1979, a meeting of Region, Area, and District representatives was held and it was agreed that an operational policy for a secure unit should be produced for discussion. Events seem to have moved quickly thereafter. The Area approved the idea in principle in July 1979 and a consultative document was sent out in August 1979 for a 30 bed purpose build unit at B1. The document went to professional groups, union, CHCs, Councils and other local bodies. Following this consultation, Area gave approval to go ahead with planning in December 1979 and the RHA approved the idea and agreed that a forensic psychiatrist followed by a nurse in charge should be appointed in advance of the unit being in operation.

During this period the idea seems to have developed that B1 should have an interim secure unit until the permanent unit was in operation. It was argued that this would help gain experience in treating difficult patients. The interim unit also seems to have been a way to sell the secure unit concept to hospital staff. In January



1980, all Areas had been asked for bids for interim units and both B1 and B3 responded. At B1, the hospital administration developed a complex scheme of upgrading wards and decanting patients, finally resulting in an interim unit. It seems clear that there could have been other locations or simpler moves and Region pruned this scheme. Nevertheless, because Region were so keen to get a secure unit established, they went along with still quite complex adaptations; the total package costing over £3/4m. The interim unit opened in 1983 and will continue to function until the permanent unit is available. Staff will subsequently transfer to the permanent unit. Not everyone is happy about the developments however. Several consultants, for example, have stated that they were not adequately consulted, though this has been disputed by other officers who point out they were often invited but did not attend meetings.

While all this was taking place, the permanent unit was also being discussed. During 1980, feasibility studies were undertaken but not a great deal seems to have happened. At all levels it seems to have been felt that the consultant psychiatrist should be appointed first so that he or she could have some say in the developments. This post was first advertised in March 1981 after delays about designating any beds for this psychiatrist at B1. There were very few applicants. This seems to have been due to the shortage of forensic psychiatrists. But it was also argued by some that the job had not been thought through sufficiently. The job was readvertised in January 1982 and an appointment made in August 1982. The delays in appointing a forensic psychiatrist caused some concern to those planning the unit. It was felt that his or her input was essential but, when no consultant had been appointed in mid-1981, it was agreed that plans should go ahead regardless. A consultant from a secure unit in another region was asked to join the project team planning the permanent unit and to give advice on the interim one. The major work on planning the permanent unit took place in late 1981 and 1982, with a particular administrator assigned to head the team at Region.

In March 1982 the AHA agreed both the permanent (40 bedded unit) and interim schemes and in November 1982 the Region put out a policy paper concerning not only B1s units but other plans for secure units. Building of the permanent unit is expected to begin in the spring of 1984.

**Developments elsewhere since 1979.** In 1980 when Areas were asked to put up proposals for interim units, B1 was not the only hospital to show interest. The relevant AHA suggested B2 but this seems not to have been taken up because of the known strong local opposition. The place where there was serious interest on both sides was at B3. There were by now fears about closure of the hospital which probably made staff more amenable to the idea and a major source of opposition, the Administrator, had left. This scheme however turned out to be very expensive, including residential accommodation for staff, so it was abandoned in August 1981.

Although there was then little progress on interim units (apart from the unit for the mentally handicapped), there was considerable discussion about whether B1 should be the only unit for the Region or whether there should be units elsewhere. When Region prepared its policy statement in 1982 it was agreed that a larger central unit plus two smaller sub-regional permanent units were needed. One of these units was to be at the mental handicap hospital where there were about 60 beds designated as interim secure and the plan is to reduce this down to a 15 bedded purpose built unit. The new unit will be for patients with mental illness who have mild degrees of mental handicap.

The site of the other 15-bedded unit has not been decided but has purposely been left vague for two reasons:

1. Region B is currently developing a mental health strategy and parts or all of one or more hospitals are likely to be closed. Until this strategy is decided, in November 1983, it would clearly be unwise to decide on the location for a secure unit.
2. It is felt to be important to leave some flexibility in the arrangements until there is experience with the B1 interim unit.

**Factors influencing development in Region B.** Region B is an interesting case because of its early recalcitrance in secure unit planning followed by very rapid progress since 1979. In the early period there was not a great deal of enthusiasm because secure units were not seen as a priority in the midst of other problems. Region backed down very rapidly when there was any suggestion of public opposition or lack of support within a hospital. It was only under considerable pressure from the government that action was taken at

Region and thereafter progress was rapid, partly because a development team with an experienced planner was given responsibility for the unit. This is an important point; there are several examples in these case studies where progress has been slow because it has not been clear who is responsible, especially at regional level.

In the early years (1974–79) at B1 there were considerable difficulties including industrial unrest. The consultants were against a secure unit because this would change the hospital including the internal power structure. The Area (officers and Authority) and District Management Team showed no overt opposition but in fact were probably not very interested, and perhaps somewhat afraid of meddling in the hospital's internal difficulties. Some officers, including an SCM at Area did keep discussions going, so paving the way for eventual acceptance of the scheme. The 1979 push from Region coincided with a period of change at the hospital. The new administrative and professional heads were keen to make changes and could see advantages for the hospital in having a secure unit, not least through the upgrading schemes proposed for the interim unit. Within the hospital perhaps there was less reaction to secure units than might have predicted just because so much was changing.

By the time consultative documents and policy statements went out in 1979 and 1982 the climate of opinion seems to have changed amongst the general public. Thus Region B has probably benefitted by being relatively late in getting started, both in terms of the public reaction and also in terms of the experience in planning units.

### **Region C (Table 9).**

**Early interest to site selection.** Interest in forensic psychiatry existed in Region C well before 1974. In 1967 a joint Home Office/NHS forensic psychiatric appointment was made, although the psychiatrist, even now, has only a limited number of beds which are not secure. In 1969 the forensic psychiatrist put forward a proposal for a 50-bedded secure unit to the RHB. This proposal was accepted in principle by the planning committee in 1972. Developments were then slowed by what was happening at national level. The Butler and Glancy Committees were set up and it was not until July 1974, that the DHSS authorized the Region to proceed with planning and shortly thereafter it was announced that finance would be available nationally.

**Table 9. Region C: Secure Unit Development.**

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events and main characters</i>
1967	Appointment of forensic psychiatrist (joint with Home Office).	} Consultant acted as product champion throughout.
1969	Consultant submits proposals for secure unit.	
1972	Proposal considered by RHB planning committee, but no money from DHSS.	Support in principle from RHB.
January 1975	Project team established and agreed one unit (100 beds). C1 suggested as site.	Hospital consultants at C1 strongly opposed to unit.
Mid 1975	Area agrees to unit in principle, consults districts for site.	District and hospital staff enthusiastic at C2.
June 1976	Area approved C2 & project team reactivated.	
1976-77	Delays while project team membership increases. Stage 1 submission in May 1977.	Little support from Region. Some of Regional officers concerned about 'diversion of resources to secure unit'.
1978	Public consultation.	Major public opposition. CHC opposed mainly to size.
1979	Initial planning permission refused but given when different site in grounds chosen. Meanwhile major public relations exercise undertaken.	Planning permission refusal seems to have been in recognition of local opposition. Public relations officer very active.

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events and main characters</i>
1979-81	Planning continues.	Very slow, large size of unit, unwieldy project team.
1982	Consultant at interim unit says C2 unit far too big. Meeting with RMO & project team.	All regional officers felt too late to change design but much support for this view from psychiatrists around Region, CHC, and others.
1983	Plans for 100 bed unit continue though still questions. Completion due 1986.	

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NB. As discussed in the text, interim units have also been set up in Region C only the permanent unit is included in the table.

Meanwhile a small group had continued to meet in Region C. They worked on the operational policy for the unit and began discussing possible sites. The group suggested that the unit should be at C1 (where the forensic psychiatrist was based and which was located next door to the prison) but this was rejected by the hospital. In any case the Region felt that there was very little space and that C1 was not a good choice because there had been difficult staff relations at this hospital.

The publishing of the national reports made some difference to the size of the unit. The requirement for 20 beds/million population meant that the Region needed over 100 beds. Although there were early discussions about whether there should be one or several units, it was decided rapidly that a 100-bedded unit would be provided with 4 consultants. The psychiatrist promoted the idea of a single large unit on the grounds that it could take a range of patients with differing security needs and could provide a range of services. Getting a secure unit accepted at one site rather than two or three

was also an argument. More recently it has been said that the unit will have advantages in that it has the security to accept patients on remand for assessment.

Although a project team was set up in January 1975, this had to be abandoned because there were so many unresolved issues. The main difficulty was over the site. In July 1975, the Area covering the main city was asked to agree to the unit in principle but they felt unable to do so until the various hospitals, and DMTs, which might contain the unit had been consulted. C1's District were strongly opposed to the idea and it seems they were joined in that by the consultants who said the unit would block development of the hospital. However, at hospital C2 there was reasonable support from the DMT and hospital staff and there was space for such a unit. Thus this site was selected. The site already has three mental illness and one geriatric hospital on the campus but still has considerable land available. It seems that the DMT supported the idea because they recognized the patient need and also saw it as a prestigious project (though this would be balanced by the work and problems it would bring). Because the unit was to be quite separate from the other hospitals there was relatively little need to involve their staff. C2's Area seems to have played only a minor role although in June 1976 it did finally accept the proposal and the project team was reactivated.

The project team included representatives from Area, District, and the C2 hospital and over time the membership has expanded to include trades unions, CHC, and other professional group representatives. In fact, it has a total membership of over 40 people though many individuals are only invited to attend as issues of interest to them appear on the agenda. The project team has dealt with the planning of the unit while the Regional Working Party on Forensic Psychiatry deals with matters of policy.

**Opposition and delays.** Throughout 1976 and 1977, while the project team grew, many details of the unit had to be resolved including staffing levels, discussions about where and how catering, laundry and heating should be provided etc. The proposal was submitted to the DHSS for Stage I approval in May 1977. It was not entirely supported at Region, however. The Regional team of officers for example, expressed to the DHSS their concern about the diversion of resources (finance but especially personnel) from other

priority groups. The team agreed that planning should continue and that consultation should take place with the unions but put it to both the DHSS and the project team that the staffing levels were too high. The DHSS in fact gave Stage I approval in April 1978 but suggested that the Region modify some aspects of the unit to keep within the amount of finance to be provided by the DHSS (unless the Region was willing to make up the difference, which it was not).

Meanwhile opposition to the unit was emerging. Initially hospital staff at C2 were fairly supportive, but once it became clear that the unit would not rid them of unwelcome disruptive patients, their enthusiasms waned. However, there has been little overt opposition. The local CHC has also expressed some concern. Their attitude from early on was that they were not opposed in principle to building a unit but that it should be much smaller. Their arguments are based on the fact that one central unit will make rehabilitation very difficult, that the NHS policy has been developing towards small units for many care groups, and finally, that there will be great difficulties in staffing the unit. The CHC has expressed these views throughout the planning period including letters to the DHSS and the Secretary of State but seems to have had little success.

The major opposition to the unit came from a group of local residents. The underlying concern seems to be that with three nearby psychiatric hospitals they felt that they already had to put up with quite enough. Although the DMT and Area officers met with the residents association in 1976, the residents seem to have felt that the unit would not go ahead. Gradually opposition from residents developed. When the press described the unit as 'Colditz', following release of the plans in 1978, a public meeting was held and a group called RASH (Residents Against Secure Hospital) was formed.

The opposition became more overt when the project was sent to the local authority planning committee for outline planning permission. A petition of 330 signatures was sent to the committee. Probably because of this local opposition planning permission was not forthcoming. However, the project was not rejected entirely but it was suggested that a more central location nearer to the other hospitals and away from the residential area be chosen. The movement of the site was fairly minor but it caused much dispute within the Health Service. The CHC were opposed because it brought the unit nearer the geriatric hospital and to a staff nursery;

the unions were opposed to the change as were the DMT. In April 1979, the Area approved the new site after some members had visited the campus that same day. This led some individuals to say that the project team and Health Service had given in too easily. However, the Region and Area agreed that the unit should go ahead on the altered site and planning permission was forthcoming in September 1979. The Area and Region were clearly very anxious to avoid a public enquiry because of the potentially long delays.

Because of the difficulties caused by the residents group the Regional Public Relations Officer became involved with the project team towards the end of 1978. Throughout, there had been a positive strategy to meet all interested groups at intervals to keep them informed and also to involve the unions at regular meetings to ensure that they had an opportunity to keep up to date and to voice any comments. In addition, a private seminar was held for all the Region's MPs; a one day seminar was arranged in 1980 at the university to which CHC, local authority, and Health Authority members were invited; and some time later the residents' association leader, the local MP, and a few other representatives were taken to see another secure unit. This visit seems to have been a turning point after which the residents stopped their opposition to the unit and changed to the view that it was just too large.

During this period, Region C was aided by pressures from magistrates, from prison visitors and the prison governor. These groups continued to speak out about the difficulties in finding appropriate accommodation for prisoners.

Since 1979, planning of the unit has gone ahead and the DHSS approved the Stage II planning in October 1981. There have been delays in development mainly, it seems, because of the size of the unit, the largest in the country. In mid 1983, the Region is almost ready to go out to tender and building is planned to begin late 1984 with completion in 1986. However, there have been concerns about the size of the unit. The question arose following a visit of a Health Advisory Service team in 1980; the team recommended that the unit should be halved in size. The issue was debated during the Stage II submission but the Health Minister finally said that the unit should go ahead on the original basis.

Then, in November 1982, the consultant in one of the Region's interim units wrote a paper based on her experience. She argued that the main unit should have 50 beds with some of the interim



units continuing as peripherals and not being closed as had been planned. The view concurs with what a number of people around the Region are saying. The paper was sent to the RMO and led to a meeting with core members of the project team but they would not agree to changes in the plans. Their arguments were that changes at this stage would cause major delays, in fact planning would have to start from scratch. Other arguments were that small units were costly and there was no evidence about the effectiveness of small versus larger units at present. Thus the 100-bed unit is going ahead, albeit slowly, while there are reservations from several quarters about whether it is the correct approach, whether it will ever be possible to staff it, and whether there will be adequate revenue to open the full 100 beds.

**Interim units.** While plans were continuing for permanent units, Region C did initiate interim units. These will be described briefly under the four Areas concerned.

In Area 1, the AMO saw an opportunity to help develop the main psychiatric hospital. He was influenced by the failure to provide a service to a group of patients requiring it and the need to develop special functions at the hospital which, with a new psychiatric unit in a nearby acute hospital, was in danger of becoming simply a long stay hospital. At first there was resistance from the hospital, but the AMO was a member of the psychiatric division and, with a united team of officers behind him, was able to get the idea accepted by the division. The lack of support from the consultant group was only overcome when it was clear that, in adapting accommodation for the interim unit, other wards would also be upgraded. The reaction of local residents seems to have been fairly low-key. However, after some adverse comments in the local press the AMO and General Administrator felt it would be wise to hold a public meeting and they approached the Regional Public Relations officer for help with it. Maximum publicity was given to the meeting through the press and by delivering leaflets to 5,000 householders within a 5 mile radius of the hospital. The public meeting went well with the main concern being about security in the unit rather than whether it should be located at the hospital. A forensic psychiatrist was appointed and the unit commissioned in 1981. The unit has had problems in attracting an adequate number of experienced staff and it is still only 'finding its feet'. The current policy is that this unit

should be kept going even when the 100 bed permanent unit is open, if funds can be found.

A second hospital in Area 1 had also expressed an interest in having a secure unit. This hospital is a mental handicap hospital and was subsequently identified by the Regional Working Party on Forensic Psychiatry as a suitable site to provide for the needs of the mentally handicapped. An 8-bedded unit was established on a permanent basis though it is outside the main secure unit programme.

In Area 2, the Region hoped that, at most, two interim units could be provided but the Area was adamant that all three psychiatric hospitals should have a unit or none at all. At C2, the DMT suggested that a 12-bedded purpose build unit be provided. Considering that the permanent unit was to be built on the same site this proposal was not looked on with much favour by the Region. At a second hospital there was reasonable enthusiasm because they were already taking difficult patients. However the consultant promoting the idea retired and enthusiasm gradually died away. At the third hospital, C1, despite all the early opposition to secure units, there has been a change in opinion. By some, the change is thought to have come about because of fears of closure of the hospital. By others, it is thought that the hospital has seen the need to diversify particularly to provide special interest placements for nurses and staff. The DMT proposed a 20-25-bed interim unit but this would have meant a loss of long-stay beds. The negotiations looked set to be very protracted and again the Region began to feel it was too late.

In Area 3, one hospital was very interested in having a secure unit and proposed that an old TB unit, which was being used for staff accommodation, be used and new staff accommodation provided. At first, Region and the DHSS were opposed to this plan, preferring that a ward should be adapted. However, it was finally agreed to go ahead. Again a public meeting with full publicity was held and there was an intriguing turn of events when the residents' leader from C2 told local residents in this area that they should have no fear about the unit. There were a number of problems at the hospital but the interim unit is now open and functioning, on the understanding that the unit will close once the permanent unit is open.

Finally, in Area 4, there was some interest from a hospital which

is located next door to a prison and with a consultant already doing forensic work. However, when it became known that another consultant would be appointed to run the unit, interest was lost and although eventually a plan was put forward, it was thought to be very expensive and was not encouraged.

In summary, in addition to plans for a 100-bedded unit, Region C has two interim units open, one of which is due to close when the permanent unit opens; it also has a separate mental handicap unit.

***Factors influencing events in Region C.*** The intriguing question in Region C is why the permanent unit has taken so long given that the Region was considering a unit well before 1974. There are other reasons for the delays but the role of the forensic psychiatrist product champion is important. He clearly had a central role in promoting secure unit development and his interest was the reason that the Region started planning relatively early. He also provided many of the ideas for the unit. However, he has become a national figure and a number of those involved with the unit feel that it is difficult to go ahead with particular decisions without his agreement and yet he is not always available to be involved. In part, the problem must simply be that the main enthusiast is outside the planning machinery.

There are also problems with how planning works in this Region. First of all, there have been three RMOs during the course of the project which cannot have helped in giving direction. Also, in theory, the Regional team of officers have been supportive of secure unit development both because of the product champion and also based on a conviction that the Region was not doing enough for psychiatrically disturbed prisoners. The evidence suggests, however, that there has not been a great deal of enthusiasm. In the early days the Region were wary not to commit themselves to anything until they knew that central funds would be forthcoming and, in 1977, expressed concern about whether secure units should be given such a high priority in terms of finance and personnel. There is certainly no evidence of any pressure from the RHA or the team of officers to step up the pace of development at any stage.

Then there is the actual machinery for planning the unit. Although the project team has met regularly, often fortnightly, since it was established in 1976, its way of working seems slow. The large membership is unwieldy and, although not all attend regularly, they

are able to delay decisions by attending even occasionally. The chairman of the team is also a District Medical Officer elsewhere in the Region so is presumably occupied with his duties there and can have little time to devote to secure unit development on a day to day basis. The impression is that decisions over quite small issues can take long periods of time. The sheer size of the project has brought its own problems. Of course, as in other regions, there were resistances from hospital staff and the public. However, these have not proved to be ultimate stumbling blocks in other regions and do not seem to be the main cause of delays in Region C.

### **Region D (Table 10)**

The former RHB had responded to the guidance from DHSS and, in 1966, established a secure ward for normal or border-line subnormal men. After considerable problems the unit's use was subsequently changed.

Following Butler and Glancy the Regional Psychiatric Advisory Committee recommended that a group should be set up to decide how to respond to the proposals and this group first met in October 1974. By the time of the meeting there had been informal consultations with all of the Region's mental institutions and the only one which would contemplate the idea of a secure unit was hospital D1. At this time the discussions were focused on the idea of a large central unit and the objections (at least from consultants) seemed to be that it would give entirely the wrong impression of their hospital. Nurses also expressed fears about caring for forensic patients. Early discussions led to the idea that a 40-bed adapted unit should be developed at D1, meeting about half the Region's requirements.

By early 1975, the Area responsible for D1 were objecting that they had not been adequately consulted and that they had been bypassed when the Region began consulting the unions. Throughout the next few years the lack of confidence of this Area in the Region (often the AHA itself more than the officers) bedevilled secure unit development. In 1975, the Area Nursing Officer (ANO) said that it was unclear how the working group had decided on the need for a unit, unclear why D1 had been chosen and expressed concern that it 'may tend to make hospitals more like prisons and this would be intolerable'. The Region agreed to Area officers undertaking a feasibility study at an alternative site and this group

Table 10.

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events and main characters</i>
1974	Group set up to decide on Region's policy for secure units. Hospitals canvassed, only D1 interested.	SCM at Region reasonably enthusiastic but other officers not keen.
1975	Meetings concerning D1. Area asked Region to explore other sites. Eventually agreed D1.	Area not supportive of development. Concerns from consultants and nurses.
August 1976	Project team established.	
1977	Area suggested hospital D1 should be closed. Public consultation over secure unit delayed.	Considerable confusion amongst public, CHCs, etc. about what was happening over secure unit.
November 1977	Area decided D1 to remain open and plans for secure unit to continue.	
January 1979	Document issued for public consultation.	
May 1979	Area rejected proposal for secure unit after consultation.	Some antagonism to unit from CHCs; Area accepted these arguments.
1980	RMO and RNO decided to take positive action, visited all mental hospitals. Developments at D1, D2 and D3.	Parliamentary pressures. New RMO felt responsibility to develop units. Changed to idea of each hospital dealing with catchment population, much more acceptable to hospitals. COHSE opposition.

Table 10. *cont.*

<i>Date of major event</i>	<i>Event</i>	<i>Factors influencing events and main characters</i>
July 1980	Project team set up to D2.	Local consultant keen.
March 1981	D3 scheme approved, opened 1983.	Consultant and director of nursing service keen to provide local service.
1981	Feasibility study for D1.	ANO particularly active.
1982	D2 scheme in abeyance due to hospital closure problems.	} Delays while decisions awaited.
Mid 1982	Proposal that 2 of Region's mental hospitals should close including D1.	
Mid 1983	Much of D1 to close but secure unit to go ahead there.	

reported in early 1976. It supported adaptation of one block at D1. The Area/Region difficulties resurfaced and it took several months to resolve who was in fact responsible for the project team and it was only in August 1976 that it was set up by the Region. By then, it was clear that the site chosen for upgrading was not suitable and outside consultants were brought in to plan a purpose built unit.

From the early meetings in 1974 onwards, the question of consultation with the local population and CHCs had been discussed. Late in 1976, the CHC for the Area in which D1 is located was contacted, and the Region suggested that a public meeting might be held on the subject at the hospital. The hospital actually lies outside the boundaries of Region D though the main user Area is within the Region. The user Area's CHCs felt they should have been consulted earlier too. Consultation might have gone ahead in 1977, including the public meeting, if at that point the four CHCs of the main catchment Area had not jointly requested that the hospital should be closed. This proposal rather shook the development of the secure unit. The Area asked Region

not to proceed because of the possibility of D1's closure. Region urged a speedy decision about the hospital and also got Area's approval to continue planning since it seemed unlikely that the hospital could be closed very quickly. However, it was agreed that some of the officers from Region should canvass other hospitals to see if the unit could go elsewhere. This survey produced little: some hospitals were entirely against the idea, in some hospitals the nurses were for it and the consultants against it and vice versa. By November 1977, the Area had decided that D1 did have a long-term future. By then a forensic psychiatrist (on a joint appointment between Area and the Home Office) had sessions at D1. The hospital had academic links so it was felt by Region that D1 was still the right place for the unit.

