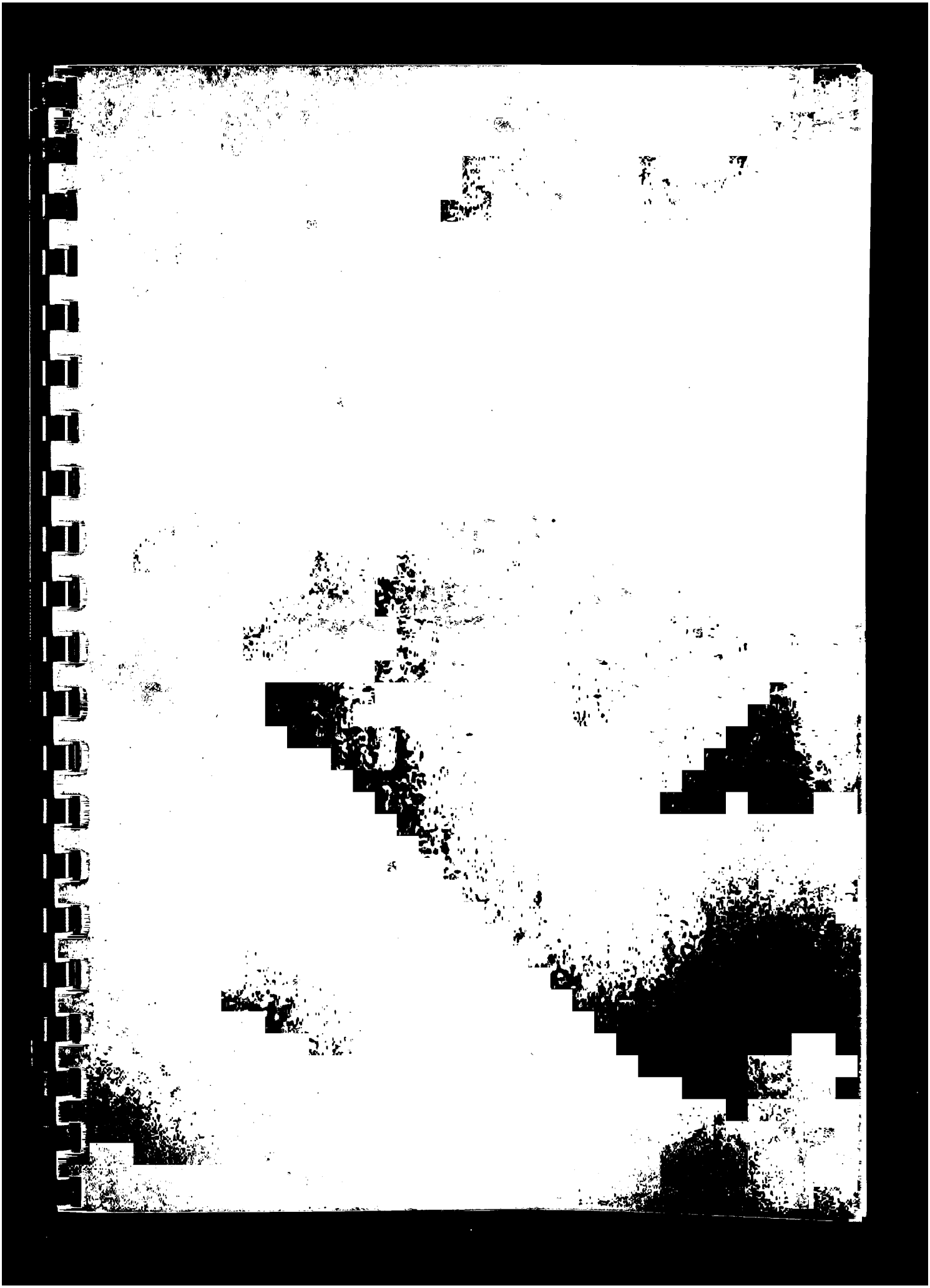


FINAL DRAFT

THE SPECIALTY REVIEWS
AN OVERVIEW

JUNE 1993

no.4 15.6.93

CONTENTS

THE SPECIALTY REVIEWS

Introduction

> "It is clear that there is unwarranted duplication of specialist services sometimes at great expense. It is plainly inefficient and not conducive to good patient care that there should be handfuls of beds in a single specialty scattered between units less than a mile or two apart. For example the Thames RHAs have reported to us that the number of centres including the SHAs providing regional specialties in Inner London are 14 in cardiac services, 13 in cancer services, 13 in neurosciences, 11 in renal services and 9 in plastic surgery".

The Government responded to these words from the Tomlinson enquiry by instructing the London Implementation Group to set up the working parties, now called review groups, which the report recommended. The aim of the reviews was defined in Making London Better as being "To achieve a more rational disposition of six specialist services avoiding unwarranted duplication and providing a stronger service and academic base for the future". The working parties addressed the five regional specialties identified in the opening paragraph with regard to the provision of adult care, and separately the corresponding services for children. The groups completed their reports as requested by the end of May 1993 and have now submitted them to Ministers. This paper from the London Implementation group provides an overview drawing out common themes, summarising options, identifying constraints and setting out a programme of further work arising from the specialty review recommendations. It should be read in conjunction with the executive summaries of the review group reports.

The Review Groups

Each of the review groups was chaired by a doctor currently practising with distinction in the particular specialty concerned, in a centre outside London. Each worked with the chief executive of one of the central London commissioning agencies who co-ordinated the activity of the group and provided administrative support. In this way the

perspectives of the clinician and purchaser have been brought together in advising on the level and distribution of clinical services.

The membership of the review groups (Appendix 1) was kept small and included doctors, nurses and therapists involved in the specialty from outside London, general practitioners and users of the service who have worked for relevant charities and voluntary organisations, and organisational experts from public health and economics. Members were chosen for their personal reputations and not as representatives of any interested parties.

The Task

Service over centuries has won for the London Teaching Hospitals the respect and affection of Londoners whose families have benefited personally from hospital care. The hospitals have had to struggle in previous times raising charitable monies and more recently in the public eye fighting a system that seems determined to curb their good intentions. King Edward VII demonstrated that rich and poor alike would give to this cause when he established his Fund for London at the turn of the century and recent support particularly in the City for the Barts campaign shows the spirit is alive and well and ready to be tapped. The City always emphasises the importance of confidence in achieving great enterprises and we cannot stress too highly that London's clinical services have to be transformed in size and levels of multi-specialty co-operation if the clinical service, research and education are to keep up an international standard. The health service has to have its version of "Big Bang" if it is to thrive in the future, otherwise as one of the group chairmen put it, only the vitality of arrogance will remain.

The review groups saw their overriding duty to be the furtherance of clinical practice in London, building on the inheritance of centuries by reviewing critically the current foundation for clinical service, research and education. The movements of population, the changes in burden of disease, the developments of health care, the integration of primary and hospital services and the need to direct money from infrastructure costs into patient therapy are themes relevant everywhere and not just in London. The complexity

of medicine and science means that individuals can only master and advance facets of even one clinical specialty. This places a premium on collaboration in the development of service and research themes which have then in turn to be integrated into programmes for greater synergy. This will be difficult to achieve but is the national and international challenge which the resources in London should be organised to meet. The review groups hope that their observations will help their colleagues in London to succeed in this task.

The Context

The review groups took as their primary consideration the service provided to the patient, while bearing in mind the responsibilities that clinical teams also discharge in education and research, and the necessary collaboration required with basic medical and social science research. In order to form a view on service provision in Central London, the needs of the population in the four Thames Regions and some people living even further afield had to be taken into account. And in order to understand the service provided by the central hospitals, the development of acute hospitals in the suburbs had to be considered. The ring created by the M25 was taken as an arbitrary first approximation for the limit of this interaction, but in the event this had to be expanded as the relevance of recent regional developments and future plans in Chelmsford, Guildford, Brighton and Maidstone came into the reckoning, and it was recognised that for specialties such as neurosurgery, a regional population was required.

The regional specialties are generally described as providing a tertiary service, that is to say they mostly receive their patients by referral from consultants working in other acute hospitals. It was therefore necessary to consider the relationship between secondary and tertiary care in order to define the activities of the tertiary centre, and to consider the links that should exist for patients to return to their homes and families with appropriate continuing care and support.

As a result of their work, the review groups genuinely believe it to be possible to transform the services currently provided in Inner London in such a way that patients

receive more specialised care, in centres more effectively arranged, from trained staff available around the clock. The selection of preferred sites for enlarged centres does mean that some patients will have different journeys, but overall travelling time will remain generally the same, some individual patients having shorter while others have longer journeys. The support for larger centres with more specialised consultant practices was largely based on the personal experience and consensus of opinion amongst clinicians and seemed intuitively right on the "practice makes perfect" principle. The relevant literature was comparatively sparse, largely American, and predominantly supported the concept of a critical mass being required if good results in terms of mortality and morbidity are to be achieved.

Planning the Work

A. Terms of Reference

The terms of reference (Appendix 2) identified 10 factors that the review groups would take into consideration, recognising that the relevance of the individual items varied according to the specialty and the configuration of the present service. At the initial meetings of the groups the emphases and exceptions to the terms of reference were identified and work plans were devised accordingly.

B. Timetable

There had been considerable speculation in the press about what could be achieved in three months. The groups came to the same conclusion that if a month was given to assembling a data base and making a literature search, and the middle month was spent visiting hospitals and gathering opinion, this would leave the final month for analysis, judgement and drafting of options and recommendations. Considerable reliance was placed on material already available since time would not allow original research, but there was confidence that although every question and perspective might not be tackled, a credible direction of travel on the major issues would be identified. This proved to be the case.

C. Information

The review groups were determined that no hospital should be misrepresented or disadvantaged by use of inaccurate or untimely data. For reasons that need not be reviewed here, complete reliance could not be placed on statutory returns. Therefore each group devised a questionnaire for completion by all providers of the specialty service, seeking information on clinical activity, staffing and costs, generally for the last three years so as to establish a short term trend. The groups greatly appreciated the speed with which the answers were supplied and the tolerance shown with regard to supplementary questions. The questionnaires were generally not piloted and the extent of the validation was restricted but it did enable contrasts in the quantity and nature of the practices to be recognised. Relative differences were clearly established even if the activity may not have been recorded with absolute accuracy.

This should not, however, be taken to imply satisfaction with the data base that was assembled. To take but three examples from the reports:-

i. cancer data from the hospital returns, the cancer registry, consultancy studies, the questionnaires and visits made to individual units did not tally for numbers of cases, nor could the extent of cancer surgery nor all aspects of chemotherapy treatment be properly measured. Radiotherapy was generally recorded with accuracy;

ii. the surgical cardiac registers are among the best time series data, but statutory returns are inadequate to describe the nature of the practice in a tertiary cardiological centre;

iii. burns and bed sores are the only diagnoses exclusively within the remit of a plastic surgeon so that the potential extent of the specialty cannot be calculated; it depends on agreement between surgeons of different specialties and purchasers about who will operate on cleft palates or repair hand injuries; nor can the complicated surgical procedures be appropriately coded;

For all the specialties the deficiency in the patient activity data was nothing by comparison with the difficulty in the attribution of costs and the limited outpatient data. These facts not only limited the descriptive powers of these projects but also indicated the limits that currently affect the contracting process. However the orders of magnitude shown in the activity data are sufficient to support the general proposition that the number of tertiary centres be halved, even if the inadequacies in detail mean that the programme for individual centres cannot be described in detail.

D. Availability of Previous Studies

All the review groups were able to draw on previous reports that defined the work of the specialty and the staffing and facilities required to provide a service for a population. There were, however, considerable differences in the extent to which such definitions and descriptions have been pursued in identifying population need by age, sex and ethnicity, in describing activity levels in secondary and tertiary care, in recording outcomes of care and adverse effects and in following the course of disease and the value of treatment. The groups therefore began their work building on foundations that differed considerably, a difference that still shows in the degree of detail of the final reports.

E. Consistency and Variation

The six reviews recognised the need for their analyses, judgements and options for the future to be summated into views that would establish the clinical programme for individual hospitals. They therefore adopted a consistent approach in the nature of their membership, terms of reference, pattern of working, distribution of time, system of assessment and form of reporting. What could not be standardised were the variations between the specialties in terms of the extent of previous work, the organisational development in the specialty, stability in the technology, pattern and time profile of disease, collaboration between professionals, relationships with voluntary organisations in the community, knowledge of outcome, and identification of costs.

F. Co-operation with the Research Reviews

The review of the research programmes of the Special Health Authorities under the chairmanship of Sir Michael Thompson was taking place at the same time as the specialty reviews. Unlike previous occasions , not only the intrinsic merit of the research programmes but also their relevance to the health service and reliance on patient participation were under scrutiny. It was therefore obviously appropriate for the two reviews to be kept informed of each others progress and perceptions even though they were formally independent of each other. The secretariats arranged appropriate cross membership between the research advisory and specialty review groups and exchanged notes on developments. The results of the UFC research review of 1992 were made available to the chairmen of the specialty review groups and the concluding meeting of the specialty reviews was attended by Sir Michael Thompson, Professor Peckham and members of the research secretariat. In addition, the review groups made enquiries of hospitals not involved in the UFC/SHA research reviews, regarding their contribution to research. This was important for the cancer review in particular where centres such as Mount Vernon had made a significant contribution over the years.