The DHSS received Stage I submission on D1 for approval in principle in November 1976 but they were not happy about this proposal. Their objections were based on the fact that only about half of the required beds were to be built. They felt that the unit was expensive and were not keen to pay for the residential accommodation which D1's staff had negotiated into the package. They also objected that the unit itself was mainly residential and that it would have to rely on the rest of the hospital for other facilities (and there seems to have been a concern that this was a way of ensuring the future of the whole hospital) and finally they were concerned about the proposals for D1's closure. The submission was not rejected but Region were forced to take out much of the detail in the subsequent consultative document because the proposals were not agreed (the resulting document was argued by CHCs to be far too general).

A draft consultative document had been prepared as early as 1977 and throughout 1978 there was negotiation with Area and the DHSS about what it should say. Meanwhile, there was continuing pressure from CHCs to obtain the document. It was issued finally in January 1979 but without the full backing of the Area who said they would not take a decision on the proposal until after consultation. It was known that the CHCs were not likely to be supportive of the D1 development and that turned out to be the case. The major objections from them and others were that the hospital did not even lie within the Region, that patients would be far from their home communities and less easily rehabilitated, and that the whole thrust of government policy was to develop locally based community

psychiatric services and this development did not fit in with this policy. In addition, it was argued that there was no evidence of a regional strategy for the patients who might require secure unit care and other models were set up as an alternative to the large unit at D1. The AHAs were convinced by these comments (despite the fact that their officers had been thoroughly involved in the planning) and in May 1979 they rejected the D1 proposal, arguing additionally that the NHS should not be providing resources for care of patients referred through the penal system who ought in their view to be the responsibility of the Home Office.

Thus by mid-1979, despite all the planning over the previous five years, it was 'back to the drawing board'.

**The second phase.** Secure units, particularly the lack of them, had by now reached some national prominence. Additionally, more AHAs had been facing problems from the courts and prisons about patients who might have been suitable for secure units. Both because of these pressures and by now a real commitment to get something done, the Region's team of officers developed a new proposal. They put to the RHA and DHSS, in 1979, the idea of a two-tier service: with a rather larger unit of perhaps 30 beds at D1 as a resource centre and with several peripheral units. In part this idea had come from the Regional Psychiatric Advisory Committee who felt that with the Area rejection of the D1 proposal it was now time to look at a more comprehensive service for the mentally ill offender.

Prior to 1979 several Areas had been actively thinking about secure units including visits to special hospitals. When, in 1980, the RMO and regional nursing officer (RNO) carried out a series of meetings, visiting each of the mental hospitals and discussing the two-tier approach with the chairman of the psychiatric division and a nursing officer at each, the results were more promising. They resulted in a change of Regional policy to accept D1 as a resource centre but with several other hospitals developing units for their own population. A press release was issued on this general policy in November 1980. Two hospitals still rejected the policy, the remainder agreed that they might be willing to develop intensive care units (the Region's preferred name for a secure unit) provided that they were only expected to deal with patients from their own catchment area. The three most positive developments which



emerged from the 1980 discussions concerned D1, D2 and D3 hospitals.

**Hospital D1: Second Proposal.** By 1980 when a different sort of unit was being discussed for D1, talks about closure had influenced opinions. The administration, staff, and consultants saw a unit as a lifeline. There was, however, disagreement with COHSE over the fact that the new plan was for an adapted rather than a purpose built unit. They argued that the new Regional policy was just a way of getting cheap, less secure units. Some resolution resulted after COHSE leaders met with regional officers in 1981. It seems that at Area level there was more enthusiasm for the unit now than there had been in the past. The new ANO became particularly involved. She felt that it would give the hospital a better future and was convinced by the forensic psychiatrist that there was a need for such a unit. Following discussion between Region and Area, the AHA agreed to set up a feasibility study to plan the unit. There were still some concerns from the staff: about staffing levels and about the lack of residential accommodation which was no longer included in the package. Management had concerns about whether it would be possible to fill the posts and Area had concerns about resources, particularly about whether Region would pick up the full revenue costs.

The feasibility team produced a document which went out for consultation in early 1982. This was for a 20-bedded adapted unit. The CHCs had been kept informed throughout and, though there was still some suspicion, the CHCs were concerned that the Region was not meeting the needs of this client group and had been pleased that account had been taken of many of their objections. One CHC offered to organize a public meeting and this might have gone ahead except that the question of D1's future again became the joker in the pack.

During the period 1980-2 there was much debate at Region about the whole strategy for the mentally ill. A working party of professionals recommended that at least four and perhaps all of the mental hospitals should remain for the foreseeable future, each to be developed for specialist functions. This proposed policy received little support from any quarter and, in 1982, the Regional team of officers proposed that two of the large mental hospitals should be shut. In mid-1983 the decision was made that the main building at

D1 will close but that the secure unit will go ahead. So planning and negotiations are now beginning again.

**Hospital D2.** The consultant psychiatrist at D2 was a member of the Royal College of Psychiatrist's Special Committee on Secure Facilities. He argued strongly the need to incorporate secure facilities into the whole range of psychiatric provision and not just to develop separate units. Having argued this case he felt obliged to show that this could work and planning had started prior to the RMO/RNO visit in 1980. The Area and the CHC were both supportive of the local catchment population proposal and so a working party was set up and met first in July 1980. After discussing various options, it was agreed that there should be a first floor purpose built unit, built on top of the existing day hospital. Major efforts were made to consult the public and there appears to have been little opposition, perhaps because D2 has a good relationship with its local community and CHC and, in any case, it is only partially devoted to psychiatric care. There was little problem with staff since the hospital has traditionally accepted referrals from courts, prisons, and special hospitals. The AHA approved the scheme in mid-1981.

Like D1, however, the development has now foundered on more general plans. A new District general hospital is being built and in a series of moves it is proposed to move all psychiatric services from D2. The uncertainties have meant that the secure unit plans have been in abeyance. Because of the potentially long delays, the working group is to be reconstituted perhaps to set up an interim unit at D2 to gain some experience.

**Hospital D3.** In the early days, the consultants and nursing staff were against the idea of a single secure unit, which they felt was the wrong approach. When it became clear they might be able to develop a service just for their catchment population, the idea became much more acceptable. The philosophy of the consultant and the director of nursing services is that such a unit should be an intensive care unit (by analogy with the intensive care units in medical care) serving the needs of their population and therefore with the possibility of local rehabilitation.

Because the medical and nursing leaders were in agreement, the

development seems to have proceeded very rapidly. The region was supportive and there seems to have been little involvement of the Area or District. The DHSS approved the D3 scheme in principle in March 1981, the formal consultation took place shortly thereafter. Two wards were upgraded and were opened in 1983. There are some differences between this unit and most secure units: the D3 unit will take acutely ill patients on admission; there will also be no fixed limit on the length of stay.

**Factors influencing developments in Region D.** Initially almost everywhere in the Region the large single unit approach unit was objected to on the grounds that it would:

- (a) be very difficult to staff;
- (b) destroy the hospital's recent and hard won improved public image;
- (c) cause jealousy within the rest of the hospital.

The more recent proposals were accepted more readily, partly because the idea of covering only the usual catchment area of the hospital was more acceptable to both medical and nursing staff; partly due to the considerable work which had been put in by some areas, districts, and individual psychiatrists; finally, the threat of closure has clearly been a major influence in changing the views of staff on the basis that if money was put into development of secure unit it would help safeguard the hospital's future. However, closure has been a two-edged sword. A major block to development of secure units in Region D has been the uncertainty over psychiatric services. The question of closure has inhibited development at D1 twice and it has also had a part in blocking the D2 unit.

At Region there does not seem to have been a major drive towards secure unit development, at least until 1979-80. Although local psychiatrists were influential in getting the D2 and D3 proposals off the ground, there is no regional forensic psychiatrist appointment to push developments at regional level and this must partially account for the lack of interest.

Finally the mistrust between the Area and Region certainly influenced D1's development. At several point this slowed down developments and seems to have been an important factor in the 1979 rejection of the D1 scheme.

## **Factors influencing secure unit developments**

In the early days no additional funds were available to regions and there was little incentive for managers to take on the problems of secure unit development. However, from 1974 onwards there was clear government policy and indeed considerable pressure from the DHSS; funds were provided for capital and subsequently for most of the revenue implications. The need for such units was also apparent. Need, policy and finance are clearly not enough to get over the hurdles and the resistances have been well illustrated in the four regions. Here some of those blocks and the more positive pressures are drawn together.

### **Philosophy and attitudes in mental hospitals**

One of the greatest stumbling blocks to secure unit development has been the attitudes and philosophies of nursing and medical staff within hospitals. Prior to the 1959 Mental Health Act most mental hospitals had locked wards and so had the facilities for and experience of dealing with difficult or dangerous mentally disordered patients. Despite all the other benefits, as mental hospitals became open, the facilities, and more importantly, the skills for dealing with these patients gradually declined. This not only fostered the need for secure units but also influenced the climate of opinion in which secure units were seen as a retrograde step. Even when staff could see the necessity for the units, often they did not wish to be associated with them. Doctors and nurses have been frightened that the more open and enlightened environment they had been trying to create would be reversed by the presence of a secure unit. In addition (14) many staff no longer have experience with dangerous, particularly offender, patients and are afraid of working with them.

Though these attitudes have been spelt out in the Royal College of Psychiatrists report and elsewhere (14), there are signs that there has been progress. The early interim units have been very influential in spreading ideas about what secure units mean and what they can do. They have allowed themselves to be inundated with visitors and the forensic psychiatrists have acted as keen product champions. In the jargon of the diffusion literature the 'observability' of the initial examples of the innovation has overcome many resistances. The interim units have also met the

need for 'triability'. It has been possible to see how small units would work out before the larger units came on stream. However, the commitment to the permanent unit has usually been made in advance of results from the 'trial'.

There have been other changes in mental hospitals. In the early 1970s, morale was particularly low following the series of scandals and Committees of Enquiry, and no one wanted to know about the even more problematic secure units. Morale may not be high now, but the fear has more to do with the threat of closures and the loss of jobs. There are examples in several of the case studies of hospitals which were adamantly against secure units now saying they would like to have them. The high staff ratios and comparatively well equipped and comfortable facilities mean that secure units are beginning to be seen as prestige developments, particularly as many regions have left behind the notion of one single unit for a region and are planning smaller units serving more limited catchment areas. Knowledge has also spread about the sort of upgrading schemes which have been possible particularly for interim unit development. These are seen by some individuals as a bribe to hospitals but they have certainly increased interest in having secure units.

The threats of closure and the need for staff to have more positive attitudes to new developments has been a two-edged sword however. As illustrated in Region D, secure unit development has been delayed repeatedly while decisions have been taken about which hospitals are to remain open.

### **Flexibility**

There has been one great advantage in the fairly slow development of secure units and that has been in providing a range of different models over the country as a whole. Fortunately for once, the different units are also being evaluated so that there will eventually be some knowledge of the advantages and disadvantages of different sizes, structures, admissions policies, and modes of operation.

The slow development has meant that some regions, particularly the slow starters have been able to take advantage of the knowledge which has come from the interim units. For example in the case studies, Regions B and D have both been able to change the initial policy of one large unit to several smaller units. There may be other

disadvantages but the smaller more scattered units have advantages in 'selling' the units to hospital staff and local communities, who may have been afraid of the effects of a single large unit covering the whole region. 'Consuming the smoke' from a smaller catchment area is much less threatening.

### **Public attitudes**

In Regions A-D there has been public opposition to almost all the units. Newspaper cuttings of the mid-1970s provide interesting contrasts. On the one hand there were headlines about patients who could not be released from special hospitals because no NHS hospital would take them, and scandals about what had happened to the government monies designated for the secure units. On the other hand there were headlines about towns not wanting mini-Broadmoors. On the whole this can probably be summarized as seeing the need but not wanting it in 'our' neighbourhood.

There were good reasons for the public's fear. In the early days there was considerable confusion and misunderstanding about secure units and the public relations aspects were not recognized as fully as they should have been within the Health Service, an example is what happened in Region A. It has to be remembered too that secure units are almost invariably to be set up in existing mental hospitals and the public surrounding them often have genuine grievances about what patients have done. The open door policy and the development of halfway houses and hostels have exacerbated the situation. Local residents have many examples of unpleasant incidents to recall, though rarely are they particularly dangerous, and the idea of even more patients, and potentially violent ones at that, has been said to be more than a community was willing to bear.

Again, there have been improvements recently. There has been more attention given to informing the public and in giving them a chance to express their concerns and, as noted earlier, the smaller size of many of the planned units has helped to reduce the resistance.

### **Forensic psychiatrists**

Staff attitudes were discussed earlier but there is one group of people who have been particularly important as secure unit product champions and these are the forensic psychiatrists. Though the

patients have not changed and many psychiatrists have worked with offender patients for many years, forensic psychiatry is a new subspecialty, and as expected there is much enthusiasm amongst its founder members. The regions who had joint Home Office/NHS forensic psychiatrists in post in 1974 were usually the ones who got started on planning units relatively quickly. Those without were at something of a disadvantage in that there was no one in the field able to explain the need for the unit and often no one very enthusiastic in pressing for it. Of course, the forensic psychiatrist could not act alone and the most successful developments seem to have been where the psychiatrist was keen and had the support of managers particularly at region.

In this case study the product champions' roles have been interesting. Region C did have a very strong product champion forensic psychiatrist and for that reason was one of the first to formulate plans. Although there are various reasons why the development has been so slow in Region C, there is also a general opinion locally that one factor has been the role of the product champion. Because of his position as a national figure he is not always available for detailed decision-making and yet since he was so instrumental in the basic design, it is difficult to proceed without him.

Region A, the fastest of the four regions, did not have a forensic psychiatrist early on but there was one charismatic consultant with forensic experience promoting the idea and he was supported by managers both at district and at region.

### **NHS management**

An enthusiast for secure units would not be likely to get very far without management support. The degree of interest in secure units has varied from region to region and there is no doubt that enthusiastic management at region has been very important. Region B illustrates the point well; while there was little enthusiasm, particularly from the RMO, very little happened. Some explorations were made but the blocks were readily accepted. It was only when the RMO took the initiative, following government pressure, that things began to happen. With a development team headed by an experienced planner it was remarkable how quickly Region B was able to get on with the job and, despite its late start, should have a permanent unit open relatively early.

In some ways, however, looking at secure units as a regional

development tends to underestimate the work of areas and districts. The impression is that secure units come about when regions really began exerting pressure but this was often only successful because areas and districts had already laid much of the groundwork in discussing and persuading hospital staff.

The opposite effect is produced if region, area and district are not in agreement. Much of the slowness of Region D's developments can be put down to lack of consensus between region, areas and districts about the need, size and appropriate location of a secure unit. Four years were spent to-ing and fro-ing between the various tiers of the Health Service and whatever disadvantages the 1982 restructuring has had, it surely must have made these sort of negotiations easier by removing one tier.

Of course, the formal management tiers are not the only channels of negotiation and consultation. Previously areas and now districts have to consult with CHCs, local authorities, trades unions, and so on. The number of groups to be consulted is sometimes seen as a facile excuse for why developments take so long but with secure units it seems to have been a genuine problem. When any one of the groups decided to oppose a secure unit, skillful negotiations were required and in several cases the development of a secure unit was blocked for several years (as illustrated in Regions A and D).

## Conclusion

The development of Regional Secure Units is a fascinating example of how need and solution as seen from the centre may just not fit with attitudes and opportunities at the periphery. Fortunately in this case, room for manoeuvre was possible and though somewhat later than was perhaps envisaged, secure unit development is now taking off. At the same time, attitudes at the periphery are changing partly as a result of changes in the mental health services and partly as there is more experience of what secure units actually are and do.



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CASE

## 2

# ***Changing patient waking times***

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'Routines are a way of coping with stress'

(C. HANDY, *Understanding Organizations*)

A common complaint of anyone staying in hospital is that they are woken very early in the morning. However, changing waking times is not as easy as it sounds, since any change affects the whole routine of the inpatient day. Nevertheless over the last few years there has been interest in making the day more like the patient's usual pattern of living. The aim of this case study was to investigate some hospitals and Districts where attempts at change had been made, the extent to which these attempts had been successful and the reasons for success or failure.

### **The recent history of the inpatient day**

As early as 1961 it was seen as a problem that patients were woken so early. A Sub-Committee of the Standing Nursing Advisory Committee was set up (under Muriel Powell) to look at this problem as well as noise in hospitals. The Committee's report *The Pattern of the In-Patient Day* (1) said that 5-6 a.m. waking times were quite usual and recommended that this should be changed to 6.30-7.00 a.m. The report said this could be achieved by some tasks (e.g. bed-making) being done later in the day and not before the 9 a.m. ward

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rounds, and by trying to eliminate some routines. The Central Health Services Council commended the report and asked Health Authorities to review their arrangements.

Although many hospitals began to make changes, by 1968 the Standing Nursing Advisory Committee were still hearing of complaints about hospitals where patients were woken at a very early hour and decided to set up a sub-committee. The Central Health Services Council felt that medical and administrative aspects should be covered as well as nursing and the Committee was established with a broader remit and membership. It began work in 1971 and the final report *The Organisation of the Inpatient Day* (2) was issued in 1976. The Committee recommended that 'hospitals should periodically review the time that patients are wakened, taking into account that they should not be disturbed earlier than is absolutely necessary and that, if possible, those patients who do not need to be wakened should be allowed to sleep'. The Committee pointed out that the problems with altering waking time included:

- The amount of work night staff had to do;
- the timing of shifts—particularly as a result of shorter working hours;
- the time of medical rounds;
- treatments, etc. starting early in the day (e.g. radiology)
- the design of wards;
- and for geriatrics, staff shortages.

Following the report the DHSS issued a circular advising Health Authorities to study the organization of ward routine in their hospitals in line with the Committee's report (3). Despite further improvements the Royal Commission on the NHS (4) were still able to say that patients were woken too early.

### **The Case Study: The initial survey of Community Health Councils (CHCs)**

Actually finding out what times patients are woken up is extremely difficult. It often varies amongst wards and units in the same hospital and may even vary with different shifts on the same ward or on different days because of ward events. Thus there was no

question that a full investigation of waking times throughout the UK could be undertaken. But even finding out where change had been attempted posed problems. It was felt that because CHCs are particularly concerned about patient welfare, including patients' experience in hospital, some of them might have tried to bring about change. Although a survey of CHCs would not pick up all hospitals or districts where change had been attempted (because much change would have been initiated by NHS staff), it was decided that a CHC survey would provide a way to study the question.

In April 1982 a letter was sent to the, then, 228 CHCs in England and Wales asking for information on three questions:

- (1) Whether there had been any investigations of patient waking times in their district (by anyone, not just the CHC);
- (2) Whether the CHC had attempted to change waking times and their success;
- (3) If change had been blocked what reasons were given and if they had views on more fundamental reasons.

In reply to this open-ended letter, 57 replies (25 per cent) were received. Subsequently, in June, a follow up questionnaire was sent to the remainder. In this the questions were phrased more specifically with Yes/No answers and only questions (1) and (2) were asked. This brought forth a further 153 replies. Thus in total 210 CHCs or 92 per cent replied. Neither the letter nor the questionnaire asked about what the actual situation was, since that would probably have involved considerable work for the CHC. Current practice would, of course, influence whether the CHC felt the need to make enquiries or take initiatives and, in fact, a number noted that, in their opinion, the situation had improved considerably over the last few years.

**1. Investigation of waking times.** As shown in table 11, 70 of the 210 CHCs who responded said that they were aware of investigations of waking times in their district. Of those answering 'Yes' to this question, 19 mentioned that the investigation had been a formal survey of the inpatient day or a survey of patient satisfaction, often carried out by the health authority or by nursing and midwifery staff. Many said that they enquired on visits. 129 said there had been no investigation and 11 CHCs gave no information at all.

**Table 11.** *Response to the letter and questionnaire.*

1. 'Have there been any investigations of patients' waking hours in your district?'	Yes	70
	No	129
	No response	11
2. 'Has your CHC attempted to change patients' waking times in your district?'	Yes	43
	No	154
	No response	13
3. 'If yes, were these attempts'	Very successful	6
	Partially successful	33
	Not successful at all	3
	(Plus one investigating what had happened)	

Total response: 210 out of 228 CHCs survey in England and Wales.

However, even amongst those CHCs there often appeared to be some knowledge about waking times.

**2. Attempts at change.** Forty three CHCs (see table 11) had attempted to bring about change in waking times. Amongst the group who answered 'No' to this question a number made comments such as:

That waking times were already flexible;

That waking times now seemed acceptable and the 'dawn' patrol only operated in acute wards;

That after the results of their survey the situation seemed acceptable;

That nursing staff had earlier achieved change.

**3. Degree of success.** Of the 43 CHCs attempting change, six said their attempts were very successful, 33 reported partial success, three had no success at all and one was currently investigating what had happened.

The successful ones made various comments. One said change had happened because the district management team (DMT) also felt it was needed, and another said the change had been achieved by staff initiative. One success was based only on a particular ward

and one CHC had gained later waking times in arrangements for a new district general hospital (DGH) and hoped other hospitals in the district would follow. Another CHC commented that its success could be measured by the fact that patients were now awakened by the day staff rather than the night staff.

Partial success sometimes meant one ward or specialty rather than general change and more than one CHC commented that partial success had been achieved only by repeated discussion continuing after the change was supposed to have been made.

A number of CHCs made comments about the situation. A CHC secretary who had just been in hospital himself remarked: 'I came to the conclusion that the reason (for 6 a.m. waking) was really a matter of routine that was more to the liking of the staff, and which the patient was expected to accept without comment . . . I was left with the feeling that hospital routine exists for the benefit of everyone except the patient whose bad luck it is to be so incarcerated'. However, another said: 'Hospital routine was created many years ago for good reasons which still stand. As an ex-nurse and many times patient I can see no reason for change.' Clearly there is some diversity of opinion amongst CHCs as well as amongst health service staff about the need for early waking.

### **The Case Study: Follow up telephone interviews**

Taking into account that change may have already taken place as a result of initiatives from NHS managers or staff, and that not all CHCs would necessarily have been interested in the problem, it is interesting that 43 had tried to make some attempts at change. The next stage in the study was to interview the 43 CHC secretaries over the telephone to find out more about what they had done (since the amount of pressure they exerted would obviously vary) and what had happened. The interviews were semi-structured so that answers to the following questions could be obtained:

1. Why did your CHC become interested in the issue of waking times? (What did you already know about waking times in your district? How did you become alerted to the problem? Did it concern all hospitals, or one particular hospital or unit?)

2. How did you try to bring change about? (For example did you take to the DMT? Did you lobby any other groups?)
3. What happened? (Who supported you? Who was against you? What were the arguments of those against you? Do you believe these were the real reasons?)
4. What was the final outcome? Why do you think you were successful or unsuccessful?