G. Focus Groups and Special Meetings

Each of the specialty review groups identified aspects of the service that required particular attention and either formed groups to focus on these issues or held meetings by invitation with experts in the topic. The larger reviews identified up to half a dozen topics some of which required repeated consideration. Particular importance was attached to meeting patient groups to explore the problem of linking the highly specialised tertiary service to life in the home, and to consider the requisite arrangements for sustaining the benefit derived from a period of inpatient admission. Members of the review groups also maintained contact with their colleges, associations and organisations who sometimes arranged meetings that gave others the opportunity to contribute views and opinions. Opinions were also taken from many national and a few international experts on both general and specific issues and in particular their forecasts for the development of the specialty.

H. Visiting

All the hospitals referred to in the reports were visited, and others besides lying further out of London. Each visit was attended by the chairman and chief executive usually supported by two or three members of the review group. The visits were found to be a particularly valuable part of the reviews for the insights they gave into a patient's experience of the atmosphere and facilities of the hospital. Some of the problems in maintaining care were only too plainly obvious and none more so than at the Brook Hospital in South East London where patients have been cared for in disheartening surroundings by a dedicated staff. Across London, staff were sometimes strangers to each other while on other occasions there was warmth and reciprocity. Those who forgot the meeting place, made no preparation and improvised, or radiated animosity toward each other, inevitably gave a less favourable impression. But these were the exceptions and the review groups were most grateful for the effort and openness of their hosts.

Assessment of Need

Each of the groups considered epidemiological evidence with regard to the incidence and prevalence of disease - sometimes including an epidemiologist as a member of the review group, sometimes forming a support group, sometimes assembling special data files, as well as referring to the relevant literature. To take some examples, the renal review group was pleased to find the inclusion of 70 patients per million in dialysis programmes for endstage renal failure and even higher rates in certain communities. Disappointing were the poor supply of kidneys for transplantation, the low intervention rates for ischaemic heart disease and the lack of equity between districts seen clearly in plastic surgery in North London. Inevitably, not all the relevant questions could be answered and sometimes need was difficult, if not impossible, to determine when care depended on habits in clinical opinion rather than burden of disease. The need for significant expansion seemed most pressing with regard to heart disease though in other specialties more could easily be taken on by substitution, the neurologist for the general physician or

the plastic surgeon for the ENT or maxillofacial surgeon. It needs to be remembered however that by comparison with Europe and America, individual London consultants are busier and provide care for a larger population than is generally the case abroad.

Models of Care

Each group has developed concepts of care from the bottom up, beginning with services in the community and then the district general hospital, before describing the care, facilities, staffing and siting of tertiary referral centres which are generally, but not always, found in teaching hospitals and special health authorities. They have drawn on previous work of professional organisations in establishing a set of criteria by which to assess current practice and on which to base options and recommendations for the future delivery of care. They confirm that many units in Central London are too small to take full advantage of internal specialisation, to support an integrated research programme and, where they are the only specialty on a site, tend to have inadequate arrangements for coping with coincident diseases from which their patients also suffer. The paediatric review group was particularly concerned that children should not receive tertiary care in hospitals that do not have a comprehensive child health service.

If many London units appeared currently too small, would it be possible for them to become too large, and what was the size that would ensure their comparability with major European and American centres? The case for larger units rested on four main arguments, that there was a positive correlation between volume and outcome; a staffing advantage particularly for medical and technical staff; an economy from the greater scale; and opportunity for a more extensive research base. Evidence on these matters was considered in detail, by the cardiac group in particular, before ideas for the largest of units were rejected for the following reasons amongst others. The largest of units internationally are three times the size of those recommended and could lead to problems by their unbalancing effect on a general hospital or inter-related research programme; by difficulties in offering the patient a personal service; by the scale of the disruption if such a unit were closed by infection; and by distortions of service delivery resulting from those living closest to the centre receiving care more frequently.

Assessment of Care

There are differences between the six specialties in the way care is organised in and around their centres. For instance, 60% of plastic surgery is directly referred by general practitioners, rather than referred by another consultant and 20% comes as trauma through the Accident and Emergency Department. Cardiologists have been appointed in district general hospitals, whereas neurologists work in tertiary centres and visit districts for perhaps a day a week. Nevertheless, there is sufficient comparability for certain aspects to have been of concern to most of the groups, such as:

(a) the number and mix of consultants;
(b) range of associated specialties;
(c) size and case mix of the practice;
(d) level of specialisation;
(e) quality of care from doctors, nurses and therapists;
(f) education and research;
(g) staffing - consultants and junior doctors, nurses and therapist practitioners;
(h) patient perspective on timeliness, convenience and appearance;
(i) care of children;
(j) organisational coherence;
(k) costs, both revenue and capital, and their reflection in prices;
(l) the changing balance of care
(m) special features.

Consideration has also been given to the way in which the specialty services rely on each other, as for instance cardiac and renal work; the need for supporting departments, such as radiology, pathology and anaesthetics - and the support given to other departments of the hospital, particularly the accident and emergency service, as well as the vital support received from intensive care and high dependency units.

Five headings on the above list require further consideration.

A. Education and Research

Teaching Hospitals simultaneously fulfil three responsibilities, caring for patients to an exemplary standard, educating the clinical professions, and pursuing clinical research which is associated to a varying degree with work in the basic medical sciences. It is generally accepted that the higher standards are achieved by a constructive interplay between the three. Not surprisingly opinions differ on where the balance should be struck and some gave evidence that research achievement and potential should lead, if not dictate, the conclusions that were reached. This the review groups resisted, mindful that other recent assessments by the University Funding Council had concentrated primarily on research and concerned that the quality of care to the patient should be given primacy in their assessment of performance. They felt justified in this view as they became increasingly aware that London's high but inconsistent rating in research was not matched by the quality of the clinical service which had sometimes fallen behind that in the leading provincial centres and was often more costly. In particular pairs of consultants in the smaller units have found themselves in increasing difficulty as their specialty differentiated, educational demands grew and finding time to collaborate in research work became progressively more difficult.

B. Patient Perspective

From the patient's point of view the diseases that lead to a tertiary centre are often a problem for the rest of their life, with operations the occasional landmarks in a continuum of care, much of which takes place at home. At present the effort to achieve results of high quality in the hospital are not matched by the attention paid to rehabilitation nor sometimes to making the necessary arrangements for treatment to continue after leaving hospital.

Building for excellence through larger units would be seen by some to accentuate the problems of delivering personal care and make it more difficult for patients to travel to the hospital. The London Implementation Group approached the latter problem in three ways with regard to ambulance journey times, journeys by bus and rail and travelling by car or taxi. Despite the opprobrium heaped on the isochrones published in association with the Tomlinson Enquiry, it is a method that is practically valuable provided the data base is competently assembled. Four maps were drawn showing distances travelled in 20 and 60 minutes by private and public transport and by ambulance in response to emergency calls.
Steer Davies Gleeve used an extensive data base first assembled for the Canary Wharf development to calculate the public transport travelling time to the major hospitals; and the software package Mapbase was used for the private transport calculations.

Whereas private transport showed a considerable advantage over public transport for shorter journey times, this tended to disappear at 60 minutes for journeys into the centre of the city. The advantage remained for hospitals further out, and particularly those close to the M25, where outside the rush hour considerable distances could be covered. This helped consultants travelling to provide specialist outpatient clinics when their own tertiary centre was difficult to reach by public transport.

Population coverage by the teaching hospitals varied considerably, with Guy's Hospital covering completely the one hour public transport travelling zones of both St. Thomas's and St. George's Hospital and extending well to the north of the river, a factor of importance with regard to special services for children. To the West of London, Charing Cross Hospital is more convenient than the Hammersmith; to the north there is little to chose between the Royal Free and Middlesex Hospitals; and to the east there is a marginal advantage travelling to the Royal London Hospital from the north of the Thames estuary.

As well as the travelling time, there is also the problem of parking a car, or the ease with which the hospital can be reached from the station, together with the degree of security and personal safety that is felt in the neighbourhood. Nowhere is more convenient than the station across the road at the Royal London Hospital in Whitechapel or the access bridge at Guy's Hospital provided you can cope with the stairs. Particularly during the current building works, the journey on foot from Hammersmith station to the Charing Cross Hospital is awkward but the metropolitan line station at Hammersmith Broadway may be unique in having an exit entirely on the flat. Generally access from stations and facilities for parking could be improved in most hospitals thereby mitigating any increase in travelling time that comes from changing the site of specialist services.

On reaching the hospital, patients and their families become aware of the convenience of the siting of inter-related departments, the conditions in outpatients and the wards, standards of cleanliness and quality of the food. No patient satisfaction surveys were carried out during the reviews and the opportunity to talk to patients was limited with so much to see and enquire about. However some general impressions were created of the subterranean siting of cancer departments cut off from natural light, occasional poor standards of cleanliness, unnecessary mixing of the sexes in Nightingale wards, or wards seemingly not renovated since Victorian days.

C. Financial Considerations

The reviews were primarily concerned with the organisation and performance of the clinical services, but attempts were also made to assess costs for the services as currently configured, and as they might become, together with estimates of site values and removal costs. In many circumstances only part of the cost could be identified and prices varied markedly suggesting different bases for attribution of overheads or omissions from the calculation. Taken with the paucity of audit data, this meant that comparisons of value for money were limited. Merger of clinical

teams could result in savings from changes in occupancy of beds, in duplication of staff, in cost of theatres and intensive care while at the same time clinical and research programmes could be dovetailed to improve performance. But these sums, significant as they might be, were not to be compared with site closures that depended on a series of parallel decisions which the individual reviews were not in a position to anticipate.

D. Staffing - consultants, junior doctors, nurses and therapist practitioners

Expansion in the number of consultant posts at a rate of at least 2% a year is critical to the career of doctors training in the specialties. The review groups do not think this will be compromised by their proposals, although it will depend on funding decisions taken by purchasers around as well as in London. Changes to the siting and distribution of inpatient care would provide the opportunity in some specialties such as plastic surgery, to rearrange split contracts so that they are worked in hospitals that are in closer proximity than is currently the case. In two ways competition between consultants could be anticipated, one the result of surgeons and physicians vying to provide care for certain patients, such as those with hand injuries, or perhaps arguments over age related policies for medical emergencies between physicians and geriatricians. And secondly the formation of larger departments might sometimes lead to reduction in the numbers of specialist posts in supporting departments such as pathology.

Turning to the junior doctors, the problem of maintaining emergency cover is usually greatest amongst doctors in higher surgical training in specialised departments for which cross cover arrangements are inappropriate. It was not altogether surprising therefore that the review groups found several examples of surgical registrars whose contracts had been changed on paper but not in practice. It was evident that for the situation to change a smaller number of larger, better staffed units were required. The review groups proposals would make it possible generally for one in five rotas in higher training to be established at the tertiary

centres, and for the doctors in general professional training they could cover both the tertiary and secondary centres as part of one in five rotas, provided surgical and medical cross cover were acceptable at this level.

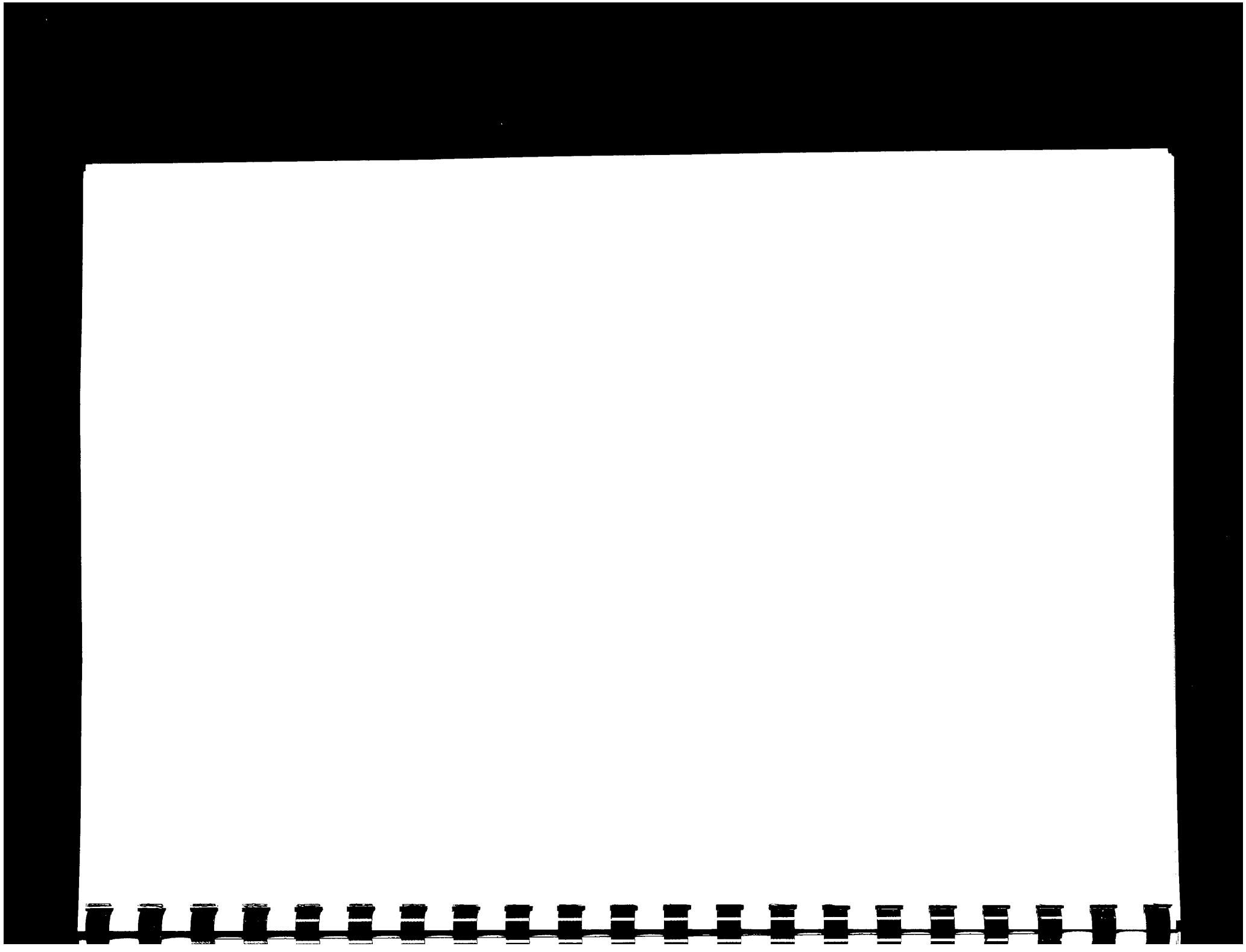
The review groups were also concerned to look carefully at the nursing service, the methods of working, the grades of staff and the timing of their shifts, and the standards that were therefore achievable in theatres, intensive care and general wards, day units and outpatients. They were frequently told by hospital nursing staff of their pride in the quality of nursing care, but it was rare to find records of what was achieved. The impression of widely varying standards even in some of the most famous hospitals suggested that the nursing service itself will have to be improved before changes in duties can be discussed with doctors and therapists.

Just as the nursing profession is developing its educational programme in project 2000, so therapist education has been reorganised in response to Working Paper 10 of the Working for Patients Initiative. Physiotherapists and occupational therapists commented on the opportunities for collaborative working which increase during a professional career to the point where the possibility of integration could become a reality.

The discussions with nurses and therapists were of course not confined to the hospital context. With the general practitioner members of the review groups and the members of voluntary, charitable and patient organisations, they played a major part in developing the bottom up approach that placed as much emphasis on achieving quality care at home as in the tertiary centre.

E. The Changing Balance of Care

The changes proposed by the review groups for these bioscientifically oriented specialties are part only of a wider plan to provide more comprehensive care to patients in London by developments in primary care and community services. The



adoption of micro techniques, the discovery of less irritant drugs and the opportunities for miniaturisation toward a "Walkman world" are significantly changing the relationship between primary and secondary care. No one wants to be in hospital if they do not have to be, or even to go there if they could receive the service in a general practitioner's surgery. This has to be taken together with an increasing awareness that in life time terms, too much is spent too late on attempts at heroic salvage, and that more support is needed at home and at work for those with life time diseases and tragic injury. Fund holding general practictioners can find small sums of money for help, aids and adaptations that make a great difference to such people, saving greatly on previous delays in outpatients and on frustration when sometimes no help was forthcoming.

Finally a number of ethical issues arose which in the end did not affect the appraisal of options but were thought to be important by individual review groups. A number concerned levels of investment as therapies were applied in less propitious circumstances. Examples might include dialysis for patients with disseminated cancer or increasing success in the early management of quadriplegia, now sufficient just to sustain life. Some therapies were limited by supply as for instance in organ transplantation that raised questions of patient selection which went beyond scientific matters such as tissue typing. Expanding the cardiac surgery programme for ischamic heart disease, the resiting of burns units and increasing the frequency of cancer screening all competed for resources as did the development of services following head injury. Dilemmas could also surround potential reductions in service requirement, for instance recognition of cardiac defects in utero for which termination might be offered. These matters are important in deciding the nature and extent of clinical practices, but were not decisive in considering the size and siting of established programmes.

The Vision

Six important principles came out of the review groups discussion of options in principle and practice for the delivery of patient care and the integration of service, research and education;

a. that London has sustained an enviable position in research particularly in the bio-medical sciences, but the clinical departments are in danger of being outgrown and overtaken by centres elsewhere in the country, both in terms of clinical service and for clinically based research.

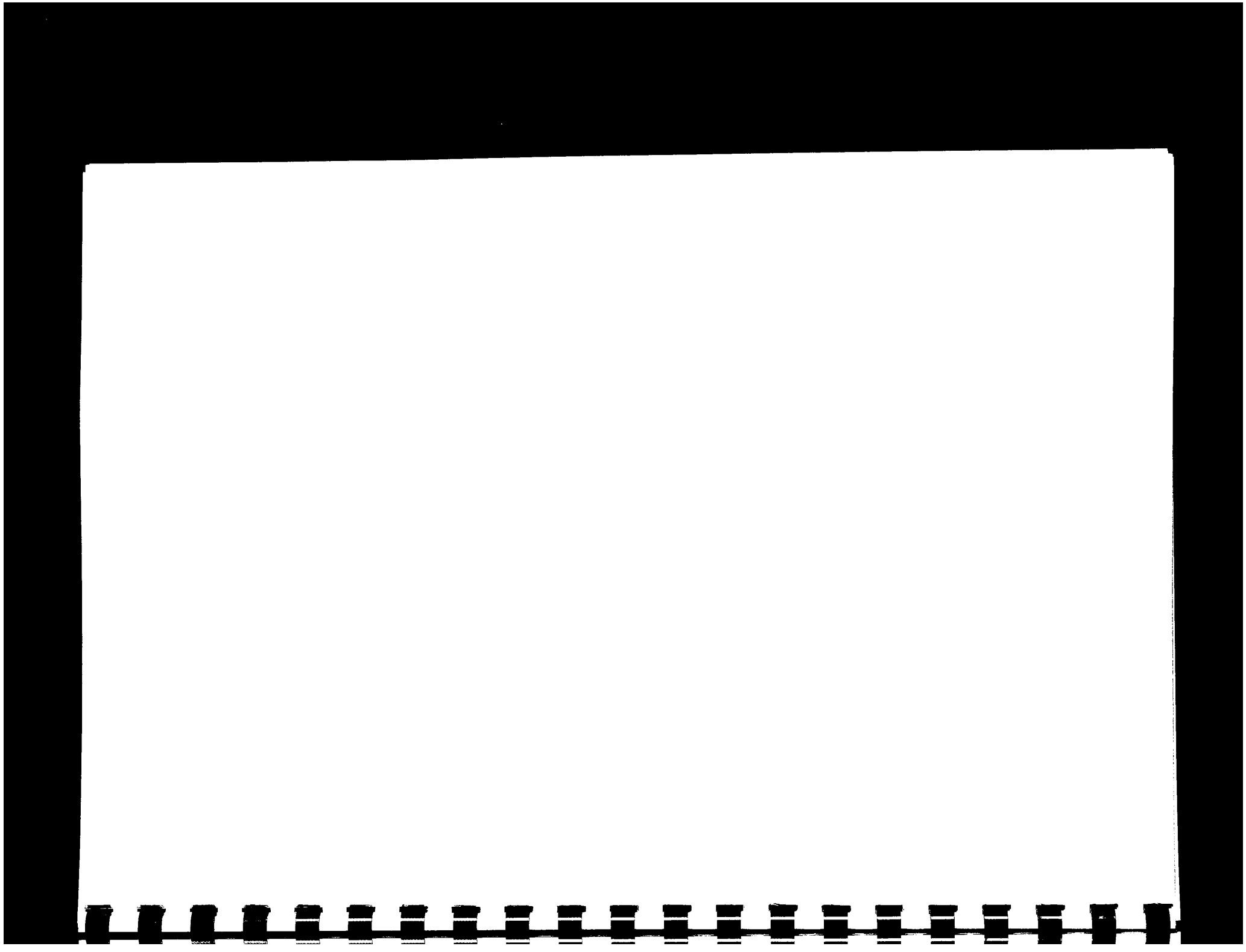
b. that the concept of four colleges of London University having major medical faculties should act as the foci for realignment of the undergraduate and postgraduate responsibilities of teaching hospitals and special health authorities.

c. that the clinical services in the hospitals collaborating with each medical faculty should be brought together forming units of a size found generally elsewhere in the larger cities of the United Kingdom, anticipating improved performance levels from the unification.

d. that where the changes in the clinical services can result in a reduction in the number of separate hospital sites, this would lead to savings on infrastructure costs that would mean a higher proportion of health service monies were spent on patient care.

e. that the clustering of specialist services should improve the opportunities to contribute to clinical research for which some of the smaller units have found difficulty in finding time and been restricted by their size.

f. that the result should be of benefit to the patient now in terms of the opportunities for sub-specialisation by consultant staff at larger tertiary centres; then from better



distribution of frequently required services on the hub and spoke principle; and long term from further improvements in care discovered by the augmented research programmes.

This set of general proposals were thought capable of transforming clinical practice in London by preserving the excellence of past achievements and providing scope for further development. The options are discussed in more detail in the following paragraphs.

Options in Principle

a. The Colleges of London University

When the review groups discussed the integration of clinical services with research and education, in particular the responsibilities of the medical schools, they found it appropriate to do so in relation to the colleges of London University referred to in the Tomlinson Report, namely Imperial College, University College, Queen Mary's Westfield and Kings College. The only hospital that clearly stood outside this arrangement was St. George's Hospital at Tooting Broadway - the only teaching hospital in South West Thames Region. London was therefore discussed in five segments, North West, North Central, North East, South East and South West.

b. Special Health Authority Hospitals

Within this framework the presumption was to include the Special Health Authority Hospitals as they occurred geographically within the appropriate segment. North Central London therefore included the Hospital for Sick Children, Great Ormond Street, and the National Hospital at Queen Square.

When considering these hospitals, the review groups were looking for an exemplary pattern of care that would suggest advantage had been taken of the opportunity to concentrate on a particular set of clinical problems. They hoped to see benefit in the quality of patient care, in contributions to clinical research programmes and collaboration with research in basic sciences at the Institutes. While the groups formed a view on patient care themselves, they looked to the now HTEFC ~~UFC~~ and SHA review reports to read of the research ratings and evidence of necessary collaboration between service and science.

In general, though of course not in every case, they failed to find evidence of an advantage being realised by comparison with the best of what the teaching hospitals in London or elsewhere in the UK had to offer. They were concerned to find that the arrangements for calling in supporting consultant opinion for patients with multi-system problems could be somewhat informal and evidence that delays measured in days would sometimes occur. When the groups had had the opportunity to compare their impressions they were generally of the view that formal clinical and organisational integration was now required, academically aligned to the London University college framework, in order to transform the orientation of the patient care and/or the focus of the research programme, and to sustain the SHA hospitals as they entered the market.

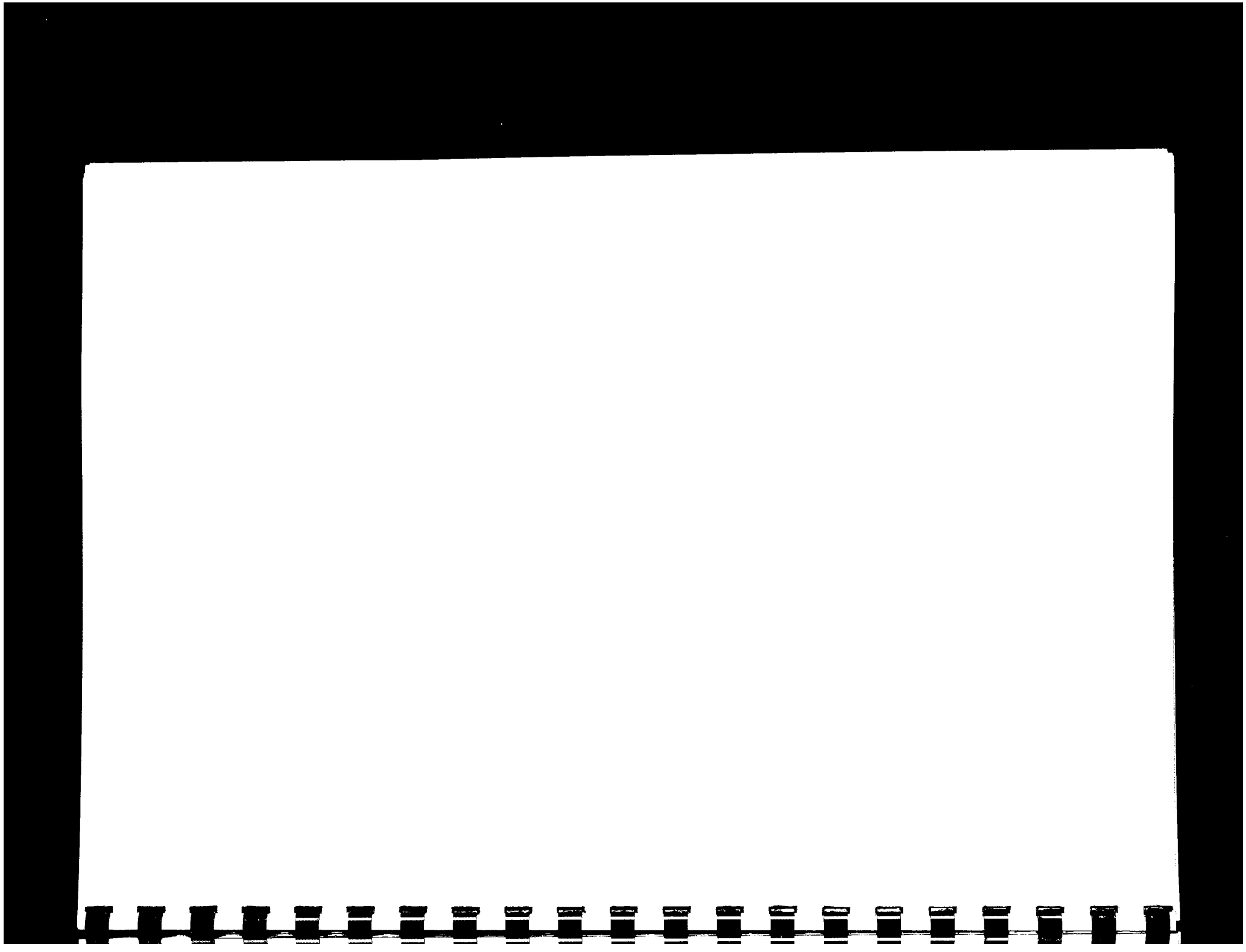
c. **Hubs and Spokes**

For each specialty, the review group identified the role of a tertiary centre and in the process became equally clear that the centres were not islands entire unto themselves. Rather the centres worked in co-operation with surrounding acute hospitals, and thereby in the community with general practitioners, district nurses and therapists. Various phrases were used to describe this relationship, hubs and spokes being the choice of the renal, neurosciences and plastic surgery and burns reviews. Cancer services preferred the term "outreach" from specialist centres.