The telephone interviews took place in June 1983. Of the 43 CHCs, 16 had tried to change waking times before 1978 and had no recent interest other than perhaps asking questions during hospital visits, 22 had taken up the issue in the last few years, four on further questioning had not really taken up the issue and one refused to answer questions. The results are analysed pre and post 1978.

**1. The sources and main reasons for concern.** As shown in table 12, the main source of knowledge and concern about early waking comes from visits. In the group active pre-1978 several of the CHCs who said that the issue came to their attention from visits, also said that they had other knowledge such as a CHC member who had a relative on the ward. Several CHCs were stimulated to take up the issue by the Report on the *Organization of the Inpatient Day*. In the 'other' category one CHC said it took up the issue following a Health Advisory Service (HAS) visit which identified the problem; one said the issue came from local knowledge of the CHC secretary; and one CHC had a Hospitals' Committee which was interested in the inpatient day.

What were the pre-1978 group concerned about? Table 13 shows that a total of 7 CHCs were concerned about long stay or geriatric units (and an additional CHC who said it was a general problem mentioned specific concern over 5 a.m. waking in the long-stay wards). Two mentioned 5 a.m. in long-stay and the rest were concerned about 6 or 6.30 a.m. waking. Eight said it was a general problem throughout the District with times mentioned ranging from 5.30 a.m. to 6-7 a.m. and one CHC was specifically concerned about the main acute hospital where waking was at 5.30-6 a.m.

Again, many of the 22 CHCs active more recently got their information from visits. Interestingly, in three cases, staff working

at the hospital brought the problem to the attention of the CHC. In one case it was a consultant (see District X below) and in two cases ward staff, one subsequently backed up by information from the hospital chaplain. All three examples concerned wards for geriatric or psychogeriatric patients. Two CHCs had got their information from surveys of patient satisfaction. The 'other' category included a variety of sources: walk-in complaints, complaints from relatives, a meeting with relatives on life in the hospital, comments from the public at other meetings, as well as interest from the Area Nursing and Midwifery Committee. The impression is that both the public, including patients and relatives, as well as hospital staff, have been more willing to come to CHCs in the recent period, perhaps just because CHCs are becoming better known.

**Table 12. Source of concern about early waking.**

<i>CHCs</i>	<i>Visits</i>	<i>Staff</i>	<i>Survey</i>	<i>Report on organization of inpatient day</i>	<i>Other sources</i>
Active pre-1978 (16 CHCs)	10	—	—	3	3
Active post-1978 (22 CHCs but 24 sources since 2 acted on two separate occasions)	11	3	2	—	8

**Table 13. Main concern of CHC.**

<i>CHCs</i>	<i>Active pre-1978 (16 CHCs)</i>	<i>Active post-1978 (22 CHCs but 24 concerns as 2 CHCs acted on two separate occasions)</i>
Long-stay unit unspecified	2	3
Psychiatric Hospital	1	—
Geriatric or psychogeriatric unit	4	10
General problem in district	8	5
Acute only	1	6

Post-1978 13 CHCs were concerned about long-stay or geriatric units with waking times ranging from as early as 4.30 a.m. to 6-7 a.m., most of the CHCs being worried about waking times between 5 and 6 a.m. Where the problem was general to the district 5.30 a.m. was mentioned and the latest time which caused concern was 6-6.30 a.m., similar times to those mentioned when the problem was mainly in acute wards.

**2. Action and outcome.** The above description gives some indication of the extent of the problem as seen by CHCs so what they did they do and what results did they have? Because many of the sources of information were from visits the main action was to discuss the situation with hospital managers and/or to send the report to the DMT and discuss the issue with them. Statistics give little insight into the degree of success they had, nor the factors the CHC identified as important, so instead tables are presented giving their very abbreviated comments.

The tables are divided up into pre- and post-1978 action and into whether the CHC was concerned about long-stay and geriatric units (which do have different problems because of their many highly dependent patients) or whether it was a general problem throughout the District or in acute hospitals. If CHCs were concerned about general policies throughout the District this would, of course, include both long-stay and acute wards and in some cases the CHC did specify their achievements in each sector.

Pre-1978 the CHCs which concerned themselves with long-stay or geriatric units seem to have had considerable success. As shown in Table 14, six of the seven said there had been improvement if, in one case, only gradual and only one was sceptical enough to say 'possibly some changes'. When the problem was general to the District or in one case specific to an acute hospital (Table 15) success was not so great.

Twenty-two CHCs took action since 1978, but there are 24 responses on tables 16 and 17, because two CHCs took up the issue on two separate occasions for different reasons concerning different hospitals. The CHCs concerned about long-stay or geriatric units were not quite as successful as their CHC colleagues of pre-1978. Though nine said quite definitely that there had been changes, three were only able to say there had 'probably' been some changes and one said they had little effect. Those concerned about acute or



**Table 14.** *CHC active prior to 1978 and where action involved long-stay or geriatric units.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Discussed with HAS team during visit and with DMT and consultant geriatrician.	Patients now left later. Night staff share waking jobs with day staff, even some use of volunteers to help in rising and dressing.	Only resistance concerning volunteers, otherwise all groups in favour of the change.
On visit discussed with new nursing officer.	Change to later waking and day staff doing all waking chores.	Senior nursing officer very anxious for change to give better life for geriatrics.
Discussion with hospital staff.	Possibly some changes.	Any change has probably resulted from new staff with different attitudes.
Discussed with DNO and divisional nursing officer.	Now more flexible, patients can get up later and day staff do more of the waking tasks.	Positive attitude from nursing managers.
Discussed with hospital staff, reports to DMT.	Gradual improvement.	District administrator (DA) and district nursing officer (DNO) very supportive.
Took to area administrator.	Hospital said would look at whole in-patient day. Improvement as patients now undress later and can stay up. Not clear what happened on waking times.	Not very positive response and resistance from nurses on wards.
Took problem to both hospital managers and DMT.	Day shift now comes on at 7 a.m. and not 6 a.m. Waking times more flexible—probably about 7 a.m.	Some nursing managers in hospital were trying to change shift so were glad of support. New psychiatrist showed how much more flexible waking times could be.

**Table 15.** *CHC Active prior to 1978 and concerned about acute hospitals or general problem in District.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Visit reports went to DMT, discussed with them.	Long-stay more flexible—patients allowed to break-fast in dressing gowns. Little change in acute.	DNO and nursing managers resistant.
Discussed with hospital managers and sent report to DA.	DA commissioned survey of hospitals day. Gradually change resulted, helped by need to change rotas to 37 hour week.	DA pressured not only by CHC but also by junior administrator. DNO forward looking, blocks in catering logistics.
Suggested change to DNO.	Little change.	Management sympathetic but say impossible to change.
Discussed problems with managers on a number of occasions.	Little change.	Managers feel little can be done with existing staff shortages.
Discussed with DMT and area.	Area already concerned, carried out survey of hospitals. No formal policy change but gradual change in attitudes. Still problems in long stay.	Area and district management agreed needed change but blocks at senior nursing level and on wards.
Discussed with area health authority (AHA) and hospitals. CHC involved in commissioning new hospital.	Long stay did become more relaxed. More flexible in new DGH. Still problem in surgical and maternity wards but CHC accepts arguments.	Hospitals and AHA receptive but argued difficult to change
Took to area and hospitals.	Area asked hospitals to review. Gradual change especially in long stay units probably still very early in acute, especially surgical. CHC continues to review.	Elderly health care planning team progressive. Area officers also very responsive.

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Discussed report with area team of officers.	Area audited all hospitals. Set up working party. Area accepted recommendations that waking should be later and more flexible. Have been improvements.	Area interested, only resistance seems to have been from staff.
Took to unit administrator and DMT. Tried to influence routines in new hospital, opened 1980.	Not much change. Nor clear if any improvement in new hospital, CHC not continued with issue.	Although sympathetic, managers said impossible to change. Previous DNO resistant.

**Table 16.** *CHCs active since 1978 and concerned about long-stay geriatric units.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Meeting at hospital then took up issue with DMT.	Maybe some change. DMT said would recruit more staff and say waking now at 7 a.m.	Hospital did not acknowledge problem but change did occur. DMT supportive.
Took issue to DMT.	Probably some change.	Director of nursing services (DNS)—long stay, supportive, ward staff less so.
Wrote to DA. When found still going on discussed with district officers at CHC meeting.	DA replied policy was not to awaken patients unnecessarily. DMT assured them that it was isolated case. Rotas changed so shift less likely to exist.	DMT receptive but not convinced there was a problem. Senior hospital staff willing to bring about change once brought to staff attention.
Recommendations to DMT following survey of patients' views.	Change in DMT policy. No waking before 6.30 a.m. Day shift do many waking chores.	DMT and nursing officer at hospital strongly convinced of need for change.

Table 16. *cont.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Discussion of survey results at hospital with staff and DMT.	Gradual change, waking now more flexible.	All management supportive but problems at ward level.
Discussion with hospital management.	Good—patients allowed to go to bed and get up with more flexibility.	Support from hospital management. No resistance from ward staff.
Taken up with hospital, DMT and district health authority (DHA).	Little effect.	Managers agreed with principle but think impossible. Resistance on wards.
Met with hospital staff proposed night staff put patients to bed, day staff got them up.	Some change may have resulted.	Suggestions seen as too radical by hospital managers because of the staffing levels.
Included in report to DMT.	DMT reviewed all hospitals in district and said no waking before 6.30 a.m.	Senior nursing officers resistant but DMT convinced of need for change.
Spoke to hospital staff.	Major improvements.	Very positive response as geriatric care in district being changed.
Discussed visit report with DA, brought to district geriatric services panel.	More flexibility—day staff helping patients get up but since restructuring some drifting back.	Ward nurses supportive. Senior and district levels supportive but problems with short staffing.
Discussions on visits with senior hospital staff.	Considerable improvement in a particular hospital, did not get very far with acute units.	Change seems to have been possible because of change in senior nurse.
CHC took up issue with hospital management.	Good—visits suggest waking and breakfasting now later.	Nursing officers at that time were cooperative.

**Table 17.** *CHCs active since 1978 and concerned about acute hospitals or general problems in district.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Took to health authority.	Policy changed—patients not to be woken before 7.30 a.m.. CHC not checked to see if occurs yet.	Interest from health authority. Little resistance except over changing shifts.
Discussed with hospitals. Took to DMT.	Probably some change but still complaints.	DMT reasonably supportive.
Discussed with health authority. Policy is that patients should be left as long as possible.	May not have been much change but policy acceptable—question of whether it really happens.	Health authority already aware of problem and were trying to do something about it.
Discussed at area level, health care planning teams and hospital staff. CHC pressed to be part of hospital commissioning team.	Poor in existing units but agreement for 7 a.m. waking in new hospital.	Previous area management resistant but commissioning team more progressive.
Discussed with DA.	DA said changed: unclear whether as a result of CHC comments.	
CHC pressed for area working party and for implementation of its recommendations.	Very little effect.	Area not convinced there is problem, despite nursing and midwifery committee's enthusiasm.
Wrote to DA.	DA surveyed all hospitals. Gradual improvement in some wards/units depending on senior nursing officers. In some, night staff work later, in others share tasks with day staff.	DMT gradually became interested especially DNO. Some nursing officers interested in change.

Table 17. *cont.*

<i>Action of CHC</i>	<i>Outcome</i>	<i>CHC comment</i>
Discussed with senior nursing staff.	Problem disappeared with change in staff when moved to new unit.	Senior nursing staff also concerned.
Letter to AHA followed by meetings with area nursing officer and nurse managers.	Administrator said little could be done, but gradual change to 7 a.m. waking.	Any change has probably resulted from new staff with different attitudes.
Discussed survey with hospital staff.	Told waking hours were flexible except surgical wards, probably little change.	
Discussed visits with DMT.	DNO concerned that policy not followed, put out circular. Seems change has come about.	Resistance by staff mainly in long stay wards. DNO very active.

general district policy were even more sceptical about what had happened. Several commented that the policy seemed satisfactory; it was more a question of whether it was carried out.

These tables do not show all the reasons behind the resistances which were met, they do point out clearly the need for support from senior nursing officers or the DMT if change is to come about.

The impression is that change is somewhat easier to bring about in the long-stay and geriatric units, perhaps because once the problem is pointed out both ward staff and nursing officers see that early waking is not in the best interest of patients. The acute wards pose different problems. Even when policies seem reasonable, the impression is that it is difficult to ensure that they are carried out. Of course, the comments on whether change has occurred depend on the CHCs knowledge and, as some noted, they cannot really be sure about what has happened. The comments are, of course, those of the CHC; hospital or district managers might wish to argue with their judgements.

## **Detailed study of four Districts**

The telephone interviews gave some insights into the difficulties in changing waking times but they only gave the picture from the CHCs' perspective. It was important then to visit a small number of Districts both to find out what current policy and practice really was, as well as to investigate the change or blocks to change by interviewing the interested parties and consulting records. Four Districts were selected out of the CHC group active since 1978 because they seemed particularly interesting: in three cases because the CHC had made some considerable efforts at change and in one because the CHC had said that they had done little because the hospital staff were so keen to bring about change. The four Districts included one where a long-stay hospital was a problem, one mainly the acute hospital, and two where both acute and long-stay units were a cause of concern.

The visits usually included interviews with District officers, either the Administrator or the Chief Nursing Officer, the Unit Administrator, and nursing staff, especially the appropriate Director of Nursing Services and on several occasions time was spent on the wards talking to ward sisters about the feasibility of change. The events in the four Districts (W-Z) will be described before drawing some general conclusions.

### **District W**

The cause of concern in District W was a 160-bedded psychogeriatric hospital located some miles away from its 'parent' psychiatric hospital. Although the CHC took up the issue of waking times on a number of occasions, the initial impetus came from the chairman of the medical executive committee in 1978. He was concerned that patients were being woken at 5 a.m. and, when he found resistance locally to change, he took it to the DMT and CHC. It was argued that the problem really concerned meal times: since the last meal of the day was at 4.15 p.m., it was hardly surprising that patients were up very early. However, to make the evening meal later involved changing catering staff shifts and this required extra money, which was not available. Although there were discussions about catering arrangements at DMT level, no change resulted.

During the period 1978-81 the CHC visited the hospital and on more than one occasion brought up the issue but they felt forced to

accept the views of professional staff who said that none of the patients were sufficiently oriented to be aware of the early hour of rising and that there was a very heavy work-load with a very limited number of staff which made the early rising necessary.

The arguments of the staff were not accepted by the new Director of Nursing Services (DNS) who took up the post in 1978. At first, on visits to the hospital, he tried to persuade staff not to wake patients unnecessarily. However, in July 1981 he carried out night visits to the hospital. He found that the situation had not changed and decided to take more positive action. He issued formal instructions to nursing staff 'that no patient should be up and dressed before 7 a.m. unless it is in the patient's interest'. He has subsequently visited the hospital on a number of occasions and believes that practice has changed. Since catering arrangements were not changed at the same time, this success rather belies the argument that the whole problem was meal times.

However, his instructions caused some concern to the administration who felt they had been issued without adequate warning. Because later meal times would be better for patients, the district catering manager took action. He provided a catering assistant to work in the evening, only to find that the assistant had nothing to do because the meals were still being served at 4.15 p.m. The reason was that no agreement had been reached with the porters about who was to take the trolleys back to the kitchens. The problem with the porters may have resulted because they were not consulted early enough. It also appears that a union activist had recently become a porter and he was instrumental in turning a minor change into a major issue. When no agreement was reached locally about what shift or overtime changes were necessary, the issue went through the full grievance procedure and was finally disallowed. Even then the problem dragged on and it was only in May 1983 that agreement was reached. New duty rotas were accepted, making the later meal time possible as part of a bonus scheme. This scheme and the later evening meal were implemented in July 1983.

This case study illustrates a number of points. Firstly that waking times affect not only nursing but have a knock-on effect on other services. District W also highlights the organizational context in which change comes about. Until recently, the hospital concerned has received little managerial attention, in part because of problems in the main hospital. The senior administrative assistant responsible



for the hospital was resistant to change and seems to have been the person who centred the argument on the catering issue. The nursing staff of the hospital are given credit for being dedicated and caring but as many of them have worked there for many years they have developed routines and traditions and were also resistant to change. It seems that change became possible with new managers, particularly the arrival of the DNS and the retirement of the senior administrative assistant. Despite the arguments, it did then appear that change could be brought about even in an institution with very difficult patients and very limited staff.

### **District X**

The issue in District X concerned the waking times in the new district general hospital. As the hospital is not yet open it is not known whether the proposed routines will work in practice. Nevertheless, certain policies have been set out. District X (previously a single District area) has a large number of hospitals each with very strong traditions and low staff turnover.

The interest in the inpatient day and waking times came from the CHC secretary. He already had an interest in hospital routines but was stimulated to take up the issue four or five years ago following a hospital stay. Several CHC members also became interested and it became standard practice to bring up the question about waking times during visits and also at health care planning team meetings. It seems to have been general throughout the area that patients were woken at about 5.30 a.m.. Despite the CHC feeling that they achieved little, about 1979 there were discussions amongst nursing staff in the area about what change might be possible, partly because of the concerns of the Area Administrator. Following a report of one of the CHC's visits, the Area team of officers were quite shocked to learn that waking times were so early. Nevertheless, there seems to have been acceptance that it would be very difficult to change the attitudes of nursing staff and little change resulted.

The opportunity for change came with the commissioning of the new hospital. Although it had been planned for many years, it was only a short time ago that the contract was signed for the building to go ahead. At that point the CHC secretary went to the Area team to request that they be included on the commissioning team. Area agreed that the CHC should be involved and suggested that a CHC

Working Party should meet with some members of the commissioning team from time to time. The routine of the inpatient day was discussed, in that context in 1981.

The commissioning team were progressive and saw the new hospital as an opportunity to rethink routines and to make changes. They agreed that the earliest waking time should be 6.45 a.m. and that this should be as flexible as possible. 6.45 a.m. was a compromise between the CHC and what the commissioning team felt was feasible. When it was put to the Area Administrator he argued that waking times should be later and the operational policies now say 6.45-7.15, and preferably as late as possible. The CHC hopes that the inpatient day will be accepted as policy throughout the District not just in the new hospital, and the new Chief Nursing Officer is anxious to begin making changes.

The case study illustrates that altering waking times may be more feasible in the context of larger changes when many issues are being rethought. The new hospital has a more modern layout than any of the existing hospitals which means that patients should not be so disturbed by each other or by procedures necessary for only a few patients. It also means that staff will have to change routines wherever they come from. A certain amount of resistance is expected, since most of the nursing staff will come from existing hospitals. Apart from the difficulties in combining staff from different hospitals, this also means that they will bring with them well established routines, particularly about what work is appropriate to the day or night shift. While the hospital senior and administrative staff are committed to the changes they clearly do not want to alienate incoming nursing staff.

Because of the new arrangements, waking times have not met problems with catering or domestic services. However, there are some changes which will require the consent of the consultants who, in District X, are said to be very traditional. It is hoped to change the times when patients are given drugs in the early morning or to persuade consultants that certain routines such as temperature taking may not be necessary. It is felt that this may be possible because there are a number of new younger consultants coming into the district.

### District Y

District Y used to be one District of a multi-District teaching area. It considers itself to be the poor relation of the neighbouring teaching District. Not only is it poor in terms of financing but comments suggest that until restructuring it had fairly weak management, particularly in nursing. A number of new and more active managers have been appointed following restructuring. The District attitude is an important influence. One senior manager commented that because staff were often doing a good job in antiquated and difficult conditions, managers were reluctant to 'rock the boat'.

Interest in patient waking times has arisen on a number of occasions. Following the Report on the *Organization of the Inpatient Day* in 1976, each hospital was asked to review and report on its policies on all aspects of the day including waking times. Subsequently, this seems to have resulted in an informal policy throughout the District (in about 1980) that waking times about 6.30 a.m. were reasonable and that they should not be much earlier.

In one of the acute general hospitals, attempts were made to change daily routines. A working group of day and night nursing staff was set up with the idea that some tasks should be redistributed and if tasks were unnecessary they should be eliminated. Although some changes were implemented there were problems, for example, it was hoped that some bed baths could be done in the afternoons but this did not seem to appeal to patients and meant that a great deal of work needed to be done between about 3 and 5 p.m. The necessity of repeated patient observation was questioned but this brought resistance from some of the medical staff and some confusion amongst the nurses who had to decide whether a particular measure was needed or not. Some changes probably did result from the working group but not as much as had been hoped. Restructuring and industrial action brought the working group to a halt.

In the other acute general hospital, interest in waking items followed a complaint by a patient to the CHC that waking was very early (about 5.30 a.m.). The CHC secretary commented that early waking has often been mentioned by patient or their relatives, though never as the main reason for the complaint. When the particular complaint arose, the Director of Nursing Services was alerted and reiterated the policy: that waking should not be before

6.30 a.m. and that patients should be left as long as possible. It is argued by nurse managers and ward staff alike that there are good reasons for early waking. For example, on surgical wards patients need to be prepared for operation and on other wards early treatments may be required. Because the wards at the hospital are long Nightingale wards any activities wake other patients. It is also said that many people on the district have traditionally got up early because of the shift work in the mines.

In the long-stay geriatric hospital, change in the organization of the inpatient day seems to have come about with the arrival in 1980 of the current Senior Nursing Officer. He found that lights were going on at 5 a.m. and he called a multidisciplinary meeting in the hospital to discuss the inpatient day. He was able to persuade staff to undertake a three months trial of a different daily routine in one ward.

There were a number of problems with this experiment due to the heavy work-load caused by the patients. For example, if day staff did not put patients to bed then night staff had to do this when they came on at 8.30 p.m. As a result it took such a long time to complete the ward that some patients were left up very late. The rearrangements caused considerable friction between day and night staff. The Senior Nursing Officer stopped the experiment before the end of the three-month period because he felt it was not benefitting patients. However, some changes have remained and have been generalized throughout the hospital. Now patients are only got up after 6 a.m. and, if they wish, they can stay in bed until 8-8.30 a.m.; they are allowed to lie on their beds for a rest period in the afternoon; also there is more questioning of the need for particular routines.

Lastly, in the acute geriatric hospital, concern about waking times arose when a ward sister came to the CHC saying that staffing levels were not as good as they had been led to believe. As a result, she was being forced to wake patients at 4.30 a.m. The CHC took this concern to the DMT. There are various views about the situation. Senior nurses in the hospital felt that this complaint was not justified. However, nursing officers in the hospital and at District did agree that if such early waking was taking place it should be changed. They point out that there are many constraints: many of the elderly do awake very early anyway; some drugs are necessary at 6 a.m.; and in an acute setting there are many treatments and procedures to be carried out.

In District Y there is clearly a gap between policy and action. Although there are particular constraints, such as the Nightingale wards and, in the long-stay area, the shortages of staff, it also seems that nursing management has not seen changing waking times as a high priority. With little pressure from the top it seems that ward staff have maintained their routines and traditions.

### **District Z.**

District Z has two District general hospitals both with geriatric units. It is a teaching District though this influences one hospital much more than the other. It also has a prestigious university nursing department in the District. Interest in the inpatient day has been quite independent in the two hospitals and even in the acute and long-stay units within each hospital. District Z was the district where the CHC brought up the question but felt that so much was going on that it did not feel any need to pursue the issue.

Taking the teaching hospital first, following the 1976 Report there was interest in change from the Divisional Nursing Officer and the Assistant District Administrator. It was agreed that the routine of the day should be studied from a 24 hour sampling survey and changes then devised. In fact, in 1977 two studies were carried out: the ward routine study and a patient satisfaction survey. It was found that the majority of patients were woken at 6.00–6.30 a.m. though some were left to sleep and some went back to sleep. Forty five per cent of the 136 patients interviewed complained about the time of waking and those who suggested a different time said 7 a.m. would be more appropriate. The dissatisfaction was felt to be an underestimate, as the patients were still in hospital when interviewed.

A surgical ward was chosen for the experiment in change; it seems that the ward sister and Professor of Surgery were both interested and the experiment began in November 1978. The main features were that lights were not put on until 7 a.m.; there was no early morning tea since breakfast was fairly soon after waking; the drug round was at 8 a.m. and 6 a.m. temperature, pulse, and respiration measures were omitted. Between 12 noon and 2 p.m. the ward was closed so that patients could get some rest. The biggest difficulty appeared to be this afternoon rest period when staff, particularly junior doctors, felt they had to have access to the ward.

The experiment was successful enough to be generalized to other

wards and, in 1979, it was put before the sector team. At this point the experiment ran into problems with the Chairman of the Medical Executive Committee who argued that the changes would affect the consultants' routine. The Divisional Nursing Officer did not press further. The experiment continued in the surgical ward although the ward closure after lunch is not enforced (but a quiet period is achieved). Attempts were made to gradually bring about some change in other medical and surgical wards without giving the issue too much publicity. Some of the ideas did spread to other surgical wards and about a year ago it was accepted generally throughout the surgical unit that the drug round would be at 8 a.m., with 6 a.m. drugs kept to a minimum.

The three surgical wards which have tried to bring about changes have met with different problems. The day staff, in particular the sisters, are fairly receptive to change but the night staff have been more resistant. On the experimental ward, which has breast surgery patients, it has been possible to leave lights off until 7 a.m. and there are few activities on the ward before then. Patients are left until the day staff come on at 7.45–8.00, if possible. The ward has been upgraded and is carpeted, which reduces noise. The other two surgical wards have been less successful because they have a more mixed group of patients and more early morning surgical preparation.

The teaching hospital has a very large geriatric unit of over 300 beds including acute assessment, rehabilitation, and long-stay. An experiment has been taking place to try to make one ward much more like an old people's home or nursing home, where patients can get up and go to bed when they please. The experiment began two years ago as the result of interest from the Divisional Nursing Officer and the nearby university department of nursing. The latter assessed ward routines both before the experiment and later. Although patients are still given tea at 6.30 a.m. (and toileted throughout the night as necessary) they can decide whether or not they wish to get up. It has resulted in the night staff getting up far fewer patients and puts a heavy work-load on day staff who may be bathing and dressing patients throughout the morning. The biggest problems seem to have been with night staff who, particularly on the weekly unit concert night and weekly ward party night, are left with most of the patients to put to bed. There were also problems with domestic and catering staff. It was possible to rearrange shifts

for this one ward but it is felt that extending this change to other wards would be difficult.

There have been changes in waking times in other wards but the inpatient day commonly begins about 6.30 a.m. when night staff wake patients, give them tea, and usually toilet and wash them. Interest in change seems to have come from senior nursing officers as well as recruitment of young ward sisters. Not all staff are so keen on change however. As noted, the night staff are particularly resistant though this seems to be improving. A few years ago the night staff were mainly nursing auxiliaries who had been in post for many years. The aim has been to recruit more trained staff, and they are often younger and less traditional in attitude. A programme has also been instituted to invite night staff to unit meetings and to run in-service training for them in the evening so that they are more involved in what is taking place. The new Assistant Director of Nursing Services post will cover both day and night staff and it is hoped that this will also help iron out problems between day and night shifts.

In the geriatric unit at the other hospital there has been less success in changing waking times despite a special experiment. About two and half years ago, a key team was established to try to improve patient care in geriatrics. It included an administrator, senior nursing officer, and geriatrician. This key team convenes a wider group of people concerned with geriatrics care for bi-monthly meetings. The issue of waking times came up through this group and was also noted by the CHC following a visit to the hospital. It was decided to experiment with one ward, a mixed long-stay/rehabilitation ward. The idea was to let patients stay up in the evening if they wished and not to wake them in the morning, unless necessary for toileting, until the day staff came on at 7.30 a.m. This shifting in responsibility was not successful. The day staff found there was no change in the number of patients needing to be put to bed, as most of them wanted to go to bed at 6-6.30 p.m. In the morning, however, the load on the day staff was very heavy and it meant that breakfast was being delayed perhaps until 8.30 a.m. The changed routine did not seem to suit staff or the patients either, as many of them were awake and needed toileting. The experiment has now been stopped, although some changes have continued. For example, the timing of medicine rounds was changed and the emphasis is on keeping to a minimum any 6 a.m. drugs. The current situation is

that night staff are waking patients with a drink any time after 5.30 a.m. probably about 6.30 a.m.

In the hospital's acute sector the situation is variable depending on the interest of the nursing officer as well as the ward layout. For example, in the surgical unit considerable effort has been made to alter ward routines. Routine patient observation is kept to a minimum and daily temperatures are taken in the afternoon. Baths prior to surgery may be done the night before so that patients first on the list do not need to be disturbed early. Change has been aided by the ward design. The newer block has L-shaped wards with one wing being used for high dependency and the other for low dependency patients. There are several single and double rooms and 4-bedded bays. The patients who are to go to surgery or just recovering from surgery will be in one wing and they will be moved as they progress. This means that the whole ward does not need to be woken when one or two patients have to be prepared for early surgery. As far as waking patients is concerned there is tea at 6.45 a.m. but patients are left to sleep if possible, especially in the low dependency wings.

District Z illustrates the importance of the general ambience particularly illustrated in the geriatric unit of the teaching hospital. If there is a real commitment to change from nurse managers and a liveliness through younger well trained staff and the interest of outside bodies, then many changes become possible, even though the staff patient ratios are as low as elsewhere and the patient dependency as high.

What is also interesting is what happened in the hospitals acute sector: despite the backing of the Divisional Nursing Officer, change was blocked by another powerful group, the medical executive committee and the complaint was so vociferous that the nursing officer felt obliged to back down. Although some change has continued, without leadership from the top it is difficult to maintain and has not spread far.

### **Factors influencing change**

From the limited coverage of this study no firm conclusions can be drawn about what waking times are around the country. However, it is clear that despite considerable improvements in the last few



years it is not unusual to find acute hospital with waking times as early as 6 a.m. and long-stay geriatric and psychogeriatric units where waking is at 5.30 a.m. Even when districts or hospitals have policies which support later waking and individual patient flexibility, there is no guarantee that the policy will be followed: perhaps because of the difficulties of ward design resulting in the one-awake-all-awake syndrome; perhaps because of the number of procedures that it is necessary to perform in the early morning; or perhaps just because of the resistance of nursing staff to change. Changing policies may be a start but for real change to take place careful monitoring is needed.

### **The context**

**National policies.** It was clear from the telephone interviews and the visits that the Report on the *Organization of the Inpatient Day* had considerable impact. In some places it had encouraged nursing officers and administrators to look at many aspects of hospital life and in others it had encouraged CHCs to take up the issues, including waking times. In all cases this was only a start, not all those who instituted reviews necessarily gave a high priority to change and even those that did act were not necessarily successful.

**The hospital.** In the hospitals visited the whole ethos of the establishment was clearly important in determining interest in changing the inpatient day. The most thorough attempts at changing waking times (and even they were not always successful) were in hospitals where there were many other changes and experiments taking place, often with outside links, or in the case of District X where a new hospital provided the incentive to review routines.

### **The actors involved**

**Nursing staff.** Though in one or two examples ward staff were the ones to raise the issue, they were relatively powerless unless supported by their nursing officers. Where change has come about, it has usually been through the interest and commitment of nurse managers. The ward staff are, however, the ones to implement change and what eventually takes place is probably determined more by attitudes of ward sisters than any other factor. One problem which was mentioned on a number of occasions was the

conflict between night and day staff over whose job it is to wake patients and carry out the waking routines. In several instances the night staff seemed more resistant to change than day staff. Often they had been in post for long periods of time and had little knowledge of the changes which were taking place in the hospital. One unit was making specific attempts to reach night staff through in service training and several mentioned that they hoped the situation would improve when one senior nursing officer became responsible for both day and night staff.

In long-stay wards the resistance to change was usually based on the problems of staff shortages. Two nurses (not necessarily trained) on a twenty-bedded ward at night and three or four in the morning day shift were not uncommon. Obviously with incontinent, immobile patients, many of whom also need feeding, the problems are enormous, yet change had been possible even under these circumstances. In more than one place staff had questioned whether it really was in the best interest of the patients.

**Other staff.** Though nurses are most affected by waking times, change has knock-on effects throughout the day; major changes do affect other staff and their commitment is also needed. Support is needed from administration if changes in catering, domestic, and portering arrangements are necessary. The other major group whose support is needed are the doctors. Negotiation with them will be needed to alter the early morning drug round, routine observations or pre-operative procedures. In the four Districts visited the support, opposition, or non-compliance of doctors was very influential in determining success or failure in bringing about change even though their own routines were little affected.

**CHCs.** This study began from the CHCs perspective and in fact 43 CHCs had tried to bring about change. Their styles were quite different, some with much closer contact with DMTs than others, some with an emphasis on input into planning, some with a commitment to helping patients and relatives take up complaints. Nevertheless, the telephone interviews suggested that none of them got very far unless they had support from managers, usually the District Administrator or District Nursing Officer, though occasionally discussions with hospital management were sufficient. Some had been more successful in infiltrating decision-making bodies, for

example, the CHC in District X which met with the commissioning team of the new hospital or the CHC in District Z where the secretary attended a body set up to review and improve geriatric care. Some CHCs welcomed the fact that some of their members had now become Health Authority members and suggested that they would begin to use their relationship with those members to bring about change.

### **Methods used in change**

With a sample of four Districts it would be unwise to draw too many conclusions about what method of change was successful. Suffice it to say that a variety were used. In one, District X, change eventually resulted from a top down management fiat after persuasion had not worked. In another, the geriatric units in District Z, there was much discussion with all staff concerned about what can be done and in fact initiatives from various staffing levels. An intermediate path was taken by the Senior Nursing Officer in District Y, who, although the main force behind change, tried to bring his staff along with him through a multidisciplinary meeting. In each of these situations changes, or at least a commitment to experiment, resulted so perhaps the only conclusion that can be reached is that there is a time and place for each approach. Several hospitals tried the pilot study approach but this did not seem particularly successful because too often the arguments could be given that 'our ward is not like the experimental ward...'

### **The type of innovation**

Changing waking times not only involves many people, it is also a continuing process. It is not something which was done one way yesterday and differently forever after. It requires constant vigilance since pressures, resistances and 'necessary' procedures work to undermine the change.

Change may be beneficial to patients, in terms of giving them more rest in hospital or, on long-stay wards, in providing a more home like environment. Usually it only causes problems to staff. They may get their rewards in seeing that it benefits patients or in pride at running a more up-to-date hospital, but these gains may be bought at a high price in terms of the disruption of routines, and threats to working relationships within the hospital. If flexibility for

the individual patient is the aim, it may begin to feel as if there are no routines at all. Yet as the quotation at the beginning of this chapter points out people need routines to reduce stress. For these reasons changing waking times is perhaps one of the most difficult changes to bring about in the Health Service.

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CASE

**3**

***Asian Rickets***

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Rickets has virtually disappeared in the indigenous UK population, although the related condition of osteomalacia may be found amongst the housebound, chronic sick, and elderly. However, as early as 1962, in Glasgow, rickets was found in Asian children (1). Subsequently, there were reports of its incidence in many other Asian communities, for example in Rochdale (2), Derby (3), and Bradford (4). This case study has explored the reasons why it was not until 1979 that an integrated programme of health education and vitamin supplementation took place in Glasgow and subsequently looks at the 1981 Stop Rickets campaign in England and the response of four Health Districts to this campaign.

**Asian rickets in Britain:  
its epidemiology and aetiology (5)**

The classical model of rickets identifies either ultra-violet deprivation and/or a lack of dietary vitamin D as the causal factors (in the absence of other pre-disposing conditions such as renal disease). Though this simple view has had to be modified following studies, particularly on the Asian community in the UK, there is still agreement that the disease is caused in most cases by low vitamin D blood levels (in certain situations calcium levels may also be implicated).

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If vitamin D levels are only slightly lowered there may be no signs or symptoms. This sub-clinical condition may only be detectable by blood tests or from bone x-rays. In more severe cases the bones are less able to calcify normally giving rise to symptoms such as vague aches and pains and x-rays will confirm the diagnosis. Eventually the disease becomes overt and the resulting bent and malformed bones, allow the diagnosis of rickets to be made by clinical examination.

It is argued that, in the UK, Asian children under 5 and in the pre-adolescent and adolescent growth phases are more likely to suffer from rickets than white or West Indian children. What is not known is how many children are suffering from rickets. There is a lack of agreement about whether only those children presenting with 'clinical' rickets should be considered or whether the much larger number of children with subclinical asymptomatic vitamin D deficiency should be included.

In the early days when rickets was being studied in the Asian population there was no simple test available to measure serum vitamin D. Other biochemical markers had to be used such as raised levels of alkaline phosphatase and low calcium and low inorganic phosphorus levels. These measures, particularly alkaline phosphatase alone, are not reliable indicators however, since it is now known that alkaline phosphatase levels may rise during periods of rapid growth (6). Even when it became possible to measure serum 25-hydroxy vitamin D (in any case not necessarily representing the level of active form of the vitamin), in the early 1970s, the problem was not resolved. It was found that Asian children have lower serum 25-hydroxy vitamin D levels than other groups of children but not all these Asian children have or develop rickets.

The lack of agreement over the definition of rickets has led to the use of terms such as 'biochemical', 'radiological' (though again there is controversy over radiographs because of the variability in their interpretation) and 'clinical' rickets. Some workers do not accept all terms as 'true' rickets and this results in confusion about the extent of the disease and whether it is increasing or decreasing (7).

The DHSS (5) argue that rickets is on the decline, that in the Midlands and North of England about one Asian in 100 under 16 years suffers from rickets and about 1 in 250 in London. These figures apply only to cases serious enough to come to the attention

of health workers and no national survey has been done. However, other workers have carried out more limited surveys or made other calculations and assess the problem to be much greater. On the basis of hospital admission data, Dunningan estimated that the probability of a Glasgow Asian school child being admitted to hospital with rickets between 5 and 16 years of age was 1 in 29 between 1968 and 1978 (8) prior to the supplementation campaign. If the definition is broadened to include subclinical rickets one survey has estimated that one child in 20 had rickets in Glasgow (9).

If Asian children have lower levels of vitamin D than other ethnic groups in the population and this predisposes them to rickets, then what is this caused by? A number of theories have been put forward and discussed. In summary, the evidence suggests that there is no one factor accounting for the higher occurrence of rickets in the Asian population but that a mixture of factors such as diet, exposure to sunlight, skin pigmentation, and individual genetic variation may be involved. Whatever the explanations, the problem can be solved by increasing blood levels of vitamin D, either by giving vitamin supplements directly or, as been proposed and tested by the Glasgow group (10) by fortifying chappati flour.

Despite arguments about the causes of the problem, then, there are practical solutions. The question is why, until very recently, so little has been done to solve the problem over the long period since its identification in 1962. First, what happened in Glasgow will be discussed, then national policies towards rickets, and finally the response of four English districts in the Stop Rickets campaign.

### **Asian rickets in Glasgow**

The story of Asian rickets in Glasgow has been pieced together from files, references and interviews with a large number of the people concerned. Although the Greater Glasgow Health Board has given permission for the following account to be given, they do not necessarily concur with all aspects of the analysis.

***The Asian community in Glasgow.*** The Asian community in Glasgow is fairly small, perhaps 15,000 individuals comprising 1 per cent of the total population (11). Immigrants from India and Pakistan arrived in Glasgow in the late 1950s/early 1960s and

because many of them came to jobs concerned with transport, literacy amongst the male Glasgow immigrants, at least, was high. Later immigrants came from more rural areas and had less education. Few Ugandan or Kenyan Asians came to Glasgow. The majority of Asians are Moslems with smaller numbers of Hindus and Sikhs. The Asian community lives in fairly well defined pockets of the city (although some families moved into other areas and into the suburbs) and this has made the current rickets campaign much more feasible than it would otherwise have been, particularly in reaching school-age children.

**Early history: 1962 to NHS reorganization.** Rickets is nothing new to Glasgow. Arneil (12) estimates that, in 1920, at least 50 per cent of Glasgow children suffered to some extent from infantile rickets due to a combination of lack of sunlight and poverty. The problem seemed to have been solved, both in Glasgow and elsewhere, by national policies which made available fortified dried milk and cod liver oil. By the mid-1950s, the Royal Hospital for Sick Children in Glasgow was only seeing an average of two children per year with gross rickets compared to hundreds a decade earlier. However, following concerns about infantile hypercalcaemia, fortification with vitamin D was reduced. In addition, it seems probable that mothers were turning from cod liver oil to more palatable vitamin sources, such as rosehip syrup, which did not include vitamin D (12). By 1963, Arneil and Crosbie (13) could report that the number of cases of gross clinical rickets presenting at their hospital had risen in the period 1958-62. It should be noted that only 25 per cent of these children were Asian, the rest Caucasian. One reason why a special campaign against Asian rickets was not seen necessary by many workers in Glasgow was probably because they were used to the occurrence of a number of cases of rickets and did not see anything unusual about the Asian incidence.

However, in 1962 Dunnigan, *et al.* (1) showed that there was something quite different about rickets in Asian children in that it was also occurring amongst adolescents. Following the discovery of three children with rickets and osteomalacia in the mother, Dunnigan screened 11 Asian families and found that 35 of the 74 individuals in the survey showed evidence of these conditions.

The recurrence of rickets in Glasgow was not ignored; the Health and Welfare Department of the Glasgow Corporation took note of



Arneil's findings and also Dunnigan's representation to them. Attempts were made by the Health and Welfare Department to investigate the extent of rickets in Glasgow children. The first survey began in 1964 and looked at 400 young children, their social conditions and dietary and vitamin intake. A second survey carried out biochemical and radiological examinations in 100 children from a very deprived area. As a result of these surveys it was agreed, in 1964, that 'vitavel' syrup containing vitamins A, D, and C should be made available through child welfare clinics and the school health service. The syrup was to be available very cheaply or on occasion free. In fact, it seems that the syrup was probably given out freely and that often all members of Asian families would take it. Special attempts were made to reach the Asian community: the Principal Medical Officer of the school health service spoke at the Sikh temple; the instructions accompanying 'vitavel' syrup were translated into several Asian languages; and the Medical Officer of Health (MOH) gave a press conference on rickets, though he did not emphasize the Asian aspect.

Initially, considerable amounts of vitamin D supplement were issued but there was little follow up by way of encouraging workers to continue the activity. The view at the time was that the problem would be evanescent: once Asian mothers learnt English and were taught the elements of child nutrition the problem would disappear (12).

***Pressure for a campaign.*** While the Health Board had taken some steps to deal with the rickets problem this was not seen as adequate by clinicians who were still seeing many cases, particularly amongst adolescent Asians. Throughout the 1960s Dunnigan and various workers carried out studies to try to elucidate the reasons for vitamin D deficiency. Evidence accumulated that it was not low dietary intakes of vitamin D (14) nor comparative lack of sunlight (15) which was the problem. By the early 1970s, Dunnigan was convinced that it was the high fibre content of the diet which was predisposing children to rickets. Subsequently, his group undertook a study in which chappati flour was fortified with vitamin D, and showed that this was effective in increasing vitamin D levels (10). Dunnigan became convinced that fortification was the answer to the rickets problem. It was only gradually, as it became clear that the national Committee on Medical Aspects of Food Policy Working

Party, which was considering this issue, was not likely to recommend fortification that he began to consider other measures again.

Dunnigan was particularly impressed by what had been achieved in one particular clinic in the heart of one Asian community. This clinic had started issuing vitamin supplements in the early 1960s in response to the Health Board's initiative. Children under the age of two were seen at the clinic and given vitamin D drops, subsequently Asian mothers often brought their children back to the clinic and, when they began nursery or primary school and yearly thereafter they were seen. The School Health Doctor would tell Asian children and their mothers to come to the clinic to get vitamin D supplements, mainly in the form of 'vitavel' syrup. At this particular clinic the atmosphere seems to have been very welcoming, whole families (including parents) were probably taking supplements and the School Health Nurse was keeping records, by school, of which children were receiving them. It appears that other clinics and school doctors were not making similar efforts as the central pharmacy records show that little 'vitavel' syrup was issued in the early 1970s, apart from at this clinic. Dunnigan became aware of what had been achieved and became convinced that a health education and supplementation campaign could work. At this point he became involved in a 'war of correspondence' with the Health Board.

Meanwhile Dunnigan was not the only clinician who felt that more could be done about rickets. Arneil, at the Royal Hospital for Sick Children, had had an interest in the problem for many years and he made contact with the community relations council (CRC) in the early 1970s as Dunnigan had done. Arneil's view was that the problem could be overcome by getting health visitors into the homes to persuade mothers to give supplements and by health education in schools. His concerns led to the film 'In Place of the Sun' being made in 1973, using both English and Asian languages. The film was shown at the cinema and in mosques in Glasgow but it was not shown in schools. One community dietitian had been particularly interested in the Asian population and had prepared leaflets and diet sheets in Asian languages. She, and subsequently other dietitians in the unit, were brought in to help in the making of the film.

The CRC officer had been convinced of the problem by the clinicians and, by the mid 1970s, was writing letters to the Greater

Glasgow Health Board and the City Council saying that more needed to be done. It seems that the Health Board were at this time convinced that everything was being done that was necessary; the Glasgow City Council accepted this view. They also seem to have been concerned about whether special action would be seen as racial discrimination.

Though, by the mid-1970s, various individuals were becoming involved, it seems to have been the sheer tenacity of Dunnigan that brought about the current campaign. In 1977, he wrote to the Health Board's Chief Administrative Medical Officer (CAMO). The letter was passed on to the Area paediatric sub-committee who replied to their parent Area Medical Committee as follows:

1. The correct solution must lie largely in the field of education.
2. Education should primarily be carried out at school through the agency of the School Health Service.
3. Clinical detection of cases could be helped by routine inspection of the legs of all Asiatic children at school.
4. Asiatic children on a high chapatti diet should receive additional vitamin D supplement of perhaps 200 i.u./day.

The committee saw no obvious disadvantage in non-Asiatic children receiving this vitamin additive at the same time (16).