As the phrase implies, the tertiary centres were seen to be situated at the hub of a wheel from which spokes radiated to a number of other acute hospitals at which consultants in the specialty held outpatient clinics and performed day surgery.

Patients requiring more complicated investigation involving expensive equipment, or inpatient surgery, would be referred from the spoke acute hospital to the tertiary centre at the hub hospital. Consultant staff would work in both the hub and the spoke hospitals and close working relationships, if not actual rotation, would be required for nurses and therapists, that extended on to their colleagues working in the community. This arrangement might be seen as cutting across independent contracting by Trust hospitals but it is the preferred arrangement for delivering high quality care and purchasers are encouraged to contract in ways that support such arrangements. Moreover it would enable the specialty services to be funded as an entity establishing budgets to be operated within year and adjusted annually on the basis of a single comprehensive review involving all parties. The advantage to the patient-would be two-fold, a specialist centre that would provide the full range of regional services with sub-specialisation and internal referral between the consultant staff; and the working relationship with the acute hospitals and through them general practitioners and primary care that would improve levels of care in the home.

This principle is already working in plastic surgery in many areas and the renal review saw definite advantage in drawing transplantation and research into a reduced number of hubs and distributing dialysis to small units (ten dialysis stations) in several acute hospitals which do not at the moment provide such service. Most but not all acute hospitals now have a cardiologist or physician with a special interest in cardiology, while in oncology and neurology the review groups recommended an increase in the number of sessions spent by the hub consultants in visiting acute hospitals for joint consultation. In paediatrics the group sees the special services gathering in two or at most three hospitals in London associated with further modification of acute hospital practice. The change in emphasis towards community provision suggests that acute hospitals



should serve communities of 500,000 with one hospital providing inpatient care as the hub to a distributed outpatient and consulting practice.

d. Geographical Gaps and Coverage

Attention has been drawn in the specialty reviews to the considerable distances sometimes travelled by the public in seeking care. A good example is plastic surgery services for Enfield which means a 10 mile journey to any of three possible outpatient departments, an unusually long distance in London. The hub and spoke principle is intended to deal with just such lacunae and is capable of doing so within the M25 but not necessarily in Essex and Kent. The situation varies from specialty to specialty but the review groups welcome developments already planned for oncology in Guildford, cardiac services in Brighton and as recently provided for oncology in Maidstone and Reading. In general, Essex and Kent seem poorly served in several specialties; North West London has three specialist hospitals at Mount Vernon, Harefield and the orthopaedic hospital inStanmore that are increasingly isolated; there is something of a gap in services due north of London; and low uptake rates in Surrey indicating either a population with exceptional health, reliance on private practice or a stoical attitude to disease.

The review groups were very conscious that these matters lay outside their immediate brief but they were far from irrelevant, affecting as they did contracts currently placed with London teaching hospitals and patients treated by Special Health Authorities. Furthermore the preference for the Royal London Hospital and Guy's Hospital rested significantly on ease of travel along the highly populated north shore of the Thames estuary and into Kent respectively. This matter is taken up again in more detail in the sections on the options in practice.

e. Capital Developments

The quality of the capital stock, the state of repair and decoration, the layout of the buildings and presumed lack of storage space judged by trolleys, beds and

boxes seen in corridors, all left their mark on the review groups. The review groups saw that the east end of London has had less investment than the west side, and that within sites some inter-related departments are some distance apart and could be expensive to relocate more conveniently. Although the review groups recognised their competence to lie predominantly in assessing the appropriateness and performance of clinical organisations, they were also aware of the limited availability of capital resources and recognised that in the past significant capital developments seem to have been poorly coordinated. Given the circumstances at the Brook Hospital, around the A & E department at Kings College Hospital, parts of the Royal London Hospital and more generally at Oldchurch Hospital, it seemed obvious where capital money was needed. Equally the problem in failing to exploit modern competently designed sites such as Charing Cross Hospital and the Royal Free Hospital was obvious, particularly when hospitals within half an hour's travelling distance were seeking redevelopment. Hindsight might now suggest alternative locations for these major investments but the buildings are there and cannot be ignored.

f. **Size of Tertiary Centres**

The review groups generally found to be justified the statement in the Tomlinson Enquiry that there is unwarranted duplication of services operating within short distances of each other in a way that is plainly inefficient and sets additional problems in the delivery of patient care. Previous differences in surgical mortality rates and organ transplant survival times are now less evident and no longer distinguish between the hospitals in a way that case mix would not explain. Nevertheless it is still plain that the restrictions in the range of service in particular hospitals are the inevitable consequence of small departments. Sometimes this leads to a quite perverse set of referrals of the sort described by the cancer review. A patient with cancer of the breast found on screening at Kings, could be sent round St. Thomas's and Guy's hospitals before completing her course of treatment again at Kings. In a similar fashion, the organ specific separation of tumour treatment between the Fulham Road and Sutton Branches of the Royal

Marsden Hospital inconvenienced patients in Kensington and Surrey and could cause a St. George's Hospital patient to have to travel to both sites for treatment of one illness. It was only outside the centre of London that centres of "regional" proportion were seen, as at Atkinson Morley's Hospital, Mount Vernon Hospital and Harefield Hospital but they are or seem likely to become single specialty oases. Even the exceptions to the size rule such as the Hospital for Sick Children, Great Ormond Street (paediatrics), the National Hospital Queen Square (neurosciences) and the Royal Brompton Hospital (cardiothoracic services) showed the effects of isolation on which further comment is made in the section on options in practice.

As has been said previously, the review groups were impressed by the research programmes in certain hospitals but felt that clinically London was falling behind the best in the rest of the country and was also diminutive by leading international standards. Proposals were therefore made for the cancer, cardiac and renal tertiary centres to be two or three times their current size, neurosciences and plastic surgery to be resited and integrated, and paediatric services based in hospitals that provide a complete programme of child care.

The review groups did recognise the enduring attraction to teaching hospitals of self-sufficiency, but just as the need for students to receive parts of their education away from the alma mater has become accepted, so it is now necessary for hospitals to recognise that the struggle to be pluri-potential has left them offering services in many specialties that are incomplete. The review groups did not start, however, from a preconception that big is automatically better. Size can outgrow the ability of staff to cope with the myriad of inter-related yet diverse problems. However on balance London hospitals have undersized departments that will have increasing difficulty in keeping up with the pace of clinical change and remaining cost effective.

g. **The Reputation of Hospitals**

The review groups were very aware of the eminent reputations of several of the hospitals and the trust that patients place in the definitive opinions regarding diagnosis and treatment which they receive there. The public know that everything that could and should be done will have been done by referral to these hospitals and these reviews were determined not to tarnish that image when suggesting transformations aimed at building on that excellence. But equally clinical practice does not stand still and it was vital to seize the opportunity for the clinical teams to continue to grow and develop even if that meant resiting was required. The groups were apprehensive that love for familiar surroundings could blind clinicians and the public alike and might lead to misrepresentation of their proposals as shortsighted closures only motivated by a need to save money. This is not the case, and in making suggestions for changes at Great Ormond Street Hospital, the National Hospital, Queen Square, the Royal Marsden Hospital, Harefield Hospital, Hammersmith Hospital and St. Bartholomew's Hospital, it is with an eye to the future, not a criticism of the past. Determination to see clinical services develop is as important as loyalty to an institution.

h. **Nature of the judgement**

Individual Hospitals not surprisingly fulfilled many of the criteria looked for in a tertiary centre, and where this was the case these features did not serve to discriminate between one hospital and another. While it was generally possible to find out what care was given and the staff engaged in its delivery, there was a paucity of information not only on the long term results but often also on the short term outcome particularly where morbidity was concerned. Taken with the inevitable uncertainty regarding innovations, the review groups realised that they could not construct a definitive description of "what to do" in absolute terms but they could identify "what to do next" both to improve potential performance and to establish a sound position from which to cope with future eventualities.

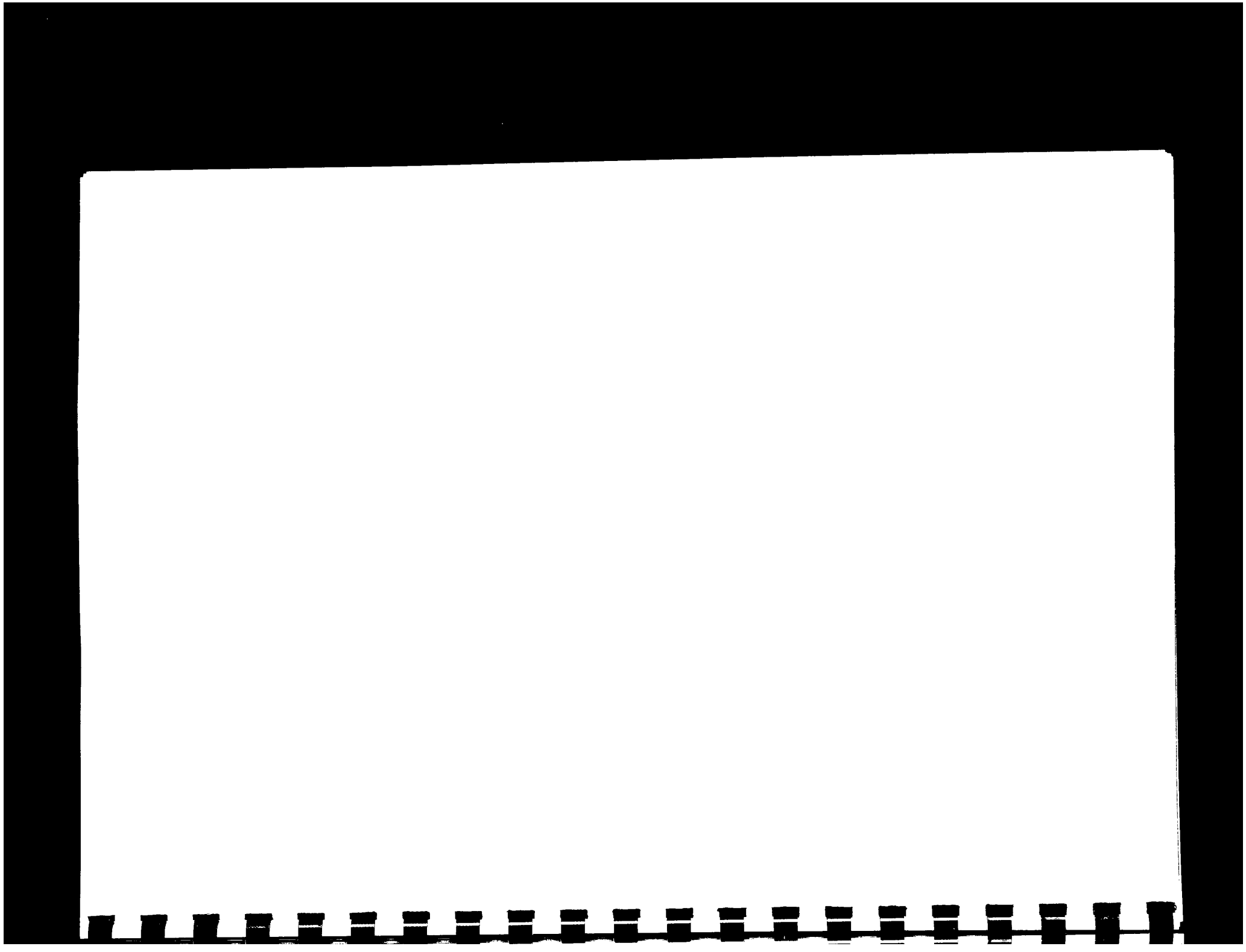
This involved deciding on two separate sets of options - one for the future formation of the clinical team and its relationships, and the second for choice of site, picking the hospital best positioned to meet the needs of an appropriate catchment population. The conclusions of the review groups are summarised in the succeeding paragraphs on:

Options in Practice

Before describing the results for the five sections of London corresponding to the four colleges of London University associated with Medical Schools and the fifth centred on St. George's Hospital in South West Thames, the main findings in principle for each specialty will be summarised.

Cancer Services

Cancer Services in London are generally provided in units serving at least a third fewer patients a year than tertiary centres elsewhere in the country, yet requiring up to a third more beds and with some expensive machinery only lightly used. Except in South West Thames, there were always three hospitals vying to provide care with some unusual internal referral patterns dictated by history (often a hospitals previous location) and the siting of the essential equipment. There were considerable variations in size and case mix between the clinical practices, sometimes radiotherapy, sometimes oncology and sometimes research being notably strong in a particular hospital. The review group recommended, after taking very wide advice, that somewhat larger centres than at present will offer a better service and research base for the future, and will also be more cost effective. They also recommend that such centres should not "stand alone" but rather be closely joined, on site whenever possible, with teaching or acute hospitals providing a spread of specialist and general services. Centres should not in future operate on split clinical sites.

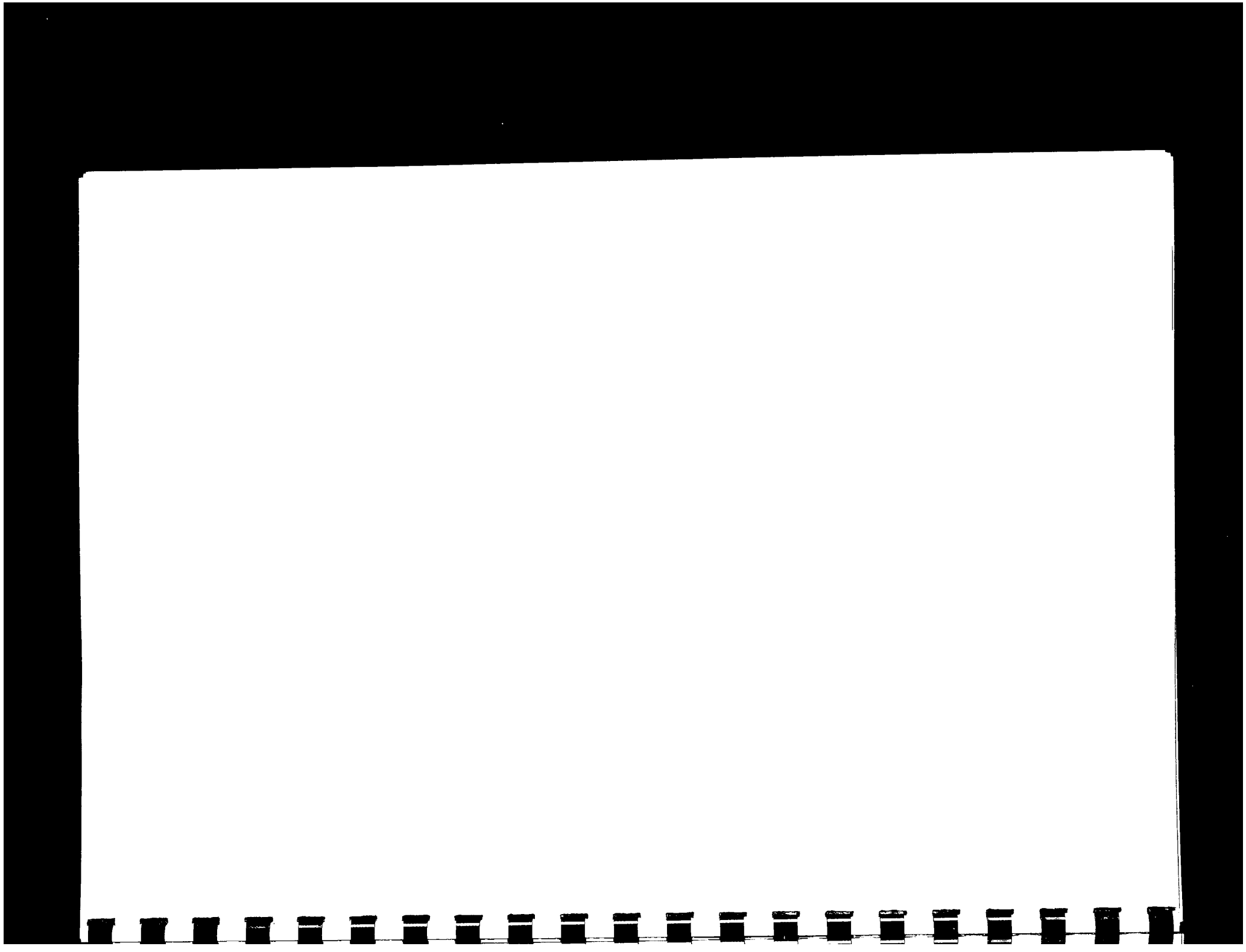


Cardio-thoracic services

Cardio-thoracic services share with cancer services their concern for the major preventable cause of death and disease, namely smoking, particularly of cigarettes. Both groups welcomed the prominence given to this issue in Health of the Nation and subsequent publications, and the reduction to the work of their specialties that life style changes might bring if the stated targets can be achieved over the next 20 years. In the meantime the cardiac review concluded that demand for tertiary cardiac intervention for the population of the Thames regions was likely to continue to increase because the benefits of health promotion activity are not likely to result in lower rates of ischaemic heart disease until the next century. They expected however reduced demand from elsewhere in the United Kingdom as services developed more locally. Against this background they recommended a reduction in the number of tertiary centres from 14 to 9. If this number were to prove inadequate, any additional units should be located away from London. The group supported the development of a unit at Brighton, were less convinced about the viability of one in Kent, recommended consideration of a new unit at Chelmsford and recommended the transfer of Harefield to Northwick Park Hospital. Remaining units would be in London itself, associated closely with research and teaching.

Renal services

Renal services were considered in three parts, transplantation and dialysis for endstage disease, and nephrology for acute and chronic diseases of the still functioning kidney. Concentration of transplantation services onto five sites would mean over 100 patients a year in each centre and an opportunity to improve the harvesting of organs through a readier availability of a surgical team. Such units will be comparable with the rest of the United Kingdom but still only a third of the size of the largest programmes in Europe and America. Five centres would correspond with the academic segments and the current number of professorial programmes in London, but there would still be a more than 50% reduction in the number of units. The review group also proposed a similar number of nephrological centres, with all ten hospitals having dialysis programmes which would in turn be supported on the hub and spoke principle by a series of small units (ten dialysis

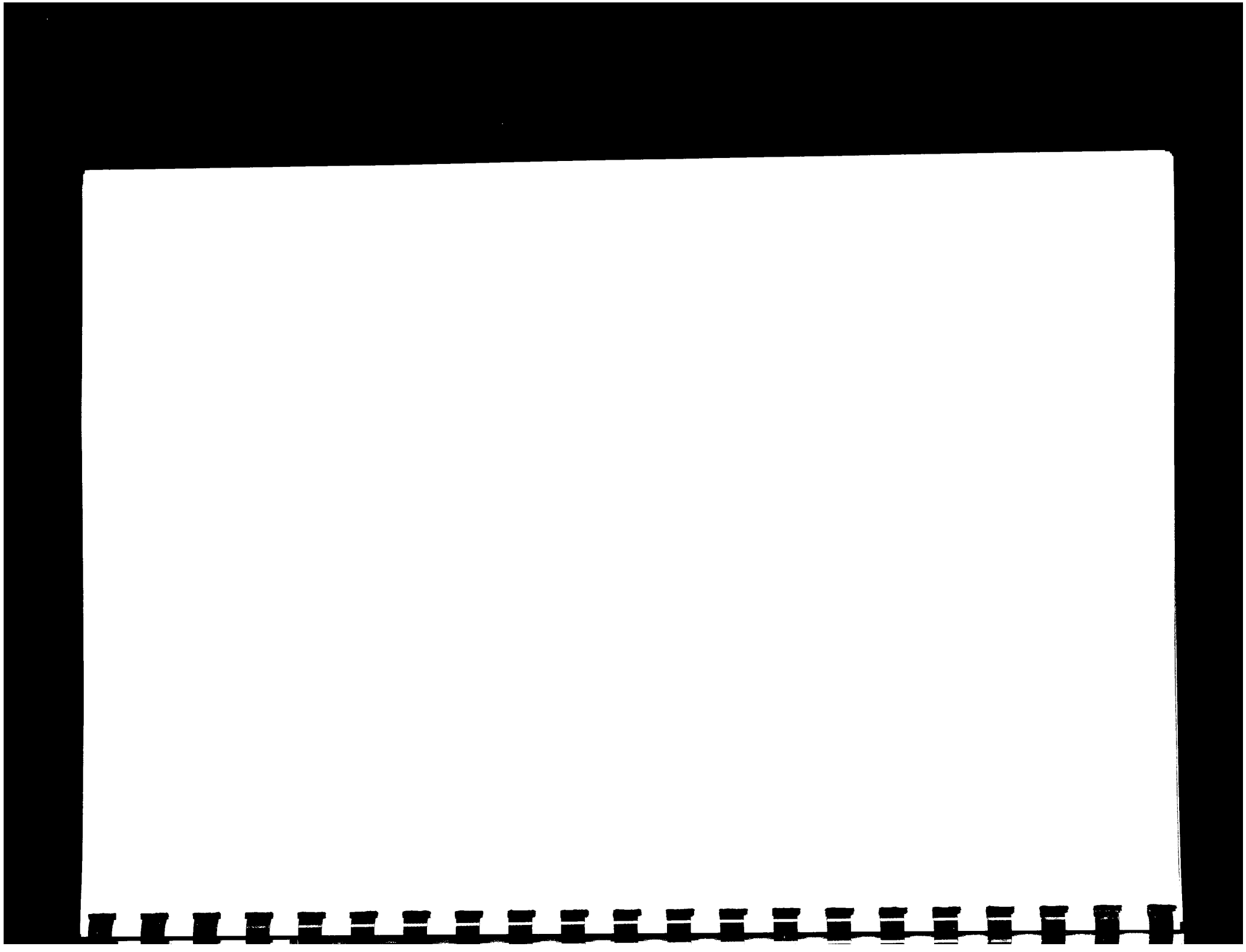


stations) for chronic dialysis only. Patients may therefore travel further for the single event of transplantation but have much shorter journeys for their thrice weekly dialysis.

The Neurosciences Review

London neurology has been dominated for decades by the National Hospital, Queen Square which has sustained its reputation for clinical research and now seeks opportunities to strengthen performance in the basic sciences. A considerable number of the consultants have dual contracts, either with teaching hospitals, or other acute hospitals particularly in the North West Thames Region. The future however is likely to change as the neuroscience departments continue to develop to the North West and North East of London so reducing the population seeking care at the National Hospital. The review group welcomed the incorporation of the University College and Middlesex Neurosciences Service into the National Hospital and the opportunity this provided for neurobiological research to prosper between the Institute and University College. The review group suggest that this process should now extend to the Royal Free Hospital with merger of the surgical services ath the National hospital and union of the management of the two hospitals in a single trust.

In South London, another Special Health Authority, the Bethlem and Maudsley Hospital has a small neurosciences presence which the review group expect the SHA review to consider in terms of its contribution to the research programme. The siting of a neurosciences centre to replace the Brook Hospital and bring together services from elsewhere has been under consideration for sometime, and the South East Thames Region had as its preferred option a new build on the Maudsley site linked by a bridge across Denmark Hill to Kings College Hospital. Subject to the view of the SHA review, this preference should be reconsidered in terms of the benefit of bringing the specialties requiring a regional population together on the Guy's Hospital site, and its ease of access by public transport.