Despite the recommendations being supported by the Area Medical Committee, not much seems to have happened. In fact, the ability of the School Health Service to assist in the work was questioned and it was suggested that the most effective work was likely to be undertaken with pregnant women. Thus, in January 1978 no District had received instructions about giving out vitamin supplements to children. This caused Dunnigan particular frustration as he had been working with the health education unit to prepare information to go to Asian families, but could not disseminate this until health staff were informed that they should be giving out supplements. The delays meant that any activities could not be initiated during the winter of 1977-8.

A colleague and member of the Area Medical Committee agreed to investigate what had happened and, indeed, found that the issue had in fact 'got lost'. He put Dunnigan in touch with the Administrator at the Board whom he felt he might be able to help. The Administrator was highly regarded by Board members and

staff alike and was known as a problem-solver. He became convinced that rickets was a problem and expressed surprise that there was so much difficulty over a problem such as rickets which required so little finance.

The Administrator convened a meeting between Dunnigan, Ford (a Glasgow paediatrician), the CAMO, the Health Education Officer, and the Area Nursing Officer for Community Health. The CAMO agreed that a Senior Registrar in Community Medicine should appraise the Asian rickets problem and develop a preventive policy. A paper was put before the Board's policy and planning committee in April 1978 which suggested that there should be a rickets campaign to include in-service training of staff who would be expected to give out supplements and a major health education drive. There were many questions of policy to be resolved. For example, should the supplements be given to all children, not just Asians, to avoid racial bias? Should the campaign be organized on a District or Area basis? A Working Group was convened to sort out these problems, the Policy and Planning Committee considered and approved its recommendations, in November 1978 and, later that month, the full Board approved the campaign.

***The current campaign.*** The Glasgow campaign has several facets: the availability of free supplements to all children up to 18 years of age (although there is no evidence to suggest that non-Asian children over five years of age require vitamin supplements, to avoid any suggestion of racial bias the supplements are available to these children too); inservice training for health workers; and a vigorous health education campaign. An interesting point is that it is the Health Education Unit who are funding the whole campaign, including the vitamin supplements. The costs of the campaign including supplements was 12,000 pounds in 1981.

***Vitamin D supplements.*** The Greater Glasgow Health Board approved the issuing of free supplements in November 1978 with the aim of starting the campaign in February 1979 (it did in fact begin in March 1979). There had been some question as to whether supplements could be given out free but the Board had inherited a policy of free supplements on demand from the Glasgow Corporation and this did not seem to conflict with the Welfare Foods Act, though the Board realized that they were rather 'sticking their necks

out' with this policy. It was agreed that drops, syrup, and tablets should be available for children aged 0-5 years at child welfare clinics and tablets should be available for older children.

The sort of tablets to be issued did cause some difficulties. Those in the British National Formulary contained both calcium and vitamin D and the only simpler tablet containing vitamin D only was that obtained through the DHSS and only indicated for use for pregnant women. This tablet was used until 1982 when the Manchester Health Authority questioned the legality of using the tablet. A Parliamentary Question was asked on this matter and subsequently Glasgow had to find another tablet and is now using a multivitamin pill. What other cities, now issuing tablets in the Stop Rickets campaign, are using is unclear. The DHSS have had discussions with manufacturers and, in 1983, this has resulted in a more suitable tablet being prepared for use on a test basis.

Getting supplements to the under 5s is relatively straightforward. Very young children will be attending child welfare clinics and families can be encouraged to come back for supplements. A more difficult question was how to reach school age children. It was decided that schools should be contacted and asked to cooperate. In fact, tablets were issued in three secondary schools with a high proportion of Asian children. Although the idea of issuing supplements to primary school children was not included at first, this is now also to take place.

To obtain the cooperation of the three secondary schools, the Director of Education was contacted. There were some difficulties because of interprofessional disputes between health and education but these seem to have been fairly easily resolved. Tablets are now being distributed in the three secondary schools through the cooperation of the school nurse or by providing nursing help. Although the tablets are available to non-Asian children if requested, only Asian parents were initially contacted to give permission for their children to receive tablets.

*Inservice training.* One of the most important parts of the campaign is to ensure that health professionals are on the look out for rickets, and active in distributing supplements and giving advice about vitamin D to families. Prior to the start of the campaign, three inservice training seminars were given which covered a total of 500 members of the medical and nursing professions. Despite attempts

to reach all those concerned, the coverage was not complete. For example, school nurses who were expected to give out supplements did not seem to hear about it. GP attendance was also fairly low. Consideration is being given to follow up training sessions.

*Health education.* The third central theme of the campaign has been to get information to the Asian community through as many channels as possible. A large amount of health education material was prepared in local languages, talks have been given in schools, to groups of Asian women etc. and the media coverage has been impressive.

The current campaign, which began in early 1979 seems to be running successfully based on evidence from hospital discharge rates, levels of supplement uptake and biochemical and radiological assessments of almost 300 children from three general practices in the city. Supplement uptake (over 80 per cent of children in the sample) and knowledge about vitamin D deficiency (based on interviews with mothers) are both high. A central reason for the success of the campaign must be the commitment of the Campaign Committee which continues to meet twice a year, and the fact that it includes leaders of all the professions playing a part in the campaign. It enables changes to be made in supplement distribution in the light of the evaluation. For example, it has been suggested that some primary schools should be included and that supplements should be given out by health visitors or practice nurses in general practices. The question remains as to how long the momentum of the campaign can be maintained. Some of the workers believe that such a campaign cannot be the final long-term solution.

*Factors influencing developments.* The current campaign should really be seen as one more step, albeit a most important one, in the continuum of events concerning Asian rickets in Glasgow. Certainly those people who were involved in public health in the early 1960s felt they had done what was necessary to overcome rickets. For that period (and it has to be remembered that health education then did not have the same level of acceptance and interest that it has today) they were active and innovative, for example, in visiting Sikh temples. If they can be faulted it is in not following up to see whether supplements were reaching children and in not accepting the evidence that rickets was still occurring and that more needed to

be done. What they did not know was that the problem would not disappear as they expected. They believed that as Asians changed diet and as habits altered, Asian rickets would no longer occur. In fact, diet and other cultural habits have proved remarkably resistant to change.

But why did it take the clinicians so long to impress upon the Health Authorities the seriousness of the problem? Firstly there were problems because of rivalries between Arneil's and Dunnigan's groups in Glasgow so that they did not present a united front. Secondly, there is the question of whether it should be the clinician's role to be the prime mover in what is essentially a public health campaign. In the early years, Dunnigan was taken up with clinical work and did not see his role as initiating a public health campaign. Even when he did lobby more actively, he had difficulty in getting his views accepted by the Health Board over what was a public health matter. In fact, the turning point seems to have been when the Board's Administrator recognized the problem. With this internal support action began to take place.

What were the community physicians doing, those who might have been thought to be responsible for preventive measures? As noted above, in the 1960s those responsible thought they had done what was necessary. The evidence about Asian rickets gradually accumulated up to the time of reorganization, so why then did the community physicians not take action? For those coming out of the old MOH's Department the period around reorganization was clearly very difficult. They were moved from well-defined positions in hierarchical structures to rather diffuse roles in the new Health Board and with the Districts. Watching the structures that they had built up so carefully being dismantled must have given them concern, and the suggestion that they had not done whatever was necessary in their previous roles met with some resistance. For the new community physicians, particularly those coming into Glasgow from outside, the reason that they did not see rickets as a priority seems to be that they needed time to become accepted, that they had to deal with a new structure and with the fears and concerns of individuals who had just lost their old positions, that there were many pressing problems, and that an orientation towards health care provision rather than public health predominated. Finally, several community physicians at District level were previously Medical Superintendants from hospitals so that their

backgrounds were not conducive to the idea of a public health campaign.

How then were these blocks to a campaign removed and why at a particular moment in time? In part the answer seems to be in the accumulation of people with a concern about rickets. In the early 1960s there was no Community Relations Council and it was not until the mid 1970s that the CRC officer also began lobbying the Health Board and the Glasgow Council. Because of the film 'In Place of the Sun', by the mid 1970s the community dietitians at the health education unit had also become anxious to do something about Asian rickets. It was not until the mid-1970s that Dunnigan became convinced that a health education and supplementation campaign could work. By that time, the immediate traumas of reorganization were over and this presumably gave officials at the Health Board more scope for taking up problems such as rickets. Some of those who had been involved in the 1960s had also retired so that any reservations they might have had were no longer so influential. Finally, the accumulation of evidence, plus the gradual realization that Asian rickets was not a passing phenomenon, made the arguments for a campaign difficult to oppose.

### **National policies and action**

Throughout the 1960s and 1970s, while the Glasgow events were taking place, concern about rickets was emerging throughout the country. In 1976, a booklet was issued by the DHSS aimed at health professionals to help them to be aware of the problem (17). At the same time, the chappati flour study in Glasgow demonstrated that there were possible solutions. Thus, health professionals, DHSS and the Asian community themselves were questioning what should be done and in 1977 the DHSS established a Working Party on Fortification of Food with Vitamin D, under its Committee on Medical Aspects of Food Policy (COMA).

Discussions about fortification of foods with vitamin D were not at all new. During the war, fortification of margarine had been introduced, as had free cod liver oil for children under 5. Vitamin tablets were also free to pregnant women and for 30 weeks after delivery. In addition, the vitamin D content of cod liver oil was doubled. These arrangements continued after the war but led to



concern as evidence emerged of children developing hypercalcaemia with the suggestion that this was caused by excessive vitamin D. By 1957, the amounts of vitamin D in cod liver oil and infant milk and cereals had been reduced. When the COMA Working Party met in 1977 they were well aware of the potential toxicity of excessive amounts of vitamin D and took this into account.

The Working Party (5) came out against the fortification of chappati flour and recommended a vitamin supplement campaign accompanied by health education. Their main arguments were: that those most in need (children) consumed the least chappati flour while healthy young men might receive the highest doses (with the underlying concern about long-term toxicity); that fortification would require amendment of bread and flour regulations and appropriate procedures for testing and enforcement; that 'compulsory medication' which would involve large numbers of people not at risk might, like fluoridation, meet with great opposition; and that voluntary fortification would lead to problems for manufacturers and retailers and might not reach the at risk groups.

They recommended instead that Health Authorities responsible for Asian populations should 'give priority' to the education of health professionals and the Asian community themselves about vitamin D, including exposure to sunlight and the need for supplements for at risk groups. Vitamin supplements are already available under the Welfare Foods Scheme to children up to 5 years and to pregnant and lactating women (up to 30 weeks); thus the problem lies in making health professionals and patients aware of the need for these supplements. The only changes the Working Party suggested in this area were that consideration should be given to making vitamin supplements available to women attending hospital antenatal clinics, to adolescent Asian school children during the winter, and to some house-bound Asian women.

Although the report was not published until 1980, the recommendation against chappati flour fortification was made known at the end of 1978. It was shortly after, that Dr Gerard Vaughan, the then Minister of Health, began to take an interest in the problem. The Asian community seems to have accepted that they were not going to get fortification and Dr Vaughan seems to have been concerned to show them that the problem would be tackled seriously. He asked the DHSS to convene Asian community leaders and the meeting was held in November 1979. The aim was to use their knowledge to

see how rickets, osteomalacia and the measures for prevention could be brought to the attention of Asian people, as well as to open their networks for health education. It was also felt to be important to get the Asian communities' traditional leaders in support of the campaign. It was a sub-committee from the larger group which actually planned the Stop Rickets campaign.

A major health education and supplements campaign was not something that the DHSS had undertaken previously and there was scepticism about the approach. The normal procedure would have been to alert Area Medical Officers to the problem and leave it to them but the Minister and the Asian committee were convinced that this was not adequate and that a major campaign to bring the message to the Asian community was essential. Late in 1980, a national director was appointed to run the campaign, and the campaign was launched in February 1981. After a national launch the next step was to persuade each of the 40 or so Health Authorities with significant Asian populations to start local campaigns.

As discussed in the report of the national campaign (18), not all of the 40 Health Authorities were willing to undertake a local campaign. In the remainder of this chapter the history of events in four English Districts who gave varying responses to the national Stop Rickets campaign is presented. As a footnote it should be added that the campaign highlighted other problems of Asian communities and a new campaign concerning maternal and child health is planned.

#### **District A (previously part of a larger Area)**

***The Asian community and the Health Authorities.*** There was a first phase of immigration into the city consisting, from 1952 to 1965, of predominantly males of working age. This was followed by a growing influx of women and child dependants. In the Metropolitan District as a whole (which is larger than the current Health District) there are about 45,000 Asians or about 10 per cent of the population. More than half are from Pakistan and are Moslem. The Asian population in the city is poor, has higher unemployment levels than the indigenous population, and many of the women do not speak English and are illiterate. The community is conservative and said to fear authority which may make them afraid of using health services, particularly hospitals.

In the 1960s, the Metropolitan Council, including the Health Department, was alert to the special problems of immigrants, partly because there were fears in the indigenous population that the immigrants might be importing disease. Immigrants were contacted on arrival and invited (voluntarily) to come for screening (particularly for TB and intestinal diseases). Interpreters were employed in the community health service and there were Asian liaison officers. Since that time the Health Authorities have made a number of special efforts involving considerable energy and expense to reach the Asian community including shifting medical resources into immigrant areas, establishing community antenatal clinics, and a training programme for community nurses so that they understand the special needs of the community. However, these efforts are judged by some workers to be totally inadequate to meet the needs.

Only recently has the CRC become involved in community development including health. Partly as a result of the rickets discussions and the other problems it uncovered about the difficulties the Asian population have in using the Health Service, the CRC now seems to be taking on a more active campaigning role including lobbying the Health Authority to provide Halal meat in hospitals and to increase the number of interpreters.

***The appearance of rickets.*** Like Glasgow, there are parts of District A which are very deprived and rickets continued to be found even in the white population until quite recently. At the end of the 1960s, evidence of vitamin D deficiency amongst the Asian population appeared both among children and pregnant women. Because of these findings there was communication with the Glasgow workers. As a result, in collaboration with them, a survey was carried out in school children in 1973.

The team first looked at hospital admissions. In the 9–16 years age group, 23 children, all Asian, were admitted with rickets over a four-year period, and 18 of them required osteotomy. A survey of children aged 9–16 was also undertaken. This included 156 Asian, 40 West Indian and 35 white children. Biochemical markets, including serum 25-hydroxy vitamin D levels were measured. In May 1973, 45 per cent of Asian children showed biochemical abnormalities (compared to 22 per cent West Indian and no white child), and the mean serum 25-hydroxy vitamin D levels were lowest in the Asian children. Forty of the children with abnormali-

ties were re-examined in September 1973 following the summer and biochemical abnormalities had improved in many of the children but radiological evidence of active or healing rickets was seen in 20 of the Asians investigated.

It is clear that there was a problem of both overt and radiological rickets in the city in 1973. Some action was taken on this: health visitors were encouraged to promote vitamin supplements in child health clinics, and a meeting on nutrition was also held with Asian leaders. One or two Asian doctors tried to stimulate interest in rickets in the community but few Asians came to their talks. There was beginning to be much talk about chappati flour fortification with the national committee reviewing this subject and specific interest in the local problem seems gradually to have declined.

**The recent campaign.** By 1980, when the first approaches were made by the DHSS to Health Authorities, the general impression was that rickets was no longer a problem in the city either numerically or in relation to other health problems amongst Asians. Few GPs or health visitors could remember cases of even suspected rickets; paediatricians felt it was a minimal problem. A review showed that, in the years 1973-5, there were only 29 cases of outpatient referrals for suspected rickets, and these were mainly toddlers. What seems surprising is that there were not more cases amongst school children. Even if toddlers were by now getting vitamin supplements, school children were not, so it seems surprising that so few cases were found. Local workers suggest that diet and exposure to sunshine improved in the period after 1973.

The first response of the Health Authority, when the specialist in community medicine (SCM) for child health was called to a meeting in London, was that they had much more severe problems than rickets, for example iron deficiency, anaemia, and high perinatal mortality rates. The Area requested that the campaign be broadened out, at least to cover anaemia, but this was rejected by the DHSS. Left with rickets as the central concern, the Health Authority felt they needed to know the extent of the problem before taking action. A similar view was held in a neighbouring city and a proposal was put to the DHSS to carry out a study in the two cities (a) to provide this baseline information, and (b), to evaluate the effects of the proposed campaign. Serum vitamin D levels and anthropometric measures were to be taken both before and

sometime after the campaign in 100 children in each of four age groups in each of the two cities. This research application was eventually rejected by the DHSS.

The two cities did, however, proceed with the rickets campaign. A committee of health professionals and Asian leaders had already been formed to plan the activities. Although the Area A committee felt they already had good contact with the Asian community and felt that rickets was not a priority, they felt that they might as well use the impetus of the national campaign. The campaign was launched jointly with the neighbouring city in October, 1981. The rickets campaign seems to have been brief and aimed mainly at the Asian community rather than health professionals, though the latter had received relevant data throughout the preceding year. Briefing sessions had been held for senior health professionals, and GPs were circulated information through the Family Practitioner Committee, but these activities were fairly limited. For example, the paediatricians were not involved in the campaign.

On the nursing side, there were no special meetings but rather the usual chains of command were used to pass on the message about the campaign. The health visitors did find the campaign useful as a means of formalizing their policy on what to do about rickets. Staff meetings were also held by midwives and health visitors with the dietitians and Health Education Officer in the hope that a District policy on diet could be produced. This has not resulted so far. For school-age children, it was decided by the campaign committee that supplements should not be given routinely. The main focus was to be on diet and sunshine and school nurses were alerted to look out for rickets in school health interviews.

In the Asian community about twenty meetings were held (at mosques, in Asian women's centres, etc.) mainly under the auspices of the CRC. Posters were put up all over the city including Asian grocery stores and clubs, and talks were given on the radio. The whole campaign lasted just a few weeks and it seems that the issue was then dropped: partly due to lack of interest and partly because some of the central people left as a result of restructuring or for other reasons.

**Factors influencing events.** Despite early interest in the problem, District (then Area) A's response to the recent Stop Rickets campaign was fairly low key, why was this? The answer partly stems

from the Asian community itself which presents enormous problems to the Health Service because of its poverty, language, and cultural differences. The problems appear specifically in high perinatal mortality rates, high handicap rates, and very poor diets for babies leading to severe anaemia, amongst other conditions. In the midst of these problems, it is perhaps not too surprising that there was not a great deal of enthusiasm for a campaign concerning a disease of seemingly low priority. Few cases of overt rickets have been seen recently in the Asian community and there is the impression that health visitors have been doing their job well in promoting vitamins and that Asian families are very willing to give them to their children.

There were also some objections to the methods being used in the campaign, which were seen by some as 'naive and inappropriate'. Some local workers stated that the problem would only be overcome over a long period of time through the one-to-one relationship of Asian mothers to their health visitor or doctor.

Also of importance is that there were no particular individuals championing the rickets cause, either amongst service staff or from the Asian community. Nor did anyone locally have real enthusiasm for using the rickets campaign as a vehicle for closer connections and understanding of the Asian community.

### **District B (previously a single District Area)**

***The Asian community and the Health Authorities.*** In the 1950s and 1960s, District B was a thriving city and immigrants were attracted because of the availability of work and the fairly cheap housing. The major influx took place in the 1960s and a smaller number arrived from East Africa in the early 1970s. The majority of the city's Asians are Sikhs from the Punjab. At present Asians make up about 7–10 per cent of the city's population.

The community gives the impression of being fairly well organized and reasonably affluent. The majority of the men speak English well, but language is still a problem for many of the women, especially the more technical language of health care. The race relations seem to have been good until 1981 when an 18-year-old Asian student was killed and an Asian doctor was stabbed. The racial tension has now declined, in part perhaps because of the efforts of the Lord Mayor's Committee for Racial Harmony which was set up at the time.

The City Council's attitude has been that immigrants should be encouraged to integrate into the city but that there should be no discrimination against them. In the early days the MOH did make some special attempts to reach the immigrant community. There were clinics to give health checks to immigrant children from all countries (which continue) and he attempted to use Asian clinical medical officers in that community. However, the City Council felt that even these efforts should not be pushed too far.

Since 1974 the Health Authority has taken the view that the Asian community should receive their health care through normal channels (apart from some special services such as the immigrant clinic). More recently there has been interest in making special attempts to cater to the needs of Asians. For example, since 1981 there has been a Working Party on Asian Feeding Problems in Hospitals and the hospitals do now have Asian menus.

**Early investigations of rickets.** Unlike other Areas, awareness of Asian rickets came not from orthopaedic surgeons or paediatricians noting an increased incidence, but from external research workers. In 1973, workers from a university Pathology Department outside the Area asked if the city would participate in a survey of school children to look for subclinical rickets. The MOH felt that the city should participate since rickets was being reported from elsewhere, although there was no information suggesting that it was a problem.

For the survey, two schools were chosen, each with about 50 per cent Asian pupils. Blood samples were taken from 400 pupils, about half Asian and half white or West Indian. Serum calcium, phosphorus, and alkaline phosphatase levels were measured. Any children with abnormal biochemical profiles were sent to the local paediatrician for assessment which included radiological investigation. About 30 children had 'abnormal' biochemistry but less than 10 had any indication of rickets (in fact only 4 were eventually treated with vitamin D) and the paediatric radiologist only found one clear case of active rickets. The investigation was carried out in 15-year-olds, which may have been towards the end of the adolescent growth phase, nevertheless the Health Authority was convinced from these findings that there was very little evidence of even subclinical rickets. The only outcome of this increased awareness was that the local Medical Committee were asked to make sure that pregnant women were receiving vitamin D supplements.

**Response to the Stop Rickets campaign.** The Health Authority was approached to see if it would agree to be a launch area for the national Stop Rickets campaign. The Area Medical Officer pointed out that rickets did not seem to be a problem locally and therefore a campaign was not needed. Subsequently the Area Management Team were persuaded that even though it was not a priority, there was no harm in going along with the national campaign and taking advantage of it to reach their Asian community. The Health Authority accepted this recommendation and plans began to be made for the campaign and for a Working Party to manage it. However, it was right then (mid 1981) that racial tension began to rise in the city and health officials began to question whether it was irresponsible to single out an ethnic minority group at that particular time. It was thought that the indigenous population might be further stirred against the Asian community by the special attention Asians were receiving, and that Asians might perceive the campaign as attacking their way of life. Over the course of a few weeks these doubts increased and contact was made with the local CRC who agreed there were risks. Given the lack of conviction about rickets as a problem and the possible dangers of a campaign, the decision was made not to go ahead. Initially it was thought that the campaign was only being 'shelved' temporarily. However it has never been taken up again. Some of the materials were used, for example by health visitors, and it seems that awareness of rickets has been raised with school nurses and health visitors.

**Factors influencing events.** Other districts have said that rickets is not a problem there but the response from the Stop Rickets national campaign leaders has been that health workers are not looking for it and more is found once awareness is increased. However, in the case of District B, it is difficult to dispute the study which took place in the community and still found little indication of rickets, in addition to the fact that orthopaedic surgeons and rheumatologists only very rarely see rickets (perhaps one or two a year) and then this is not overt clinical rickets but investigation for joint pains. It is not clear why rickets should be absent in this city when it occurs elsewhere. One reason may be its more southerly latitude and another that the Asian community is mainly Sikh and perhaps more open to change, including the use of margarine and good exposure to sunlight. This can only be speculation however.