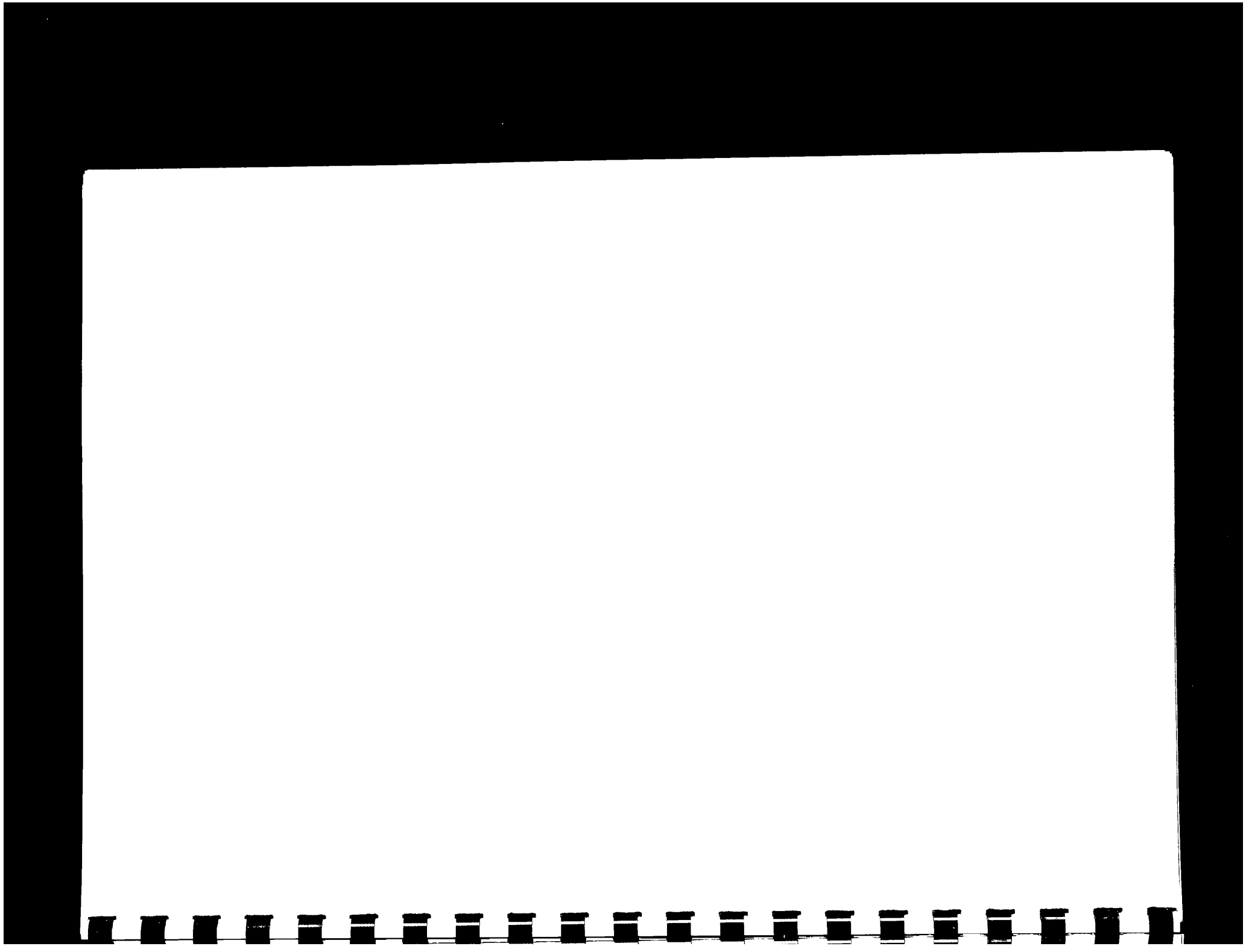
Plastic Surgery and Burns

As was mentioned previously this was by far the least "tertiary" of the services with 60% of patients coming directly from general practitioners and a further 20% from the Accident and Emergency Departments. The distribution of the main services at and beyond the M25 also showed most clearly a historical legacy that was cutting the consultants off from collaboration with their colleagues in other specialties as well as causing patients and their families extra difficulty by their distance out of town and isolation from transport links. The consultants at St. Andrew's Hospital in Billericay already recognised the importance of resiting their service, a policy which for essentially similar reasons needs to be followed in East Grinstead and later perhaps at Mount Vernon Hospital. In South West Thames, the site of the single centre at Queen Mary' Hospital Roehampton makes cover to the south coast difficult to achieve. Proposals to move to Guildford would improve that situation and also make sense when account is taken of the major service at Charing Cross Hospital which is only four miles from Roehampton.

Of equal importance is to develop plastic surgery services in the Centre of London where two segments, North Central at the Royal Free Hospital and South West at St. George's Hospital have little more than a single whole time equivalent consultant service and another which is better staffed, has virtually no outreach programme (South East). Central development will increase markedly the opportunities for collaborative working with a range of other surgeons which may in time result in the incorporation of plastic surgeons into surgical teams that will further attenuate the concept of a tertiary centre in this specialty.

The Special Services for Children

The success of the Wishing Well Appeal bears eloquent testimony to the affection for the Hospital for Sick Children, Great Ormond Street, felt throughout the country. Children with rare and complex diseases have been referred to this hospital for many years and it will continue to play a major role when it joins the health service contracting system. However, paediatrics has changed as children's departments have grown in some teaching



hospitals, as the specialty has moved its emphasis into the community and as research has developed the understanding of foetal medicine. The review group thinks it is essential for the hospital to acknowledge these changes and by closer association with University College Hospital become involved in the work of the obstetric department and through an association with the Accident and Emergency Departments and the paediatric department at the Royal Free Hospital in delivering secondary and community care. At the same time the current link between Great Ormond Street and Queen Elizabeth Hospital Hackney should be broken with the latter hospital having a new relationship with the Royal London Hospital.

Of the teaching hospitals it is Guy's Hospital that has done most to develop special services and, as a result of these reviews, it is suggested that this process should accelerate. Again there was concern that the current level of involvement of the hospital in secondary services is less satisfactory than at Kings College Hospital, but it is the hospital best placed to improve access for families living south of the Thames. The principle of siting specialist childrens services where there is a fully developed general paediatric practice had still to be achieved in several parts of London.

Finally this group anticipates that without changing the availability of outpatient consultation, the number of inpatient paediatric services will decrease, each inpatient unit serving a population of 500,000 as mentioned previously. In part this recognises the changing nature of the paediatric service with emphasis on the community but has also become necessary because of the difficulty of covering the large number of smaller units offering neonatal care.

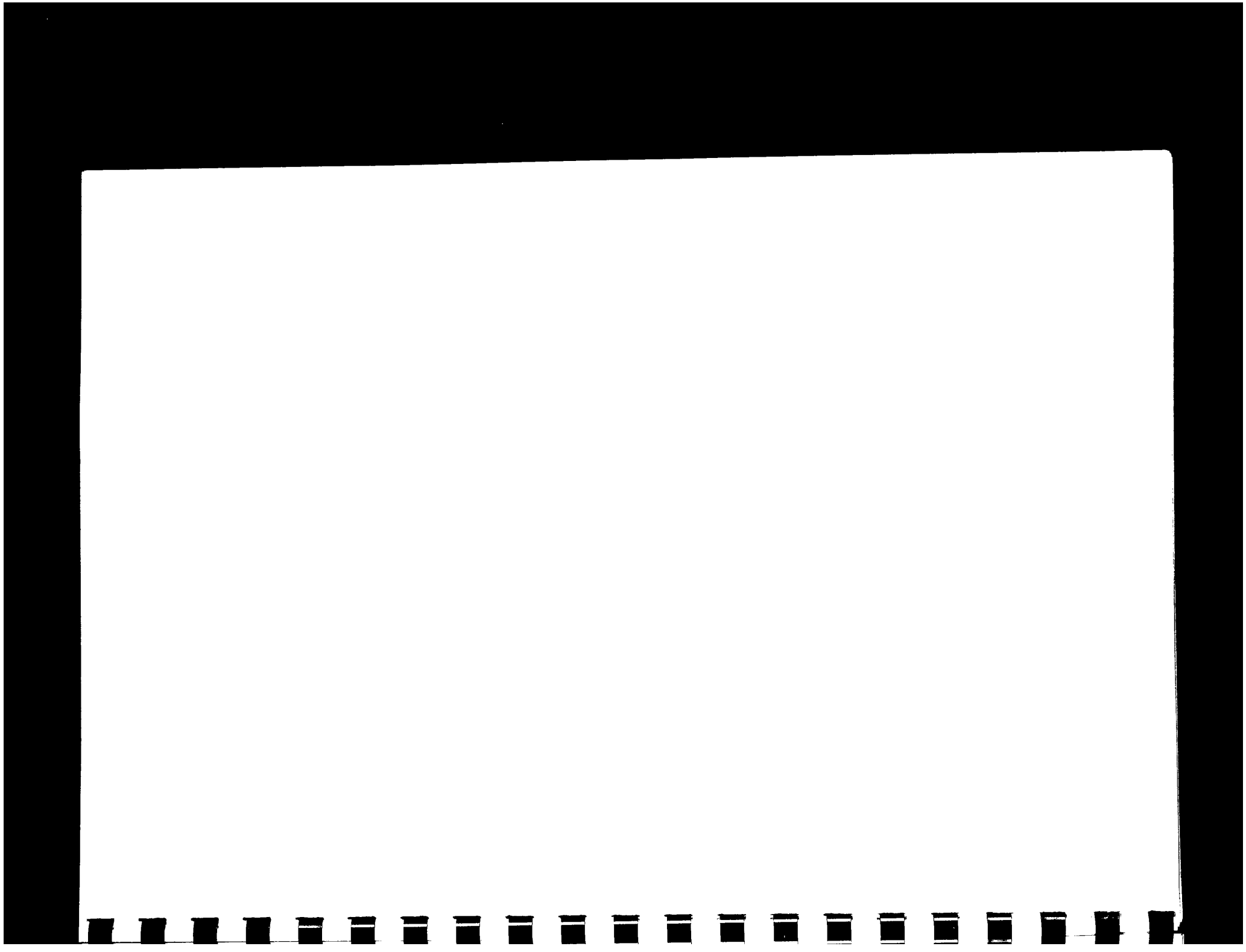
What these and other detailed proposals from the specialty review groups mean for the hospitals and colleges is best described by considering each of the segments individually.

A. **In North East London**, St. Bartholomew's and the Royal London Hospital have combined their pre-clinical programmes with Queen Mary's College Westfield and the first students have now arrived at their hospitals for their clinical education. This educational collaboration will in future be matched by clinical unity

Hospital. Closure of either the St. Thomas's or Guy's site is anticipated as one of the first acts of the new united Trust, and the review groups therefore deliberated on the way the clinical services might come together across the three sites and what effect the choice of site would have for ease of access for the public and for St. George's Hospital in South West London. As said previously, Guy's Hospital has a definite advantage in terms of ease of access by public transport but is awkward by car and parking can be difficult. Nevertheless the groups tended to prefer Guy's Hospital particularly because of their concern for services in Kent.

Cancer, renal and plastic surgery services are currently provided at all three hospitals and it would make sense for the inpatient care to come together on a single site. Here as elsewhere in London this would not necessarily mean the withdrawal of outpatient consultation or day case surgery from the other hospitals but rather a consolidation of practice within the "Kings College Group" of hospitals. In terms of service to South London, some consultants might even consider working with colleagues at St. George's Hospital, and certainly the number of outpatient consultations in other acute hospitals would need to be increased.

The preferred options for siting cancer services at Guy's Hospital and reconsidering the new build for neurosciences at Denmark Hill have been described previously in the paragraphs on the individual specialties. Cardiac services should continue at Kings College Hospital while the unit in Brighton is built and decisions taken on services in Kent, but the renal transplantation service and plastic surgery service could be centred at Guy's Hospital. In paediatrics Guy's Hospital already has a number of special services to which others are likely to be added since it would not be appropriate to site the children's component of a service on a site separate from the adult care if this could be avoided. However, questions remain about the extent of the secondary service for children given the small population that looks to Guy's and Thomas's in preference to the services at Lewisham and Kings College Hospitals.

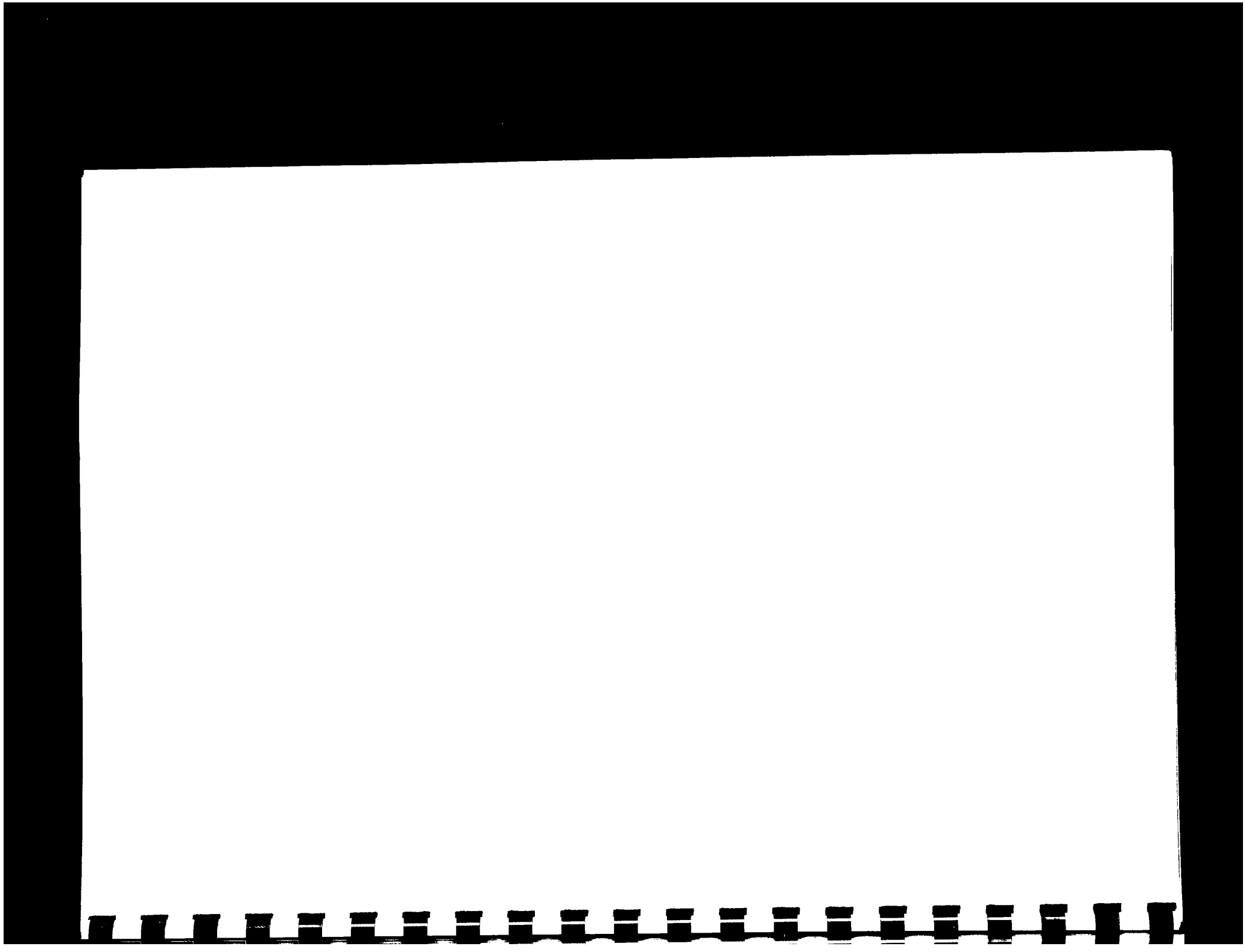


C. **In South West London** the only teaching hospital is St. George's at Tooting which is not associated with the Colleges of London University and has one of the smaller populations able to reach the hospital within an hour. The hospital has developed a multi-professional integrated education programme which they wish to pursue as an alternative to the college pattern and have made arrangements with Kingston University to provide nursing education.