The lack of evidence of rickets has meant that the issue has been a low priority and, particularly at a time of severe racial tension in the city, was not one that the Health Authority felt was worth the risks. The low priority may also be the reason why no individual has acted as a product champion for its cause.

### **District C (previously three District Areas)**

***The Asian community and the Health Authorities.*** The Asian community in District C makes up about 20 per cent of the population. Immigrants first arrived in the early 1950s and in the 1960s Asians began to arrive from East Africa. A major influx came in the early 1970s when Asians were expelled from Uganda. The majority of the Asian population in the city are Indians, about one-third from India and the rest from East Africa. The Asian community appears to be well organized, involved in commerce, and also politically active in the city. Although many of the women do not speak English, this seems to have been less of a problem than elsewhere. On the whole the city has had very good race relations: there have been one or two concerns about discrimination but these have been minor incidents.

It also appears that the District (then Area) has had a very positive attitude towards the special health needs of immigrant groups. The reasons are complex no doubt, but seem to arise because the city is a well defined area which makes it easier to identify population groups and needs. The city was prosperous throughout the period that immigrants were arriving perhaps therefore more willing to accommodate to their needs. The major influx of Asians in 1972 caused the city to take particular steps to cope with their special problems. The interest in ethnic minorities continues, for instance the health education unit has been closely involved with the Asian community, including women's groups, for a number of years.

Interestingly, the awareness of minority needs on the part of the health service seems to be matched by an interest in health from the community. The CRC for example, has a Health and Welfare Committee. The impression is also that Asian doctors in the city, both GPs and clinical medical officers, seem to have more concern about ethnic minority needs than in other places, perhaps because their cultural background is similar to the immigrant population.

**The awareness of rickets and early activities.** In the early 1970s, when the major influx of Ugandan Asians was taking place, some schools found themselves with a very high proportion of immigrant pupils. This was particularly so at the two secondary schools (one for girls and one for boys) where some 80 per cent of the pupils were of Asian extraction. In about 1974, the school doctor became aware that a certain number of absentees from school were returning with a hospital diagnosis of rickets, severe enough in some instances to have warranted corrective osteotomy.

She therefore instituted a simple screening process for rickets both at these schools and elsewhere. This process was assisted by teachers at the various schools who were requested to refer any youngsters found at physical education or swimming classes to be grossly underweight, or have joint pains or bony deformities. Of cases thus referred, some 10–15 per cent of girls and a rather lower proportion of boys were found to be suffering from overt rickets with or without obvious signs of malnutrition.

The school doctor, through the SCM (Child Health), convened a meeting in January 1975 to see what measures could be taken. Those represented included the health professional groups who might be involved, but also CRC representatives, journalists, and Asian community workers. (It is interesting that even at that stage they found no difficulty in identifying interested individuals in the Asian community, something which was later recommended nationally in the Stop Rickets campaign). There seems to have been very little fear at this meeting that activities aimed at the Asian community would be viewed unfavourably. A major campaign then began. The first step was a dietary survey carried out in the girls' school by dietitians with the help of a teacher. The teachers and school matrons together with affected pupils and their parents were all most anxious that positive action should be taken. So much so that few problems were encountered in modifying the content of school meals, in issuing a routine letter containing advice on diet and dietary supplements to parents of all children commencing their secondary education, and with parental consent, making photographs of the worst affected cases available for teaching purposes.

At the same time there was a major drive to bring the problem to the awareness of health workers. Meetings were held of health visitors, nurses, and doctors. The Working Group, which continued

to meet through 1975, was not clear what to recommend about supplements. They felt they did not know enough about which vitamins Asians were taking, nor how they would respond to the idea of vitamins for their children. In the end, supplements were not provided routinely (though parents were told about them in the letter). It was hoped that health professionals would spot specific children who needed supplements and that, amongst the general Asian population, the thrust should be on encouraging margarine in the diet. Health education was carried out through the media and the Glasgow film on rickets was shown in many different places.

One of the interesting facets to this campaign is that it seems to have been tackled on the ground with little formal decision-making at Area Authority level. Local workers were so anxious to prevent the incidence of teenage rickets from reaching epidemic proportions that they felt compelled to act upon their own clinical evidence rather than await the outcome of a more formal and sophisticated research programme. At Area level there was some concern that the problem was being overstated but, by then, the schools and the community were already exerting pressure for action.

**The period 1975-9.** The campaign against rickets did not start and stop in 1975 but seems to have continued throughout this period. One of the reasons it did not fall away seems to have been the stability of staff. For example, because the same health visitors were in post, they only needed to be reminded about rickets from time to time. Between 1975 and 1979, when meetings on rickets were held by the DHSS and the Health Education Council, representatives of the Area were invited and, when the Minister of Health called for a meeting of Asian community leaders, an Asian GP from Area C was invited to take part. This GP was already a national figure because of his membership of the National Committee for Commonwealth Immigrants and his role in setting up the Overseas Doctors Association.

Once it was decided to have a national campaign then lead areas for launching it were needed. The campaign leaders felt that District (then Area) C might be a good place to launch the campaign since health education and the city as a whole were already active. There appears to have been only minimal consultation with the Area and at a meeting at the DHSS, the SCM (Child Health), felt that she was presented with a *fait accompli*. Apparently

the DHSS had contacted the Area Administrator and the Area Authority Chairman, but discussions had not taken place directly with the workers who were to carry out the campaign, nor at Authority level. The SCM argued against a campaign in the city because they were seeing very few cases (four admissions to hospital in 1979 and these were all in low birthweight white children) and because they had already given rickets such publicity. This view was shared by nursing officers and the Health Education Officer. However, in the end, the city was used as one of the launching areas. One of the major reasons that the Area did not raise more objections was that preparations were being made for restructuring of the NHS. The city, with its three Health Districts, was anxious that it should continue after restructuring as a single authority. Consequently they were both averse to displeasing the Health Minister and also keen to show that as an individual administrative structure, the city would be more effective. Rickets seems to have provided a vehicle to illustrate this point.

***The 1981 Stop Rickets campaign.*** Despite their reservations, the Area accepted the launching of the campaign and the officers set about doing the job whole-heartedly. At the beginning of 1981 there was considerable activity: a Steering Group was set up covering health professional and community groups; a campaign committee was set up under the Asian GP to mobilize the Asian community; and a Working Group looked at the question of supplements and what dosage should be recommended.

The main difficulty seems to have been getting agreement about the supplements. In the end it was decided that they should not be issued free since:

1. The costs to the individual were minimal and affordable by Asian families.
2. There was no budget for such supplements and getting approval was likely to slow the whole process down.
3. It was felt important that Asian families should be encouraged to use existing health facilities (i.e. getting the supplements from child health clinics or a prescription from GPs) rather than using special distribution mechanisms.

Thus, supplements were to be available in clinics and all staff were to be alerted. In the months prior to the campaign

many meetings were held of health professionals. About 150 social workers, health visitors, doctors, and pharmacists attended, and were informed about what was to happen. District C seems to have been one of the very few places where GPs were thoroughly involved, too. The Asian GP arranged a whole series of meetings, sponsored by drug companies, to get local GPs together. Talks were given by the Health Education Officer and the rickets film shown. A large proportion of the city's GPs did attend.

The Asian GP was also very successful in mobilizing the media. His campaign committee had, as assistant secretary, a local councillor who presents Asian programmes on the local radio, and many hours of local radio time were devoted to the rickets campaign in 1981.

The launch took place in 1981 and the Health Minister and national campaign director visited the city. The Steering Committee met a year later to review what had happened but have not felt it necessary to meet again. Workers involved with the campaign believe it was worthwhile particularly because it has brought them into much closer contact with the Asian community.

***Factors influencing events.*** Why did District C have such an active campaign against rickets prior to 1981 and why did it still go ahead and undertake a very active Stop Rickets campaign despite the earlier activities? The fundamental factors seem to be the characteristics of the Asian community, the city, and the attitudes of the Health Authorities. The city has the advantage of being a discreet area not just one part of a large metropolitan area. It also received its main influx of Asians at one particular time forcing the Health Authorities to take specific action to meet their problems. This probably meant that the rickets problem was much more noticeable than it would have been in a city with a continuous trickle of Asian immigrants and also meant that the Authorities were in a state of mind to tackle specific issues.

The Asian community were well accepted and are relatively well educated and commercially successful. These factors helped to reduce any fears the Authority might have had about targeting a particular ethnic group and also made it easier to involve Asian leaders even in the earlier 1975 campaign.

In the second campaign in 1981 there is no doubt that the Asian GP was a very effective product champion not merely in getting

acceptance of the campaign but in his ability to mobilize the community to make it a success. That the Health Authority were willing to go along with this, despite little evidence of rickets, partly hangs on the restructuring issue but also illustrates the willingness of workers to turn the situation to advantage and use the campaign as a way to get more closely involved with the Asian community.

### **District D** (the District did not change at restructuring)

**The Asian community.** In District D census figures show that 27 per cent of heads of households are from the New Commonwealth or Pakistan; one of the highest percentages in the UK. The community is longstanding with a comparatively small group coming from the more recent wave of Ugandan Asian immigrants. Although various religions are represented, the community has a large Moslem section. Although the racial situation has been fairly calm there have been enough incidents to evoke concern about picking out ethnic minority groups for special treatment. In mid 1983 there was no effective community relations council.

**Events prior to the national campaign.** In 1975, the DHSS requested information on Asian rickets from Health Authorities who might be expected to have this problem. This information was required for the COMA Working Party considering chappati flour fortification. An Asian senior clinical medical officer in the District provided figures. The type of children reported to the DHSS were essentially those with high alkaline phosphatase levels and the most common presenting factor was an apparent bowing of the legs. Locally it is now felt that these figures were considerable overestimates of the problem.

Another individual, an Asian community dietitian had also been concerned about the problem. She gave dietary advice about vitamin D and also prepared displays and talks for schools. She and the Asian doctor were contacted to be in the film 'Growing Day by Day' made by the DHSS for the Stop Rickets campaign. The dietitian subsequently played an active part in lobbying for a local campaign. Prior to the national campaign this was the extent of activity concerning rickets in the District.

**Events since 1981.** Once informed about the national campaign the Principal, Child Health Services, took up the issue. It was first raised at a meeting of the District Health Care Planning Team (child health) in March 1981. At this meeting it was decided that a Working Party should be established to see whether District D should have a local campaign. At first, the Working Party was keen that supplements should be issued and felt that all Asian secondary school children should be given them. However, three major objections were raised:

1. That it would be racially divisive.
2. That it would be logistically difficult to distribute supplements in schools. In part this was based on the difficulties which had arisen when there had been an effort to have dental fluoride distributed by teachers. The idea of using school nurses also seemed impossible since none of the schools have their own nurses and the public health nurses who go into schools do so irregularly and to carry out specific tasks.
3. That the problem in District D had been considerably overstated.

It was known that there was little evidence of overt clinical rickets but it had been estimated that there might be 20–25 cases of subclinical or biochemical rickets reaching the local hospitals each year. However, when the records were studied by a pathologist only about five of them were thought to be definite rickets, with another four possible cases over a two-year period. It was at this point that the whole idea of a campaign foundered. The Working Party decided, however, that efforts should be made to carry out research in the community to find out the incidence of rickets and this should include measurement of serum 25-hydroxy vitamin D levels.

In addition, there seems to have been some attempt at educating professionals. For example, the national literature provided by the Stop Rickets campaign was distributed (with some additional information specific to the District) to many health professionals. There were several meetings at which the 'Growing Day by Day' film was shown and this included one for general practitioners (attended by perhaps 40–50 GPs) and one for health visitors, nurses, and child health doctors. Contacts were also made with individuals and groups working with the Asian community with the idea that eventually Asian leaders would be invited to a meeting, originally

scheduled for October 1981, though this meeting never in fact took place.

It gradually became clear that resources were not available locally to assess the extent of the rickets problem nor were they likely to be provided by the DHSS. It was only in the late summer of 1982 that the Working Party met again. Although it became clear that research could not be done, several people advocated that the issue should not be dropped. A decision was made to abandon consideration of supplements but it was felt that efforts should be made to educate the educators, that is teachers and health professionals. In particular:

1. The Divisional Nursing Officer was to arrange meetings for nurses and health visitors.
2. The paediatrician was to speak to clinical medical officers and it was agreed that all cases of suspected rickets should be referred to him for assessment. It was hoped that in this way a clearer picture of the incidence of rickets might emerge.
3. Inservice training of nurses in all the hospitals in the district was to be arranged.
4. The health education unit was to be in touch with the nearby polytechnic to make sure that information on rickets was included in the teaching of health visitors.
5. The health education unit was to arrange sessions for teachers in local secondary schools.

Most of these activities have gone ahead and the Working Party has continued to meet. There is still no agreement about direct health education in the Asian community and there are individuals on the Working Party who feel this will not work. There is also a feeling that it is now two years from the publicity of the national campaign and that the District may have 'missed the boat' as far as using the impetus of the national events.

***Factors influencing events.*** From the minutes of the early meetings held in 1981, there is evidence of considerable acceptance of the idea of a rickets campaign. Concerns about the level of incidence of rickets in the District gradually became more apparent. That there were some cases was not disputed, but whether the problem warranted the potentially racially divisive distribution of supple-



ments to Asian school children was questioned. There were strong proponents of the campaign, particularly the community dietitian, but considerable concern from at least one of the local paediatricians about the potential side effects of giving supplements unnecessarily. He was influenced by his memory of infantile hypercalcaemia and also questioned the idea of subclinical or 'biochemical' rickets. The head of the Child Health Services seems to have had a genuine desire to tackle the problem but in the midst of the concerns that had been raised felt that research on the extent of the problem was an important prerequisite to the campaign.

The concerns have not been unique to District D but they did not, for example, stop District C going ahead with an enthusiastic campaign. The differences seem to be partly that District C had a more powerful product champion than District D (the status of dietitians in the Health Service not being sufficient when opposing the views of paediatricians, for example) but also the fact that the campaign was not viewed in District D as an important route of entry into the Asian community as it was in District C.

### **Rickets and the Stop Rickets campaign**

Despite continuing confusion about its precise aetiology, Asian rickets is very easy to prevent by making sure that appropriate children receive vitamin D supplements. Why then was it such a long time after its initial discovery that it reached national consciousness, and why once the Stop Rickets campaign was underway was there so much resistance or non-compliance with the campaign? The specific circumstances and events in Glasgow and four English Districts have already been described. Some of the important factors determining what happened are shown in table 18 and these and more general comments are discussed below.

***The climate of opinion.*** In the very early period it is clear that those responsible for preventive measures felt that the problem would only be short-lived. As Asians westernized their dietary or outdoor exposure patterns, and as the Clean Air Act came into effect reducing smog and allowing more sunlight, rickets would no longer be found. That opinion has not entirely disappeared. However, it is now recognized that the process is much slower than had been first

**Table 18. Some factors influencing response to the Stop Rickets campaign.**

	<i>The Asian community</i>	<i>Existence of a product champion</i>	<i>Evidence of rickets</i>	<i>Response</i>
District A	~15 per cent of District population. Deprived, conservative, mainly Moslem population. Health Authority overwhelmed by problems.	None.	1973 community survey showed 20 of 156 Asians (9-16 years) with radiological evidence of rickets after summer. By 1980 health workers felt problem declined. Rickets low priority.	Minimal—campaign short and low key.
District B	7-10 per cent of population. Mainly Sikhs from the Punjab, organized and reasonably affluent.	None.	1973 survey of school children: very little evidence even of subclinical rickets.	No campaign. (Race relations problems at time)
District C	~20 per cent of population. Mostly E. African, Gujarati, arrived in major influx. Educated and commercially very active in city.	First a school doctor then a very active Asian G.P.	Considerable in 1975 but at time of campaign problem already thought solved.	Very positive (officers also influenced by politics of restructuring).
District D	27 per cent of heads of household from New Commonwealth or Pakistan. Asian population of varied origins and religions but has a large Moslem section.	Community dietician (but not adequate status locally).	No agreement about the extent of problem. Review of 20-25 cases of subclinical rickets referred annually thought to be gross overestimate. Wished to carry out community survey first.	Campaign not accepted but there have been meetings for health professionals and teachers.
Comparison with Glasgow	Small Asian community in discreet pockets in city.	Very active and enthusiastic clinician.	Gradually became strong. Over years 1968-78 probability of hospital admission for rickets 1 in 29 for Asians 5-16 years old.	Health Board carried out its own campaign.

thought and that it may not be appropriate to persuade Asians to change their diet or other customs, particularly as knowledge increases about the drawbacks of the western diet.

There was also the problem of whether drawing attention to a problem of a particular ethnic minority might be seen as racism. As time went by attitudes changed, by the mid-1970s there began to be reports on the specific needs of ethnic groups including health needs. Thus a national campaign gradually became a possibility. The slowness in reaching that point may partly be due to the lack of 'pressure group' activity from the Asian community. Only recently have their leaders begun to come into contact with Health Authorities and other bodies such as CHCs, as their knowledge of the systems in the UK has increased ('a memo is better than a demo' as the Asian GP in District C puts it). It is interesting that the District where the Stop Rickets campaign really took-off (in this sample) was the one where the Asian population were more educated and influential. They had their own rickets product champion and there was a much closer relationship between the Health Authority and Asian community groups than in the other districts.

***The extent of the problem.*** It is very unusual for the DHSS to take such direct action as they did with the Stop Rickets campaign and the initial reaction is to applaud such leadership. The campaign has brought the problem of rickets to the attention of many health workers and Asian families around the country, and there has been the often stated spin-off of better knowledge of and entry into the Asian community for health workers. But it was not accepted by Health Authorities to anywhere near the extent that might have been expected. As illustrated by the four Districts in this case study, a fundamental problem concerned how much rickets there was in a particular community.

Often problems are shelved with the excuse that 'we must do some research first'. In this case the DHSS embarked on the campaign very positively only to find that often Health Authorities were not convinced they had a problem. With few studies available to convince them, many Districts said they did not have the problem (only to be told by the national campaign leaders that the reason was that they had not looked for rickets). However, even in Districts A and B where specific community surveys were under-

taken the results suggested that the problem was far less serious in the more southerly areas than in Glasgow.

But even if the problem was smaller than perhaps initially envisaged, why not go ahead and issue supplements and undertake a health education campaign anyway? In several places the low priority of rickets was mentioned, whether in terms of the efforts of health workers or the priority for a health education programme. In some places there was annoyance that this priority should have been imposed from above. There was often also the problem about whether the benefits would outweigh the risks of potential racial divisiveness. Some people had serious reservations about potential toxic effects of issuing supplements to many children who would not need them and there were also questions about who would issue supplements and whether Asians should not be encouraged just to use existing health services. In other places there were reservations about the type of health education programme that was envisaged and its applicability to that particular community.

**Complexity.** At first, dealing with Asian rickets sounds a very simple problem: just issue drops, syrup, or tablets. However, in practice orchestrating a campaign is much more complex and involves persuading and collaborating with a whole range of groups. This is probably one of the reasons why supplementation campaigns were rare prior to the national campaign and why there were reservations about undertaking the Stop Rickets campaign. Many different groups of health workers need to be involved (GPs, health visitors, child health doctors, paediatricians, etc.), if supplements are to be issued. If health education activities are to be included, they require not merely health workers but leaders within the Asian community, community relations officers, the media, and others to take part. Thus a rickets campaign is not something to be undertaken lightly and, as noted, some Districts did not see it as a high enough priority for all this effort.

This point about complexity and the number of people involved also seems to be a reason why the issue was slow to reach national or local attention in the first place. Many different individuals may have seen rickets and each of them individually may have tried to do something about the problem either in their own work or in lobbying their Authorities. However, as individuals they had little

effect since even the lobbying tended to be aimed at different groups and authorities.

**Individuals.** Once again in this case study the importance of individuals comes across forcefully. In Glasgow, a clinician acted as the product champion and in District C first a school doctor and then an Asian GP played this part. In District D, where the dietitian was the enthusiast, there was less success in terms of persuading the District to have a campaign (though there was no reason to believe that District C had any more of a problem with rickets, in fact almost certainly less, than in District D). In the two other Districts there were no clear product champions and this lack is apparent. Even at national level the prime mover in getting the campaign going was an individual, the Minister of Health at the time. His enthusiasm and commitment was very influential in the type of campaign and the speed with which it came about, despite scepticism from DHSS officials about the approach.

### **In conclusion**

This case study illustrated how a simple problem can turn out to be so complex that only the highly committed will wish to tackle it. As concerns the Stop Rickets campaign, it may be that in their efforts to get on and do something, admirable though this was, the DHSS did not consider adequately the discussions which would arise at local level. As a result, the campaign was not accepted as easily as might have been expected. Like the regional secure units care study the view from the centre was not the same as that at the periphery. For the rickets campaign there was the further problem about the rigidity of the approach. While there was some flexibility in how individual Health Authorities could carry out the campaign, to a certain extent they had to conform, as illustrated by District A and its wish to include anaemia.

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CASE

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***Day Surgery***

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Day surgery has been promoted by enthusiasts and by policy-makers for a number of years and it has been subjected to a number of trials which have demonstrated its safety. Yet the exhortations suggest that not as much day surgery is undertaken as managers of the NHS might think is desirable. In this case study an attempt was made to understand why particular hospitals and districts were carrying out more or less day surgery. Four Districts (E-H) were studied through interviews and visits: to look at the effects of the *facilities*; and to find out what *attitudes* there were towards day surgery.

The four Districts were all within a Region whose policy is to encourage day surgery. The Districts were chosen, with the aid of the Regional Medical Officer, and using the 1981 performance indicators, to include Districts with a stronger or lesser interest in day surgery. Day surgery in the various specialties for Districts E-H is shown in table 19. For various reasons the statistics do not give entirely the correct picture and it was only from visits that it was possible to gain a more accurate picture. This is a common problem in day surgery assessment and not specific to this Region, so a brief discussion of day case statistics is given below. General characteristics of the districts are shown in table 20.

**History of the innovation**

Day surgery must be set in historical context. Before the advent of

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**Table 19.** *The 1981 performance indicators give the following information about day case work in Districts E-H with day cases given as a percentage of discharge, deaths, and day cases.*

	%	E	F	G	H	Region
Paediatrics		0.4	0.6	1.2	0.2	5.3
Gynaecology		20.8	2.2	1.4	21.1	13.9
Traumatic and orthopaedic		17.7	28.6	19.0	2.4	14.5
General surgery and urology		26.9	14.1	17.5	14.1	17.5
General medicine, chest diseases and GP medicine		0.2	0.7	3.3	8.9	7.6

anaesthetics and antisepsis, patients who could afford it were operated on in their homes. Then followed a period of surgical development with operations taking place in hospitals, and long-stays and much bed-rest being the accepted practice. Hospital inpatient facilities have not had the total monopoly of surgery however; general practitioners have always undertaken some minor surgical procedures and, depending on their interest and facilities, continue to do so. Hospital day case surgery is also now new. Nicholl reported in 1909 on 8988 patients receiving day case surgery in the Glasgow Hospital for Sick Children (1).

The modern development of day surgery is however a post Second World War phenomenon. By 1955, Farquharson (2) could defend early ambulation to a specialty that was at least beginning to see its benefits.

He made the following observations:

Many of those who are most enthusiastic about early ambulation insist, however, that it should not be made a pretext for too early discharge of the patient from hospital. The reason for this advice is not clear but it may be ascribed to the fact that traditions die hard.

Farquharson made this comment in a paper in which he described herniorrhaphy as an outpatient procedure. He reported on 458 cases who had been treated in this way since 1950. All the patients were operated under local anaesthesia and only 11 had complications which required their admission. He advocated the widespread use of outpatient surgery both because individual patients preferred it and also because it would reduce waiting lists.

**Table 20. Description of districts E-H.**

<i>Location</i>	<i>Population characteristics of special relevance</i>	<i>Facilities (general)</i>	<i>Facilities (day surgery)</i>
<b>District E</b> Outer London —traditional links with teaching hospitals	—	Mainly antiquated facilities scattered over district	5-day ward in E3. Theatres available in one hospital but few recovery beds and vice versa
<b>District F</b> Coastal town	Very high proportion of elderly often living alone	New DGH but general medicine not on site. Also GP hospital with theatre	6 of 16 beds in A and E available for recovery. A and E theatre, but only used for casualty work. Day cases done in main theatres.
<b>District G</b> Several small towns in fairly rural area.	—	2 main acute hospitals, one new. Consultants cover outpatient clinics elsewhere.	10-12 short-stay (day case) beds available, currently moving location. Most day case work done in main theatres.
<b>District H</b> Inner city teaching district	Local population socially deprived. About 70 per cent patients come from outside district, thus idistance problem and more complex cases.	1 main acute teaching hospital	Large outpatient theatre area where much of day work undertaken. Waiting areas + 10 bed recovery room (due to be expanded)



In the decade following Farquharson's publication there were a number of reports from hospitals undertaking day case surgery. The operations were mainly for hernia repair although other procedures such as the treatment of varicose veins were also reported. For example, Stephens and Dudley, in 1961 (3), reported on both types of operation and insisted that the standards should be the same as for inpatients, so that general anaesthesia and preoperative assessment were undertaken. Their patients recovered on the wards and went home 5–8 hours after the operation. Several authors reported on randomized controlled trials. Morris and colleagues (4) randomized hernia repair patients from the waiting lists, to either in or outpatient surgery. The only problems they found were postoperative chest infections in some patients and that some patients would have preferred to be in hospital for 48 hours. A more recent controlled trial has been undertaken by Russell and colleagues (5) in which patients for hernia repair or haemorrhoid surgery were randomized to discharge at 8 hours after surgery or after 5–6 days. They found no difference between the hernia groups but a two-fold increase in complications with the haemorrhoid day patients. This led them to extend the length of stay to 24 hours for these patients. Like Morris they also found that a number of patients would have preferred to stay in hospital for 24 hours.

Initially, day case surgery was undertaken using regular wards but gradually the idea of special units developed, the first one being set up by Calnan and Martin at the Hammersmith Hospital in 1967 (6).

What role has the government played in the promotion of the idea? The Ministry of Health were quick to see the advantages of day surgery in terms of reduction of waiting lists and also as a cost-saving approach. In May 1967, they held a conference on the subject and subsequently issued a circular promoting the idea (7). In 1973, a circular was issued (8) on 'Arrangements for the care of persons attending hospital for surgical procedures as day patients'. It gave the advantages and asked Health Authorities to 'give consideration to the introduction or extension' of day surgery. Again, a circular in 1975 (9) on *Reductions of waiting times for inpatient admissions—management arrangements* drew attention to the fact that the Secretary of State had offered £5m for minor capital schemes to reduce waiting lists and presumably this money could be used for day case units and facilities. Day case surgery has

also been advocated in the DHSS *Report of a study on Community Care* (10) and through publication of the arrangements for planned early discharge in North Tees in the NHS 'Notes on Good Practices' series (11). The DHSS are keen to point out however that their enthusiasm for day surgery has been well tempered by concerns for safety.

Encouragement for more day surgery has come not only from DHSS but also from leaders of the medical profession. In 1982, the chairman of the Central Committee for Hospital Medical Services recommended to Regional Committees that in view of the severe financial problems of the NHS, consultants should look at ways to increase efficiency and reduce waste and he questioned whether greater use could not be made of day care for surgical purposes (12).

So how much day case surgery does in fact take place? Since 1974 the Hospital In-Patient Enquiry has been collecting data on day case surgery in England and Wales. The data are not complete but the Office of Population, Censuses, and Surveys (OPCS) has extrapolated the data to present national rates. Over the four years (1975-8) covered by their report (13), day case surgery rose by 41 per cent from an estimated 380,700 cases to 536,300 cases. Day case operations accounted for almost one in five operations in 1978. The common day case operations were cystoscopy (12.5 per cent of day case operations), excisions of skin and nail lesions (12.2 per cent) gastric intubation (8.7 per cent), vasectomy (7.5 per cent), and uterine curettage (4.4 per cent). Despite the early emphasis on hernia repair, only 3.3 per cent of patients having hernia operations were day cases compared to 89 per cent of vasectomy patients. Thus the conclusion seems to be that, although more minor operations are undertaken as day cases, there is little enthusiasm for more medium level operations. The problems of the statistics need to be discussed, however.

### **Statistics: day cases and waiting lists**

The Hospital Inpatient Enquiry defines a day case (14) as a person who comes for investigation, treatment, or operation under clinical supervision on a planned non-resident basis and who occupies a bed which may be in a ward, a day unit, or may be a recovery or observation bed. Patients attending for procedures traditionally

carried out in outpatient departments, such as routine injections, plasters, or the removal of sutures are excluded.

Though this definition may seem watertight in fact it has been interpreted quite differently by different hospitals. As noted in the OPCS report (13) not all hospitals have full coverage of day cases on their Hospital Activity Analysis system. For example, in District H in this case study, patients going through the outpatient theatre area were recorded but many of the day patients using beds on the wards were not. In any hospital, a clerk trying to track down all the day cases will have difficulty. Each of the hospitals visited could illustrate specialties where it had been discovered that not all day cases were included.

Even where serious efforts are being made to count all day cases there may be problems with the definition, for example, how are transfers from another hospital just for the operation, to be treated, what about repeated procedures such as renal dialysis, and where precisely is the borderline between planned outpatient procedures and day cases? Thus, although day case statistics are improving and have recently received some attention from the Körner Committee (15), they are often difficult to interpret, since hospitals and districts may not be recording all their cases or they may be interpreting the definition differently. These reservations should be taken into account when looking at the data for Districts E-H.

Another set of statistics needing discussion are those concerned with waiting lists. Waiting lists and the waiting times patients' experience are important because they have influenced the uptake of day surgery by individual surgeons, yet it is notoriously difficult to make any sense out of them (16, 17). First, whether a patient is sent to a hospital consultant will depend on the GP's view of the seriousness of the condition and knowledge about the supply of services. If a GP knows there are long waits at a particular hospital for a procedure, he or she may send the patient elsewhere or, perhaps if the condition is less serious, the GP may not refer them for a hospital consultation at all. Then, individuals are not included on a hospital waiting list unless they have been defined by the consultant as requiring a specific treatment. The wait for an outpatient consultation is not therefore included in the waiting time, nor are patients so waiting included in the waiting lists. Yet the length of these times can be quite variable. There is also the consultant's threshold for putting the patient on a waiting list for

treatment and it has been illustrated (16) for cataract surgery that this is quite variable. Another point concerns the consultants' practices concerning booking procedures. Patients come off the waiting lists once their procedures are booked yet they may still have anything from a day or two to several months to wait for the operation itself. Permutations and combinations of all the variables make waiting lists very difficult to interpret. They cannot be entirely ignored, however, since they do affect practice. For example, one surgeon may perceive pressure from the number of untreated people on his waiting list and decide to introduce new measures, such as day surgery, or, the lack of perceived pressure may result in him feeling that he can afford the luxury of 24 or 48 hour stays. Others feel that no matter how hard they work the waiting list will always remain the same since the threshold for GP's to send patients will just be lowered, thus they will see no advantage in trying to get through their waiting lists.

### **The four Districts**

#### **District E (See table 20)**

District E has four acute hospitals and each of them was, until a few years ago, in quite antiquated facilities. It was therefore decided to rationalize and improve by creating two district general hospitals: However, with the current economic circumstances (the District being about £0.8m 'overspent' this year) there are concerns that this rationalization will never be completed. The new buildings include an Accident and Emergency (A & E) centre, now 12 years old at hospital E2 and, at hospital E4, a more recent 11-ward replacement block. Currently then District E has problems with adequate numbers of beds on one site but poor support facilities and vice versa.

The District is on the outskirts of London and has traditional links with the London teaching hospitals. Until the late 1960s/early 1970s its consultants often came from these hospitals and did sessions in the District. At that time, however, a number of new consultant appointments were made, the individuals working exclusively in the District and thus without facilities directly available to them in the teaching hospitals.

Most of the day case gynaecology is done in hospitals E1 and 2 and most of the day case general surgery in E3 and 4. As shown in the statistics, these two specialties are particularly high. Trauma and orthopaedics is also above the regional average and is done mainly in E3 and E4. Specialized paediatric surgery mainly takes place in a neighbouring hospital outside the District so there is no discussion of paediatric surgery here.

**Hospital E1.** This hospital, like E2, is an old cottage hospital. It has an operating theatre but the main constraint on day surgery is said, by surgeons, to be the number of recovery beds. Four beds in one unit have been designated as day case beds but current plans are to convert this unit for geriatric care, so this facility will be lost. The two general surgeons are shared between E1 and E3 and, as described below, they are both very keen on day surgery. The recently appointed gynaecologist also undertakes much day surgery and these cases are mixed in the main operating lists.

**Hospital E2.** The accident and emergency centre has two operating theatres and there are also two theatres in the old cottage hospital part. The problem lies in the number of recovery beds which might be used for day surgery. Three beds in accident and emergency (out of 12) are designated as day case recovery beds but they are often in use by the A and E department so three beds in single cubicles on the old private ward were allocated for day surgery. However, the DHA in its cost cutting exercise recently decided to close these beds as the ward is difficult to nurse and very costly on staff. The surgeons are seeking to reverse this decision. The shortage of beds is exacerbated in the winter when the hospital is often on red alert, taking only emergency patients. This removes the possibility not only of day surgery but of all cold surgery.

Another limitation on day surgery is the number of surgeons who operate in the hospital. There are two general surgeon posts but one of them is vacant and the other surgeon shares his time with a teaching hospital. There is one A and E consultant, two orthopaedic surgeons (who also have beds at E3), and a gynaecologist. Some day case general surgery is done, as is some trauma and orthopaedics, including a minor operations session carried out by the A and E consultant.

When the gynaecologist arrived in 1968, little surgery had been undertaken. Because the consultants also worked in other hospitals

they could take patients outside the District, whereas the new consultant was forced to find ways to deal with the long waiting lists directly. He began day case work choosing patients very carefully so that the anaesthetists would readily accept them. Initially, he began with dilatation and curettage (D and C) operations and cervical biopsy. He now also does terminations and very occasionally laparoscopy. He does two surgical sessions, in each case a double list, with, if possible, three day cases at the beginning of the list. Apart from careful patient selection, he, with his secretary, organizes the work himself, and prefers to do the operations at the beginning of the list so he can see how well patients have recovered, later. Though he has a registrar and two SHOs whom he supervises while they perform most of the operations, he feels he should carry out certain of the day operations (terminations, laparoscopy, and cone biopsies of the cervix) and not delegate them.

His day case patients are usually booked at the time of the outpatient clinic (as are all his patients) and it is rare that a patient will have to book more than four weeks in advance, except for their own convenience, and urgent cases can be fitted in much sooner. He clearly feels constrained by the lack of recovery beds especially during red alerts but does not believe that many more gynaecology patients could or would wish to be treated on a day case basis.

**Hospital E3.** There are two operating theatres at E3, both used intensively, an additional ENT theatre and an endoscopy room. There is no accident and emergency department. In addition to the two surgical wards, there is also an 18-bedded five-day ward. Thus the constraint is more in terms of operating theatre time than with beds; though the five-day ward is kept busy.

The general surgeons carry out a high proportion of their work as day cases. One of them came into the District particularly enthusiastic to get day case work under way. He persuaded managers to convert one ward into a day case ward. This opened in 1973, and eventually became a 5-day ward. It has 18 beds and is staffed for 9 overnight beds, the rest can therefore be used for day cases. It is mainly used by the general surgeons, the orthopaedic surgeons, and a urologist from a teaching hospital who does sessions there. Currently about 50 patients go through the ward each week. The ward was threatened with closure recently but it seems that it will stay open.

The surgeons tend to mix the day cases in with the main lists, apart from endoscopy which is in a separate theatre. Most endoscopy is carried out by surgeons, rather than physicians as in some other districts, so this does boost the general surgery figures. The sorts of operation, apart from endoscopy, which are done are lumps and bumps, ingrowing toenails and vasectomy. Usually varicose veins are kept in 24 hours although some (e.g. if only half the leg is treated) are sent home the same day. Hernias have been attempted as day cases but have, in fact, been kept in overnight. The difficulty is said to be both postoperative pain and also the problem of waking patients if they have been premedicated.

The nurses have gone along with the changes although it means more intensive work for theatre staff. When the endoscopy room opened no additional nurses were employed so that the main theatres were squeezed of staff. Patients for general surgery are booked at outpatient clinics. The wait to the outpatient clinics can be 6-7 weeks but then the patient can be operated on almost immediately. The practice in gynaecology is slightly more conservative in that few operations are done as day cases, though 24 and 48 hour stays are common. There are two gynaecologists and 36 beds available.

**Hospital E4.** The new replacement block has just opened at E4. It contains 11 wards of acute beds (replacing 13) but currently 8 of them are being used for geriatric and three for medical care (1 male, 1 female and 1 mixed). This should be a temporary phenomenon. The next phase of building should include support services including new operating theatres, which are currently in huts with a limited life. There are concerns about how soon this support facility will be built, given the current economic climate.

Meanwhile, the surgical facilities include four wards (one each male/female of general and orthopaedic surgery) and four operating tables, two in one theatre with an adjacent plaster room and two in separate rooms. The theatres are not well set up for day case work because there is no waiting area and little recovery space. There are no day beds, no five-day wards and, in fact, day cases either recover in two of the six casualty beds (the maximum usage possible) or in any beds available. The constraints on day case work are said not to be operating time nor theatre availability but recovery beds and the nurses to staff them.

Nevertheless, a great deal of case work is undertaken. There are three general surgeons, one of them mainly interested in urology. There has been a long-term interest in day surgery, particularly after the surgical beds were reduced by 50. The enthusiasm for day surgery seems to come from a desire for efficiency, it does not extend to doing hernias, haemorrhoids (other than anal stretches) or varicose vein stripping as day cases. A separate day case local anaesthetic list does take place but general anaesthetic day cases are mixed in with the main lists. The sorts of operation which are carried out as day cases are lumps and bumps, breast biopsies, vasectomies, and a large amount of endoscopy. Day case orthopaedic operations are carried out, again with the limitation being the recovery beds.

**Conclusion in District E.** District E rates high in the region both for day case gynaecology and for general surgery and urology and yet it has no special day case unit and in three of the four hospitals, the surgeons have difficulties in finding adequate recovery beds. What factors seem to have encouraged this situation to come about? It seems that the District has a number of relatively young consultants, that is they took up their appointments in the late 1960s, early 1970s. They came in at a time when the District was shifting in focus from the London teaching hospitals to more local resources, including consultant appointments. The new consultants had all seen day surgery as part of general surgical practice and several of them have an interest in organizational efficiency and in keeping waiting lists to a minimum.

Surprisingly, given the enthusiasm for day surgery, shown particularly in one general surgeon's involvement in setting up a five-day ward, none of the general surgeons felt that hernias, haemorrhoids or varicose vein stripping should be undertaken as day case work. The arguments were based on either pain and discomfort to patients or a concern about risks.

There is some concern about day case work in the District with the funding cut-backs. Not only is this likely to inhibit growth of day surgery, but may actually reduce it, if the beds available for day case recovery are closed or re-allocated. Some of the main features of day case practice for District E and the other three districts are shown in table 21.



**Table 21. Factors influencing practice**

	<i>Rates</i>	<i>Main features</i>
District E	High	Began as way to reduce waiting lists now way to keep waits short.
	Average	No particular features, part of acceptance of day case work in district.
	High	Enthusiast (set up 5-day ward), general concern to run efficient service.
District F	Very low	Changing, new consultant an enthusiast for day surgery.
	High	Pressure on beds from elderly population, day cases seen as only way to undertake cold operations.
	Average	Mainly urology day cases, began as way to tackle waiting lists when urology beds had high occupancy rate and surgeons had operating time; general surgery low because of age of patients, no excess surgeon time and reasonable waits.
District G	Very low	Surgeons do not believe it is appropriate; with long waiting lists and waiting times, some change may result from pressures and change in location of recovery beds.
	Average	Interest in doing more if more recovery beds available, again bed pressures.
	Average	Surgeons' time, beds and operating beds reasonably balanced; only short waits.
District H	High	Waiting list and bed pressures, but day surgery seen as expedient, not ideal.
	Very low	Much of work highly specialized, even for general work no excess surgeon time.
	Average	Urology produces much of day case work; in general surgery varying attitudes towards efficiency. Argue that as teaching hospital get few cases suitable for day work.

**District F** (Table 20 summarizes its characteristics)

The new district general hospital opened in 1976. Prior to this time surgery was carried out in several scattered hospitals and the amount of day surgery was fairly limited. The new hospital provided the opportunity for day surgery to expand. It has eight theatres in the main theatre area though the most that are used at any one time is usually six. The theatres are usually reserved for a particular specialty. Although the theatres are not fully utilized, it is said that increased use would require an increase in staff, particularly nurses.

The hospital also has an accident and emergency department with its own operating theatre. However, this theatre is mainly used for casualty work and not cold day surgery. The A & E department has 16 beds in two six-bed wings and four single rooms. The consultant prefers that only six of these beds are used as recovery beds for day cases, the rest being needed as casualty and observation beds. Day surgery in the hospital then is mainly done in the main theatres, with some surgeons having day case lists and most of them, perhaps additionally, mixing in day cases with their other lists. Some patients recover on the wards (often in beds which will be reserved as emergency intake beds that night) and some in the A & E area depending on whether the surgeon has the day case recovery beds allocated to him for that session.

Surgery is also carried out by general and orthopaedic surgeons at a nineteen bedded GP hospital in the District. Two surgeons each do one list there a week and some day surgery is carried out. There are currently discussions about the use of this hospital, some suggesting that surgery should no longer be carried out there, others that the theatre could be used more efficiently, though the theatre would then need additional equipment.

The main hospital is said to be reasonably well bedded but there are very high occupancy rates in orthopaedics and urology. There are long waiting lists in these two specialties and in gynaecology. Attempts have been made to reduce these lists. Because of the availability of £300,000 in non-recurring funds a special attempt is being made with the orthopaedic list. This specialty already uses twelve beds in ophthalmology and it is now planned that eight beds will be made available from the children's area. Staff, including a registrar to carry out the operations, will be made available as long as the funds last.

Neither general medicine nor geriatrics are located on the site. They will only move when Phase II of the building opens, some years from now. According to the performance indicators, District F has a very high day case rate in trauma and orthopaedics, somewhat below the regional average in general surgery and urology, and a very low rate in gynaecology. The gynaecology figures do not represent the current situation, however. The District has a very high proportion of elderly patients and in the summer months has an influx of elderly visitors. Like Districts E and G there is no paediatric surgeon and any children's surgery which does take place is done by a surgeon in the appropriate specialty.

**General surgery and urology.** In District F there are consultant urologists as well as general surgeons. The general surgeons do very little day surgery apart from endoscopies (done by surgeons in this District because the physicians are not on site). Apart from special endoscopy sessions, what day cases there are, are mixed into the general list.

Several reasons are given for not doing more day surgery. The main argument is that because of their age and home circumstances there are very few patients suitable. It is also argued that the wards are being used very efficiently; the turnover is high with many 24 hour and 48 hour stays and the waiting list is reasonable with varicose veins waiting between six weeks and one year. Because of the fairly rapid turnover rate the surgeons argue that they do not have time to carry out more operating sessions and would be unwilling to leave a junior doctor alone to carry out day cases, especially if the session were in the distant A & E theatre.

Until mid 1981, relatively few operations were done as day cases in urology. However, by this time waiting lists were increasing considerably, though the urology beds had a high occupancy rate. The decision was made to try to reduce the waiting lists by each urologist undertaking a day case session (and using the A & E recovery beds) and also including day cases in the other lists. It appears that the urologists' operating time was not a constraint.

Check cytoscopies are now done as day cases, as are vasectomies. The urologists believe they have now cleared the backlog but the demand is enough to maintain the day case lists.

**Gynaecology.** The two gynaecologists came to the District in 1976 and 1981. Their attitudes towards day surgery differ. The more recently appointed consultant is strongly influenced by having been trained in one of the centres carrying out much day case work. About half his lists are day cases (thus the gynaecology day case rates have changed since 1981) and include D & C operations, laparoscopies, cystoscopies, uterine evacuations, and some terminations. As he has no additional surgery sessions and patients return to the ward to recover, this has put considerable pressure on both the nurses and the clerical procedures. He finds that he is limited in the amount he can do by both the availability of recovery beds and surgical time. He is anxious to have the use of some of day case recovery beds in A & E. Both consultants agree that more day case work could be undertaken if the firms had a registrar or another senior house officer. The other consultant undertakes only a limited number of day cases. Although there is a long waiting list he feels that more day surgery would not necessarily help since the waiting list problem is mainly for the major operations where longer stays are necessary. He feels that the ability to do more day work is limited by the surgeons' operating time and the organisational support necessary for arranging day surgery.

**Orthopaedics.** Operations in this specialty are carried out by the orthopaedic surgeons, as well as the A & E consultant. Day case recovery is either on the wards or in the A & E department. The reason for the high percentage of day cases seems to be the tremendous pressure on beds. The elderly population produces many emergency femur fractures as well as a great need for joint replacement surgery. In either case relatively long-stays on the wards result and the only way to keep the waiting time down for other cold operations is by carrying them out as day cases. As noted earlier, there are special efforts being made to reduce waiting lists for orthopaedic surgery and it is also worth noting that operating sessions are held on Saturdays and Sundays in addition to weekdays.

**Conclusion on District F.** There is a range of interest in day surgery. Apart from one real enthusiast for day case work, the main reason for high day case rates (as in urology and orthopaedics) appears to be pressure on beds combined with adequate surgical time. Where

there is little perceived bed pressure as in general surgery, there is little interest in day case work. (Summarized in table 21).

**District G (see table 20)**

In 1979 a new district general hospital opened. Prior to that time there were four general hospitals; now there are two main acute hospitals and surgeons based at one have theatre sessions at the other. The surgeons also have clinics at other hospitals in the District and about a third of them (including ENT, orthopaedics, and oral surgery) have joint appointments within a neighbouring district and have operating sessions there.