The hospital has a distinguished cardiothoracic department operating in accommodation that requires to be replaced. Representations were made to the renal review group for the development of services at St. George's Hospital in succession to St. Heliers Hospital, a proposal that gained strength from the cardiac and other major surgical and medical work currently undertaken at St. George's.

The neurosciences services are at Atkinson Morley's Hospital in Wimbledon and radiotherapy together with important research programmes at the Sutton branch of the Royal Marsden Hospital. These are single specialty hospitals but both have attractive sites with reasonable access by car so that the staff and patients are in no hurry to move. With capital money needed elsewhere and provided cover particularly in paediatrics can be guaranteed from St. George's Hospital, a final decision could be postponed for a few years. Ultimately the services should be resited and it may be that at that time neurosciences would be better placed at Guildford rather than Tooting particularly if collaboration with the University of Surrey would be possible. This will depend on the decisions that have been taken on the new South London neurosciences centre and the future of Charing Cross Hospital. In a similar way the plastic surgery service at Queen Mary's Hospital Roehampton might move to Guildford while strengthening the current small service at St. George's Hospital.

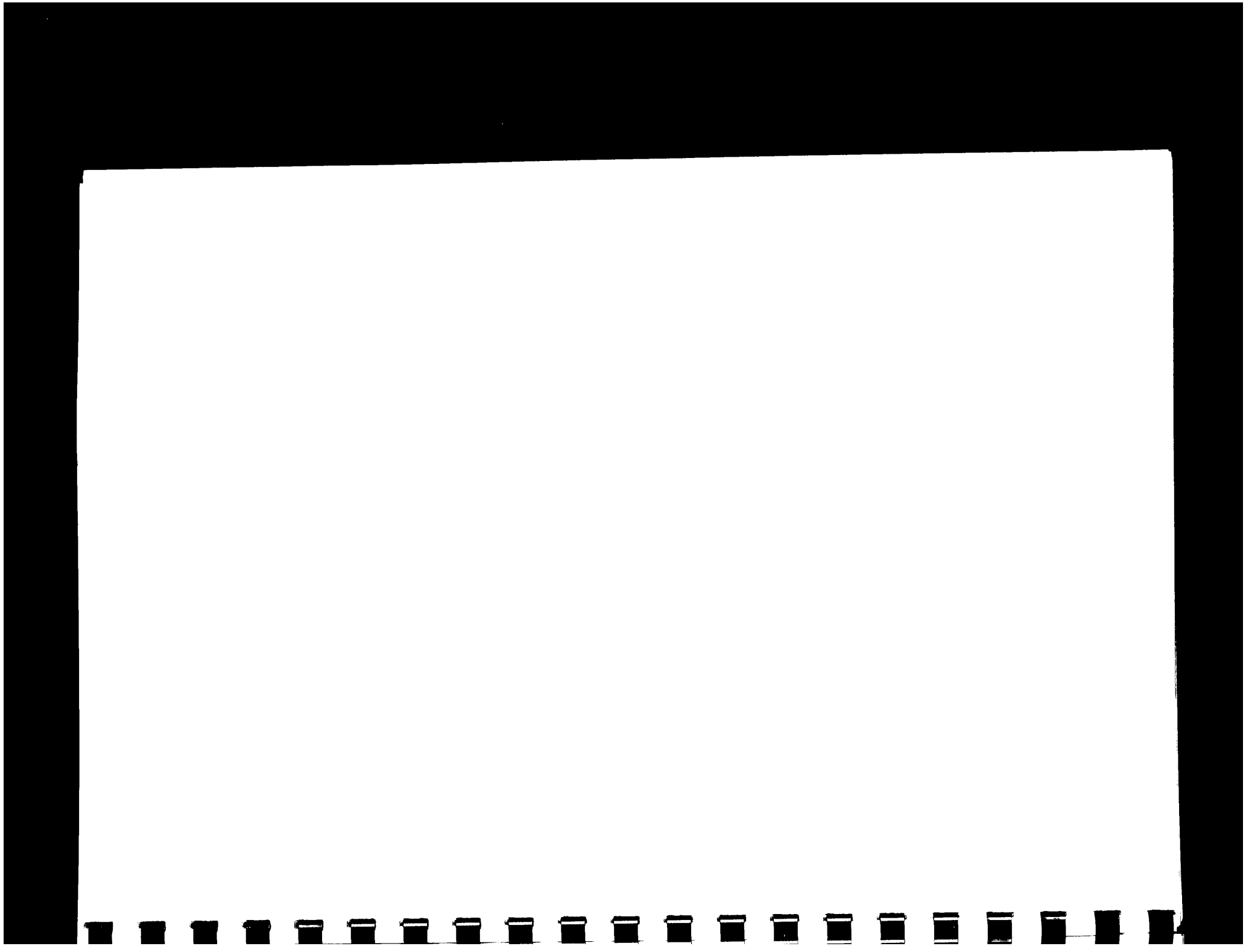
D. **West and North London** set several of the review groups their greatest problem with three teaching hospitals to be considered, the Chelsea/Westminster, Charing Cross Hospital and St. Mary's Hospital and the Special Health Authorities, the Royal Brompton and the Royal Marsden Hospitals and the services at the



Hammersmith Hospital associated with the Royal Post-graduate Medical School. At the outset the consultation on closure of the Accident and Emergency Department at Charing Cross Hospital and the review of the hospital's future by the autumn suggested that the review group should bear in mind that the whole hospital might close. What they found was a set of specialty services for cancer, neurosciences and plastic surgery that compared favourably with other centres in London for size, co-operation between the clinical professions, facilities in the hospital and linkage to acute hospitals and the community. Clinically, each was the groups preferred option and each could be expanded at little if any cost to supply a "regional" service.

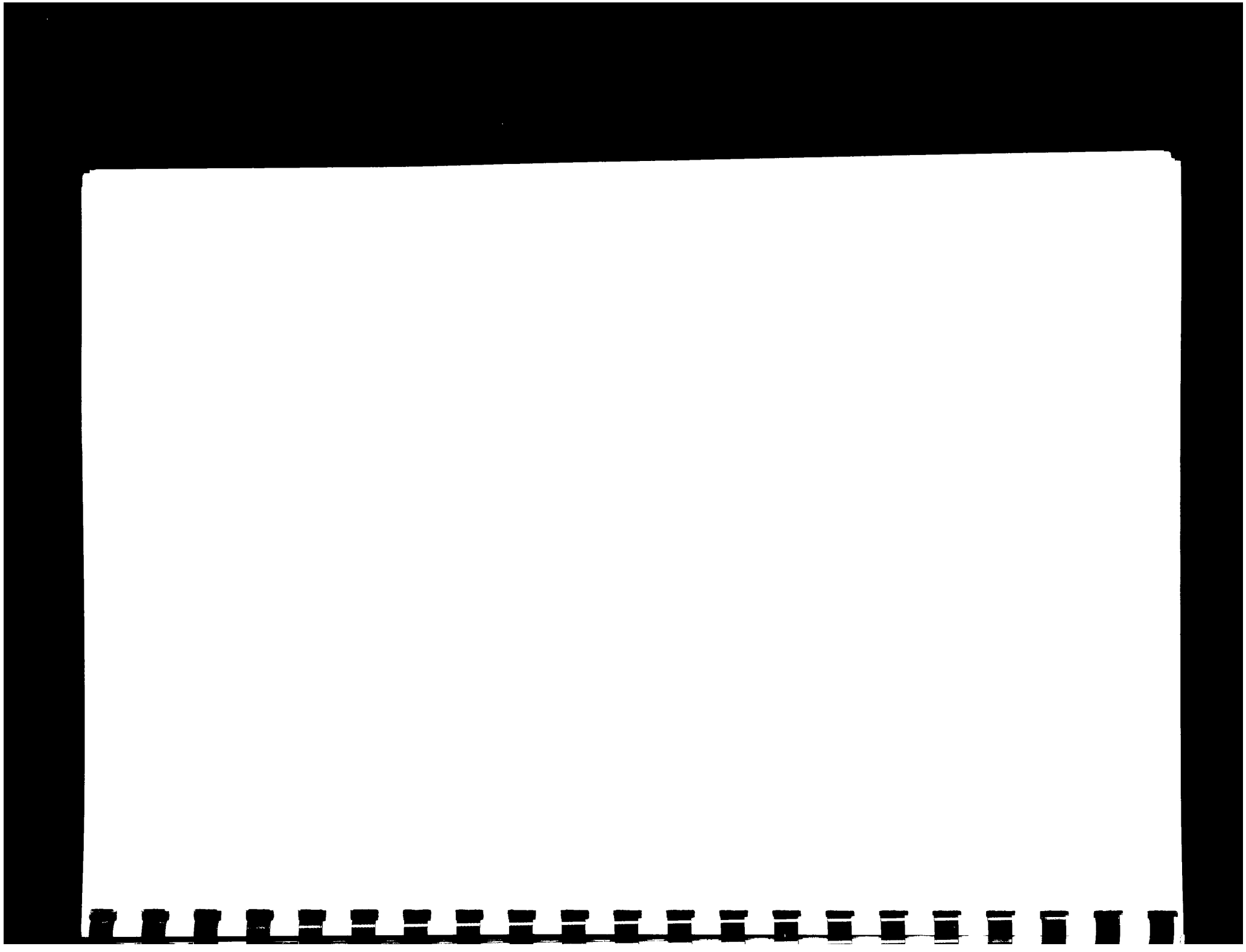
At St. Mary's Hospital the paediatric department with its national reputation in infectious diseases was commended, and the renal service was second only to the Hammersmith Hospital which was preferred because of its distinguished research programmes. The cancer programme was thought too small to take on a major role and the cardiac surgery service was small and scored lowly against the group's indicators of quality. The cardiac review group concluded that this sector required two units, one of which should be in inner London and one in outer London. In inner London, the choice lay between the Royal Brompton Hospital and the Hammersmith Hospital, both highly regarded postgraduate hospitals. The Royal Brompton Hospital was favoured, providing the disadvantages of its single specialties status were overcome by becoming an integrally managed part of the Chelsea and Westminster Hospital nearby.

The Royal Marsden Hospital was unusual in the division of its services between the Fulham Road and Sutton sites which inconveniences some patients. The review group felt that a full service should be developed at Sutton to serve South West London and that the range of care in West London would benefit from collaboration with Charing Cross Hospital or the Hammersmith Hospital. Either would be sufficient to ensure that the Institute of Cancer Research received the help it needed in pursuing its excellent research programme, in conjunction with its existing presence at Sutton.