Day surgery had taken place earlier but became much more feasible with the move into the new hospital, which had 16 beds in the A & E wing. Four beds in single rooms were kept for overnight casualty observation and the two six-bedded bays were used for day surgery. There is a casualty theatre but although some minor operations under local anesthetic are done there, all the general anaesthetic work, and some under local anaesthetic, is done in the main theatres. Apart from the casualty theatre list, no surgeon runs a separate day case list.

The short-stay (day bed) area has now been converted into a psychiatric department and ten beds at one end of the children's ward are being used for day cases. This system is less convenient because the beds are away from the operating area. However, it is planned to move the short-stay area into one part of the surgical ward, near the theatres, shortly.

Apart from day cases from casualty and the main theatres, the short-stay ward also takes most of the outpatient cases from the endoscopy unit, a separate room in the x-ray department. Most endoscopy (gastroscopy, colonoscopy, and bronchoscopy) is done in this unit by physicians and very little, apart from cystoscopy done by one of the general surgeons, is done in the main theatres.

Initially, the nursing officer in charge of the short-stay area divided up the available beds into sessions so that each surgeon had access to four day case beds. However, a number of surgeons did not take up this option and, although in theory these beds may be available to other surgeons, for most of them it is probably difficult to take up the option since they do not have operating sessions on the days when the beds are free. This leaves a situation in the hospital where it is said that the beds are not well used and yet some

of the surgeons, for example the orthopaedic surgeons, are constrained by the lack of day case beds. There are seven main operating theatres; at most, six of them are in action at any one time. With the staffing available, the theatres are fairly fully utilized. On the whole the hospital is said to be relatively well-bedded. The two areas where there are problems are orthopaedic surgery and gynaecology. The District's day case work is above the regional average for trauma and orthopaedics, the regional average for general surgery and urology and very low for gynaecology.

**Gynaecology.** Prior to the move to the new hospital a number of minor surgical procedures were done as day cases. When the move was made, day case work in gynaecology declined. The consultants did not believe that gynaecological day cases could be looked after adequately because of the distance between the short stay area and the gynaecological unit. Some planned procedures are done in outpatients and are probably not recorded as day cases. Even apart from the physical location problem, there is limited support for day case work. Overall the gynaecologists do not believe it to be in the best interests of the patients, although the three of them vary somewhat in their views about its appropriateness. Consideration is now being given to increasing day case work once the short-stay ward moves into the surgical area. Although only under discussion at present, it is thought that a minor surgery day case list, jointly amongst the three surgeons and undertaken by junior surgical staff, might be one possibility. Additional day cases could not be fitted into the already full operating lists.

There is considerable concern in the hospital and District about the long waiting lists for gynaecology. It is currently the longest waiting list in the District with over 1600 patients. However, there is some disagreement about the accuracy of these figures and also about whether changing practices (e.g. increasing day case work) would make any difference. For example, the gynaecologists argue that the figures are inflated by many patients who no longer wish to be operated on, perhaps because they have moved, perhaps because they have had the operation elsewhere. Evidence for this come from letters to all patients who had been on the waiting list for one year or more when about 20 per cent of one consultant's list did not reply. The gynaecologists say that there is no waiting list for cancer patients, and that at least one of them has a very short waiting time

for minor operations. They admit that for such operations as non-emergency hysterectomies and sterilizations waiting times may be long. They argue, however, that because they are surgically minded their lists tend to be inflated by patients who might be treated in other ways, or not accepted for treatment elsewhere. Day case work is not seen as a means to shorten the lists, as the lists are mainly for operations which could not appropriately be performed as day cases. In any case the surgeons' operating lists are full (the number of major operations per consultant is said to be high compared with other districts) as are the beds.

Although the gynaecologists perceive the pressure on beds slightly differently, the beds are always full, so there is no possibility of day cases being admitted to the ward. The average length of stay is, however, the longest in the Region (6 days in 1981) but the gynaecologists argue that this is appropriate because they have more complex cases than in some other Districts and also because they believe that longer stays are better for the patients.

Whatever the precise situation about waiting lists and waiting times it is enough of a cause for concern in the District that the gynaecologists are likely to be under some pressure to find ways to reduce these lists.

**General surgery and urology.** Surgeons in this specialty (two general surgeons have an interest in urology) are quite supportive of day surgery though the proportions of day cases are not as high as in some Districts since there is relatively little pressure on beds, nor are there long waiting lists. The surgeons' time, operating time and beds were said to be reasonably well balanced.

If there were more bed pressure the surgeons felt that they would undertake more day case work but they believe that the current short-stay system is probably preferable for the patient. In fact, one surgeon did operate on breast lumps under local anaesthesia but felt that this was not good for the patients and has changed his practice.

**Orthopaedic surgery.** This appears to be the one specialty where a considerable amount of day surgery is undertaken by the two consultants and their juniors and in which interest in carrying out more is constrained by the availability of day case recovery beds. Day cases are done on a separate list either in the casualty theatre under local anaesthesia (e.g. carpal tunnels) or in the main theatres

when 2-3 day cases are mixed into the list (e.g. bunions and some arthroscopies). The problem is that the orthopaedic beds are fully occupied and since the specialty also covers trauma it is not uncommon for cold cases to have to be turned away though their procedure is planned. The orthopaedic surgeons utilize fully the day case ward and would do more day cases, particularly arthroscopies, if more beds were available.

**Paediatrics.** There is no paediatric surgeon so operations on children are done by the appropriate specialty. Children operated as day cases will recover on the ward not in the short-stay area and the practice has been to gradually increase the number of day cases and it is expected that this will continue as the children's beds are further reduced.

**Conclusions on District G.** Amongst the surgeons there is moderate enthusiasm for day case work, apart from the gynaecologists. In general, it seems with the lack of bed pressure, consultants (apart from orthopaedic surgeons) do not feel it is necessary to promote day surgery and as a result the short-stay ward is not fully utilized. However, the general surgeons did not feel that hernias, haemorrhoid, or varicose vein stripping were appropriate for day surgery. Practice in gynaecology is quite different from other Districts and with the long waiting lists and long lengths of stay is likely to come under increasing pressure from managers. (Summarized in table 21).

#### **District H (See table 20).**

District H is an inner city teaching district with one main acute hospital opened in 1976. Since RAWP (the Resource Allocation Working Party) implementation, District H has been under severe financial pressure. More recent pressures include the need to accommodate two other hospitals considered for closure, on the main site. Currently, then, there are plans to reduce the main hospital's beds by about 100 to make them available to these other hospitals. Although there has been little pressure from District or hospital management to increase day surgery, a number of changes under discussion, including the changing bed use may have some effect.

The hospital has a large outpatient theatre area with two theatres with adjacent anaesthetic rooms, one theatre used for micturating



cystograms, two endoscopy rooms, and a laser room used mainly by the gynaecologists. In addition, it has waiting areas and a ten-bedded recovery room. Apart from the urology theatre there are only staff for two theatres or rooms to be in operation in any one time.

General anaesthetic work takes place in the morning, the timing arranged so that the morning patients will have recovered and gone home by the time the afternoon patients have arrived. The afternoon sessions are either local or regional anaesthesia day cases or pain relief clinics. The rule is that general anaesthetic day case operations in the unit will only be done by a consultant or senior registrar, with a consultant or senior registrar anaesthetist. More junior doctors carry out minor operations under anaesthetic.

Patients are selected for day surgery at their outpatient clinics and their surgery booked. They are sent an appointment date together with instructions about day case surgery and the post-operative period. They are not seen by an anaesthetist in outpatients. A checklist of questions which might influence their response to the anaesthetic has been developed and this is filled in by a nursing sister on the unit when the patient arrives for day surgery. If there are any concerns about suitability, the patient is examined by the anaesthetist and in any case is checked by the anaesthetist before induction of anaesthesia. A letter is sent to the GP on the day of surgery but in the large majority of cases the GPs and district nurses are not involved in post-operative care.

Apart from the bed use alterations described above, a number of specific changes are planned which will influence day surgery opportunities. The urologists currently have their offices in the outpatient theatre area and it is planned to move them and their urodynamic theatre elsewhere. This should free a new area for patient recovery and make another theatre available, although to increase workload increased staff will be required. Secondly, a five-day ward of 16 beds is to open in November 1983. Beds are to be allocated to different surgeons but they will lose their allocation for the forthcoming week if they have not planned their admissions. Although a five-day ward, it is expected that surgeons will also use the ward for day cases. Another pressure may come from the main theatres, two of which are to be designated for cardio-thoracic use only. Thus, use of the other theatres will be squeezed and surgeons may be more willing to use the outpatient theatres.

Day case work at the hospital is carried out in the outpatient theatres just described, in main theatres using beds from the wards and in a variety of theatres and treatment or investigation rooms around the hospital. For example, a recent survey has shown day case work in the skins theatre, ENT theatres, dental chairs, gastrointestinal laboratories, and x-ray departments to mention just a few. Most procedures outside the outpatient theatres are probably entered as outpatient visits rather than day cases even though they are planned procedures. Thus, the statistics provided earlier for the District are not a complete picture of day case work. Nevertheless the interviews did corroborate the general impression of the statistics: that paediatric day case work is quite low (though increasing), trauma and orthopaedic work is also very low, while the gynaecologists undertake a great deal of day case work.

Some comment is required on the catchment population of the hospital. The District is an inner city area with much social deprivation and poor housing. However, only 30 per cent of the hospital's patients come from within the District, though the percentage varies for different specialties. It is said that, apart from the social problems of the local population, day surgery is also inhibited by the fact that many patients live considerable distances from the hospital. Additionally, because it is a well-known teaching hospital, the patients referred to it differ considerably from those seen in the average district general hospital.

**Early history in District H.** In the early 1970s a range of factors stimulated the development of a day surgery unit. In 1970, a Committee of Community Medicine was established to try to resolve problems and to look for opportunities at the hospital/community interface, in part in preparation for the forthcoming reorganization of the NHS.

Interest in day surgery arose, it seems, because of a randomized control trial of early discharge which was being undertaken (elsewhere) by the Department of Community Medicine about that time and also out of the general interest in day surgery from surgeons. A working party on the topic was set up.

It was agreed to renovate an old theatre, in a hospital now closed, to provide a day case unit. This scheme had the additional benefit of being a trial run for the proposed outpatient theatres to be set up in the new hospital. The unit was opened in January 1973. Initially a

district nurse was allocated to manage the community liaison work but this was found unnecessary.

Initially it was thought that general surgery cases such as hernias would be undertaken but, in fact, the main use was by gynaecologists, urologists, and dental surgeons. Because the unit was not fully utilized there were discussions about how to involve more surgeons. The unit was closed when the outpatient theatres were opened in the new hospital in 1976.

**General surgery and Urology.** There are four general surgical firms including the professorial unit; each of the firms is partly general and partly specialized. It is said that although patients present for minor surgery (e.g. local anaesthetic lumps and bumps) and for major surgery requiring inpatient stay, there are less cases for intermediate types of surgery e.g. hernias, haemorrhoids, and varicose veins, than in a normal district hospital. The surgeons vary considerably in the organization of their work and in their attitudes to day surgery; none however believes that it is appropriate to repair hernias as day case work. The more organizationally minded do run a booking system so that there is no waiting list and patients do not usually have to book more than two months in advance. Practice on lengths of stay is very variable and so far peer pressure has not influenced those who keep patients in the hospital for long periods, of which the professorial unit is an example. Much of the day case work indicated in the general surgery and urology statistics is done by the urologists who are a separate specialty in the hospital. The outpatient area has been used from the beginning by the urologists.

The waiting lists for urology are long and many patients come from outside the District, particularly for urodynamic investigations not available in their own locality. The urologists see the day case work as essential and appropriate, particularly check cystoscopies.

**Gynaecology.** The gynaecologists are also substantial users of the outpatient area. They have carried out D and C operations there for some time. More recently, terminations, at less than ten weeks of pregnancy, have been done and usually two or three are mixed into the day case lists. Within the last few months the gynaecologists have begun day case laparoscopies, though with considerable reservations. The major use of the laser is for cervical treatment and, again, it was only with some reservations that this treatment

was instituted on a day case basis. Even the gynaecologist most supportive of day surgery feels that day case work is an expedient and not necessarily in the best interest of the patient. The waiting list has been reduced considerably.

For a long time the pressure in gynaecology resulted in requests for more staff and more beds, but the lengths of stay were long and peer pressure seems to have resulted in shorter stays and greater use of day surgery.

**Orthopaedic surgery.** There are three consultant orthopaedic surgeons and one of the plastic surgeons also carries out hand surgery which elsewhere might be done by orthopaedic surgeons. The department currently has one session in the outpatient theatres per month (so that each surgeon only has one session every three months) and a weekly hand surgery session done by the plastic surgeon. The amount of day case work is therefore very limited but it is said not to be because of the limited number of sessions allocated in outpatient theatres, but because of limitations on the surgeon's time. The patient mix also influences day surgery potential. One orthopaedic surgeon specializes in paediatric orthopaedics and haemophilia and probably does not have many cases suitable for day surgery. The other two surgeons have specialist areas nevertheless they do cover general orthopaedics and so could generate day cases. However at present, even if one of them was not using his outpatient theatre time fully, it would be unlikely that others could take up the time.

**Paediatric surgery.** The hospital's tradition in paediatrics has been to keep children in hospital. The paediatric surgeon has also had little interest in developing day case work because of his commitments elsewhere. Gradually some day case work has been undertaken and there are now day case beds on the children's ward. It is planned that these beds should increase in future.

**Conclusion on District H.** Pressure on beds at the hospital is said to be intense with very high occupancy rates, yet lengths of stay have also been very long. The length of stay statistics have to be interpreted with much caution, however, since they vary so much from speciality to speciality and one surgical firm to another. In

addition, some very long-stay (one year or more) patients have been known and this, of course, skews the statistics.

However, even if bed pressure has been perceived, that has not been enough to alter practice in length of stay. There seems to be little enthusiasm for carrying out anything, other than minor operations under local anaesthesia, as day cases. Even where it is done, particularly in gynaecology (which did respond to bed and waiting list pressure) it is seen as an expedient. No-one is keen to do hernias, haemorrhoids, or varicose veins as day cases and the amount of orthopaedic surgery done on a day basis is limited.

The various limitations suggested were, as noted at the beginning, the social backgrounds of the patients, the distances they have to travel and the rather different case mix compared to a district general hospital in a non-teaching district. Other constraints are in the surgeons' time, particularly since teaching and research is also expected, anaesthetic cover for any additional outpatient theatre sessions, the number of recovery beds available and staffing for further use of the outpatient theatres. The unit management team intends, however, to rectify some of the constraints imposed by the existing facilities and other pressures, as described, may alter the interest of surgeons in day surgery. (Summarized in table 21).

### **Factors influencing day surgery practices**

**The surgeons.** To a great extent surgeons are acting as individual adoptants of day surgery so the place to begin is the surgeons' attitudes. What was most surprising in this case study was that none of the general surgeons, not even the most enthusiastic, felt that patients for hernia repair, haemorrhoid treatment (other than anal stretches), or varicose vein stripping should be treated as day cases because of the discomfort to the patient. On the other hand, all of those surgeons felt that there was a place for day case work, at minimum for endoscopy and for local anaesthetic minor procedures. From the statistics a much greater range in attitude in general surgery might have been expected. What differences there were seemed to depend on how interested the surgeon was in running an efficient organization as well as the facilities available and the pressures perceived.

In gynaecology the range of views was much wider: from a day surgery enthusiast through to consultants who did not do any case work at all, despite waiting list and bed pressures. For the majority of those interviewed who were carrying out any amount of day case work, it was seen as an expedient rather than necessarily the ideal form of care. D and C operations were accepted fairly readily but several surgeons expressed concern about laparoscopies as day cases, even though they were carrying them out.

Enthusiasm for orthopaedic day case work was generally high apart from the special circumstances in District H. On more than one occasion it was said that only by doing day work was it possible to get any number of patients through at all.

**The anaesthetists.** At least one consultant anaesthetist was interviewed in each of the four Districts. Each of them felt that there were no problems with day case work, although it was mentioned that good anaesthetic skills were required for day case work because it was preferable (or even essential) that patients were not pre-medicated. Several anaesthetists said that some of their colleagues, particularly older ones, were not so happy with day case work because of this factor. Apart from one or two specific instances, anaesthetists did not assess patients at their outpatient clinic visit but left the selection of suitable patients to the surgeon.

**The nurses.** Theatre staff on the whole seemed to be generally supportive of day case work. The main problem seemed to be where nurses might be moved from the main theatres to work in an outpatient theatre if day lists were to be increased there. However, in District H where a complete day case area operated, the nursing morale was said to be very good, though the work was intense. Surprisingly there had been problems in recruiting to that unit, it was said that nurses in inner city areas are not necessarily interested in regular shifts with no opportunity for overtime. This was unexpected since one of the arguments for day case units has been the ease in recruiting nursing staff because the hours suit married women.

The views of nurses on the wards were more mixed. It was recognized that if many day cases were to be done from the wards this increased nursing work-load, because of the preoperative and

postoperative care required. Of course, this problem is avoided if day case recovery beds are available in a special unit or ward.

***The patients and the catchment population.*** It was said that day case work suited many patients particularly women with children at home, or the children themselves. District H had surveyed patients using the outpatient area and more than 80 per cent said they preferred day stay to inpatient treatment. On the other hand, some surgeons commented that for anything other than very minor procedures, patients often preferred to stay in hospital overnight not merely because of the security it provided, but also because it gave a legitimacy to the way they viewed the operation. Of course, attitudes will vary according to home circumstances and views about health.

It was also said that day surgery depended on the circumstances of the catchment population. It may be appropriate in middle-class areas where patients have comfortable homes, relatives to support them, not too far to travel, and good primary care, though, as noted, GPs and district nurses had relatively little involvement with day case patients. In District H, there were concerns that patients' home circumstances made them unsuitable for day surgery or that they had to travel long distances. In District F it was argued that many patients were elderly and living alone so that day surgery was again not appropriate. So the population and its problems, at least as perceived by the surgeons, affects what practice is thought to be appropriate.

***The GPs and district nurses.*** A surprising feature of this case study was the lack of involvement of either GPs or district nurses. District nurses might have been involved in removing sutures in some cases but there were other hospitals where surgeons preferred to have the patient come back to an outpatient clinic even for this procedure. GPs, though informed of operations, were not involved in postoperative care to any extent. In most instances this was because there was no need for their involvement but in some cases, particularly District H, there was concern because of the variable quality of care provided by local GPs and concerns about their availability.

**The managers.** None of the Districts' management teams or Health Authorities had put strong pressure on surgeons to increase day surgery. Though often there was a comment in plans or other documents to the effect that day surgery should be encouraged, on the whole it had been left to the surgeons to define their own practices. In fact, it was the surgeons in several instances who had exerted pressure on management to provide them with facilities, the five-day ward in District E, for example. There are some indications of change, however. For example, pressures were being exerted through the reduction in numbers of beds and in change in theatre use.

A part of the problem for managers concerning day surgery has been the fact that although cost per case is cheaper than for inpatient care there are rarely any savings to be found. Russell, *et al.* (5) calculated that day case surgery saved £24-£33 per patient, a similar figure to that of Prescott, *et al.* (18) who calculated £30 savings per patient for day case surgery over 48 hours admission. The problem is that day cases are treated additionally and the beds are filled anyway. So a better service may be provided to patients but there are no savings for the Health Service because bed closures have not been acceptable. But the times are changing and bed reductions are becoming more feasible. A second aspect to the problem is that the savings are not so great if day patients are admitted to the wards because then the beds will be staffed at night anyway and the savings, for example in bed linen, or portering (because the patients still have to be transported to theatre) are not achieved.

**The balance of resources.** Apart from attitudes concerning efficiency, risk and patient well-being the strongest constraint on day surgery activity in this case study seemed to be the facilities available. It should, of course, be recognized that the real enthusiasts for day surgery may find ways around those constraints or attempt to get suitable facilities.

The main facilities which are needed for day surgery are operating theatre time and staff, anaesthetic cover, surgeons' time, including the way junior staff are used, and recovery beds. Depending on the extent of day surgery a considerable amount of administrative support will be required and, in any case, changes in



organizational arrangements will be necessary, for example in getting junior doctors to clerk the patients.

The availability of these resources at the right time and place influenced considerably what was happening in the four Districts. In District E, for example, one hospital had plenty of theatre time but a shortage of recovery beds while another had a five-day ward with adequate recovery beds but a shortage of theatre time. Even in District G where day case beds were in a separate unit there were problems in using these beds efficiently. Problems included clearing the morning patients ready for the afternoon session and the difficulties caused if they were pre-medicated (which was one anaesthetist's practice), or if they were operated on towards the end of an operating list (which again was common because of the difficulties in clerking patients early in the morning). General anaesthetic day cases in the afternoon again may cause problems in clearing the unit at the end of the day.

Even if recovery beds are available and managers would be willing to increase staff to extend theatre time there is still the problem of providing anaesthetic cover and having the surgeons to do the operations. In District F it was said that more use might be made of the outpatient theatre if it were in the main theatre suite so that the consultant could supervise a junior performing the surgery. Similar comments were made in District H when surgeons' time, particularly with the additional teaching and research commitments, was seen as a constraint. Only if day case lists were substituted for main lists would this problem be overcome and it was argued that, given the number of possible patients, this would not be justified.

A more general point should be made about teaching. Consultants in more than one District argued that day case work was not good for teaching, especially if done under local anaesthetic, since it is difficult to instruct a junior surgeon or anaesthetist when the patient is awake and listening to what is being said. In the teaching hospital in District H no teaching takes place in the outpatient theatres. It was said by consultants not to be suitable but the District Medical Officer argued that students and junior staff should be exposed to day surgery since this is now an accepted part of health care. With some reorganization of teaching programmes day cases could be used for this purpose.

Many of the problems described are organizational and could be

overcome with some determination. However, they illustrate clearly the effort involved in efficient day surgery and many surgeons may feel that it is just not worth this effort, especially if they do not view day surgery as in the best interests of patients.

### **Conclusion**

Of the four case studies in this report, day surgery is the one which relies most heavily on the individual, in this case the consultant surgeon, to adopt the practice. In most cases managers appear to believe that this is appropriate since the risks or discomfort of day surgery to the patient are a matter of clinical judgement. Once again the need to manage a service effectively and efficiently have been tempered by attitudes about clinical freedom, and very little pressure had been put on surgeons to alter their practices.

What sorts of pressures do influence a surgeon to undertake day surgery? One pressure might be thought to be the length of the waiting list as a measure of unmet need. But, as discussed, waiting lists may mean many things and it is argued by some surgeons that working harder to reduce waiting lists only encourages more GPs to add patients to those lists. Some surgeons were concerned by the long waits patients had, particularly where there was a possibility of a malignancy, and did take up day surgery. The strongest pressure appeared to be when beds were full of comparatively long-stay patients and there was a waiting list which surgeons could not tackle, although they had the time to do more surgery. At that point day surgery was a way out of the dilemma.

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