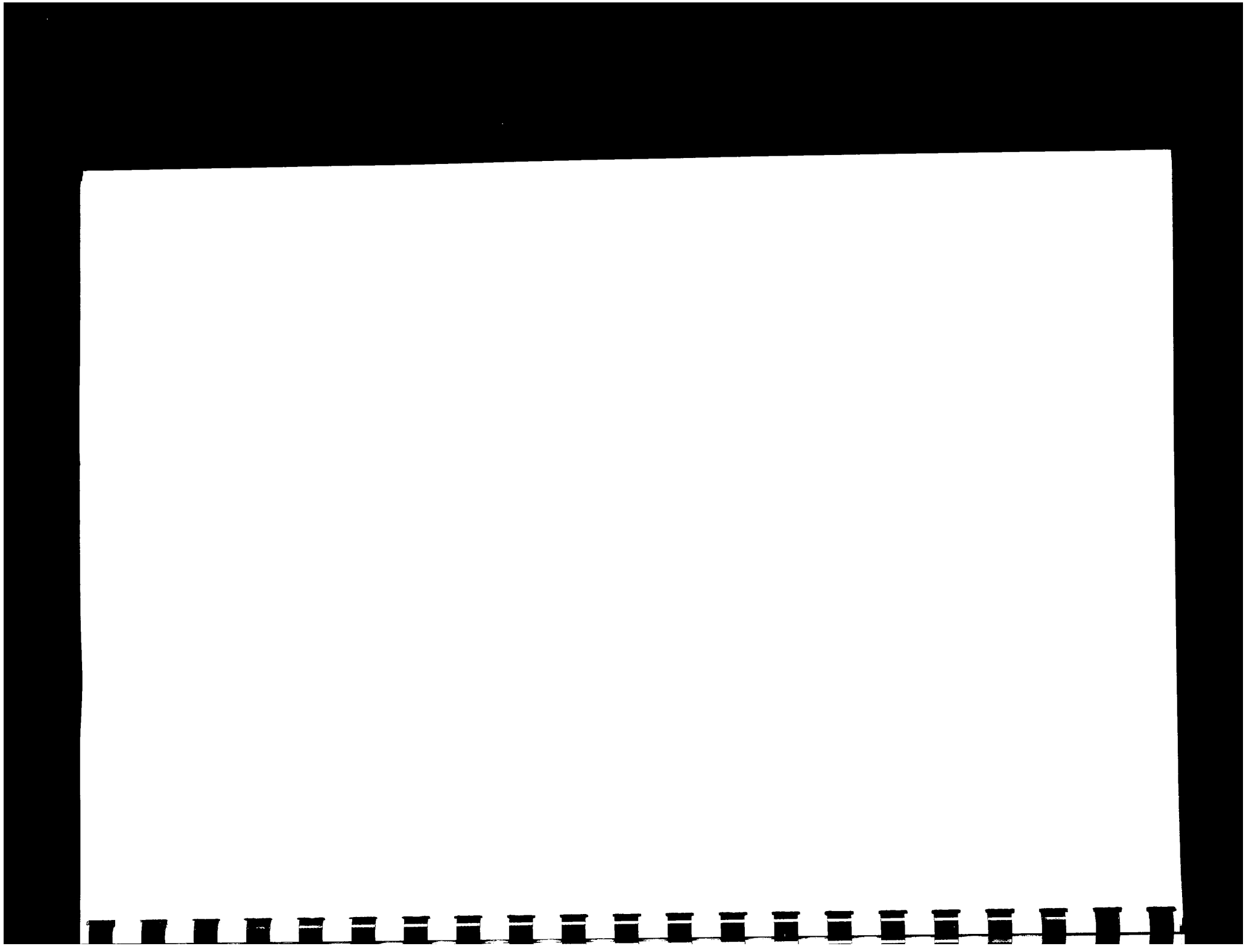
The review groups gained a notably consistent impression of the Hammersmith Hospital. The research programmes, which were highly rated by peer review and relevant to clinical progress, were appropriately supported by the volume and nature of the patient service but this meant that overall the service could be far from comprehensive. A constrained site was used tightly to blend basic science research with clinical practice and enquiry. Construction is currently taking place for the arrival of Kay Davies' team researching in molecular genetics and for a new £5m. cancer centre. It appeared to be a balanced economy with a special ethos and unusually in the United Kingdom organised on a chief of service system. To disturb the overall balance might well be to the detriment of the research drive and might not be in the patients best interest either, since the clinical practices are small in regional terms and eclectic to match the research programme. It might therefore be worth exploring the extent to which special financial support for the Hammersmith would be acceptable contingent on the continued success of the research programme. Otherwise if a choice had to be made for a single centre in West London in cardiac, cancer and neurosciences, expansion of the Hammersmith Hospital would not be the first choice in terms of patient service or ease of development.

E. **In North Central London** the opportunity to work in association with University College was seen as such an advantage in the biomedical sciences that each of the review groups were keen to site their clinical programmes on the University College/Middlesex Hospital site. Recognising that the competition for space might prejudice the clinical programme, the plastic surgery review group proposed a compromise of support for their professorial department beside the University Campus, but the siting of the main service at the Royal Free Hospital. As described previously in the specialty sections, the paediatric and neurosciences review groups looked for collaboration between the Hospital for Sick Children, Great Ormond Street and University College Hospital, particularly in foetal and accident and emergency medicine; and similarly an integrated service between the National Hospital, Queen Square and the Royal Free Hospital.



The newly refurbished cardiothoracic services and cancer services at the Middlesex Hospital should be developed and expanded, but if this led to suggestions for a new hospital at UCH on the Odeon or another site, the possibility of development at the Royal Free Hospital should be given further consideration. In renal services, the current programmes in dialysis and transplantation at the Royal Free Hospital are well established and have an excellent track record. However looking ahead over five to ten years the developing programme at University College Hospital holds out the greatest promise.

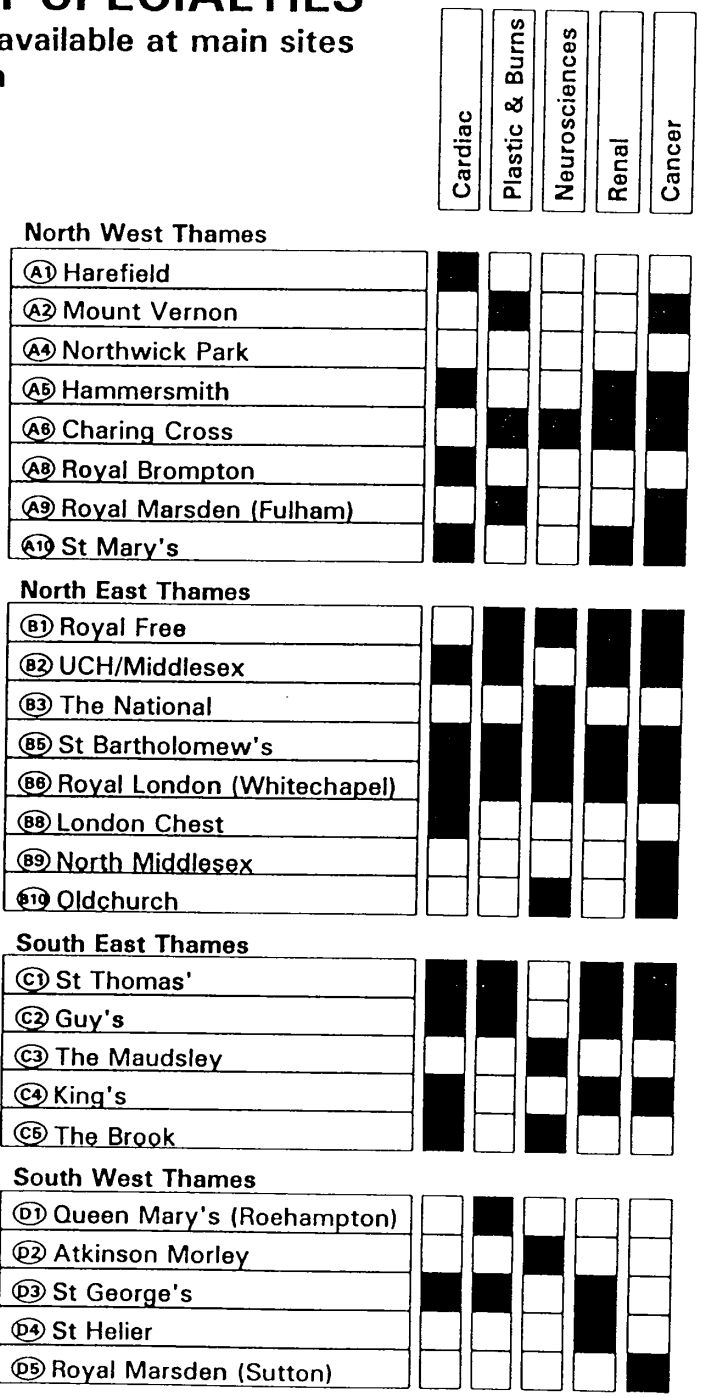
The recommendations of the five adult specialty reviews are summarised in figures 1 and 2 for the current pattern of provision and future configuration respectively.

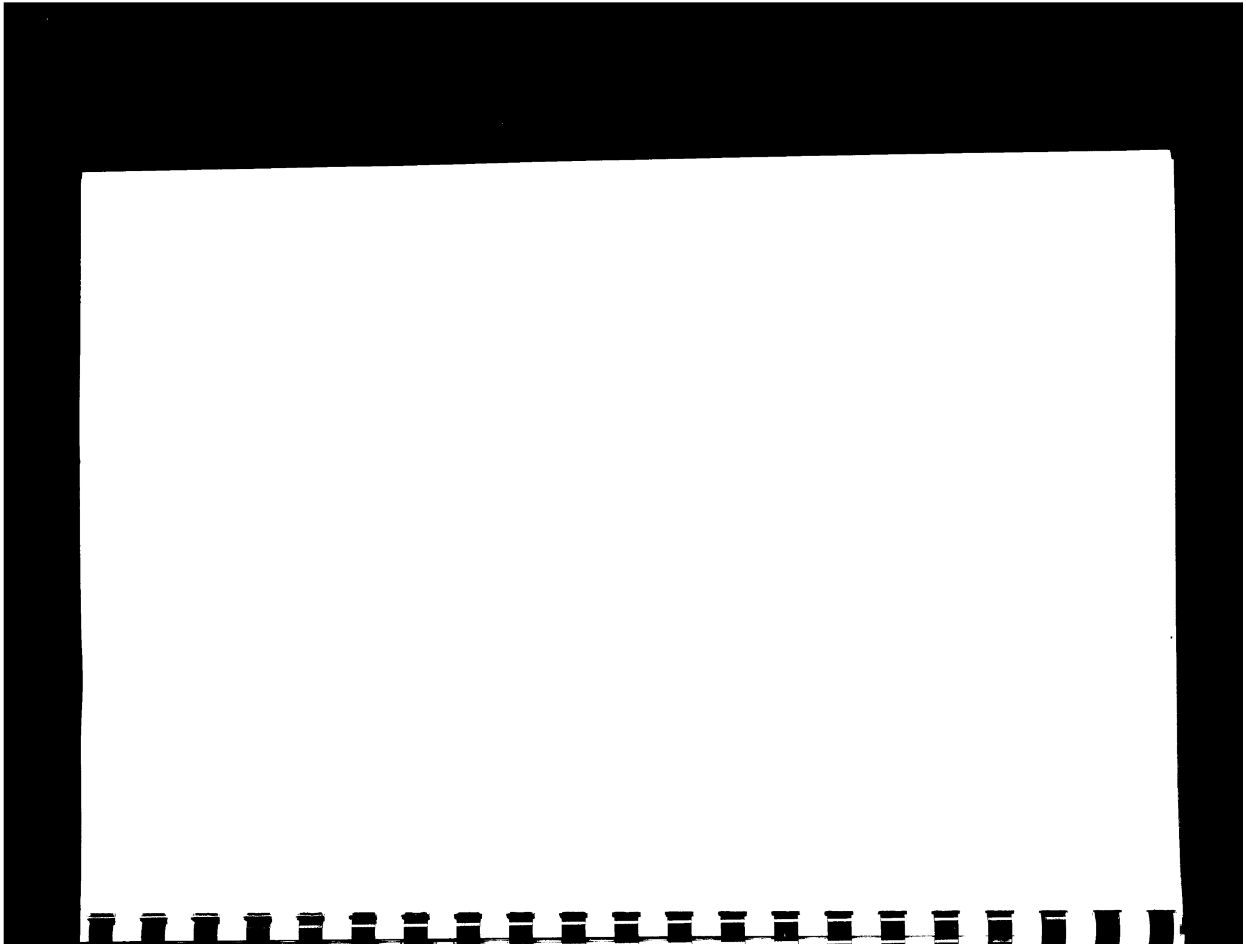


Appendix 2 (i)

ADULT SPECIALTIES

Services available at main sites in London

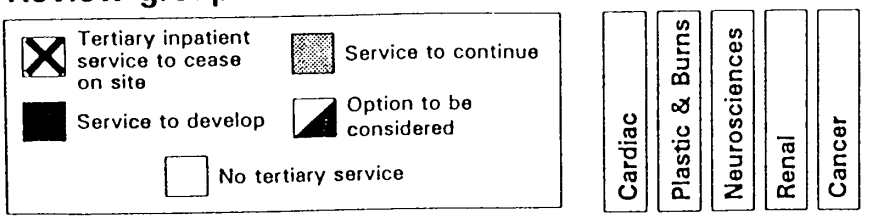




Appendix 2 (ii)

ADULT SPECIALTIES

Review group recommendations for tertiary centres



North West Thames

- (A1) Harefield
- (A2) Mount Vernon
- (A4) Northwick Park
- (A5) Hammersmith
- (A6) Charing Cross
- (A8) Royal Brompton
- (A9) Royal Marsden (Fulham)
- (A10) St Mary's

North East Thames

- (B1) Royal Free
- (B2) UCH/Middlesex
- (B3) The National
- (B5) St Bartholomew's
- (B8) Royal London (Whitechapel)
- (B8) London Chest
- (B9) North Middlesex
- (B10) Oldchurch

P

South East Thames

- (C1) St Thomas'
- (C2) Guy's
- (C3) The Maudsley
- (C4) King's
- (C5) The Brook

South West Thames

- (D1) Queen Mary's (Roehampton)
- (D2) Atkinson Morley's
- (D3) St George's
- (D4) St Helier
- (D5) Royal Marsden (Sutton)

P The main tertiary centre for plastic surgery at UCH/Middlesex should transfer to the Royal Free. However, the Professorial unit at UCH should be retained.

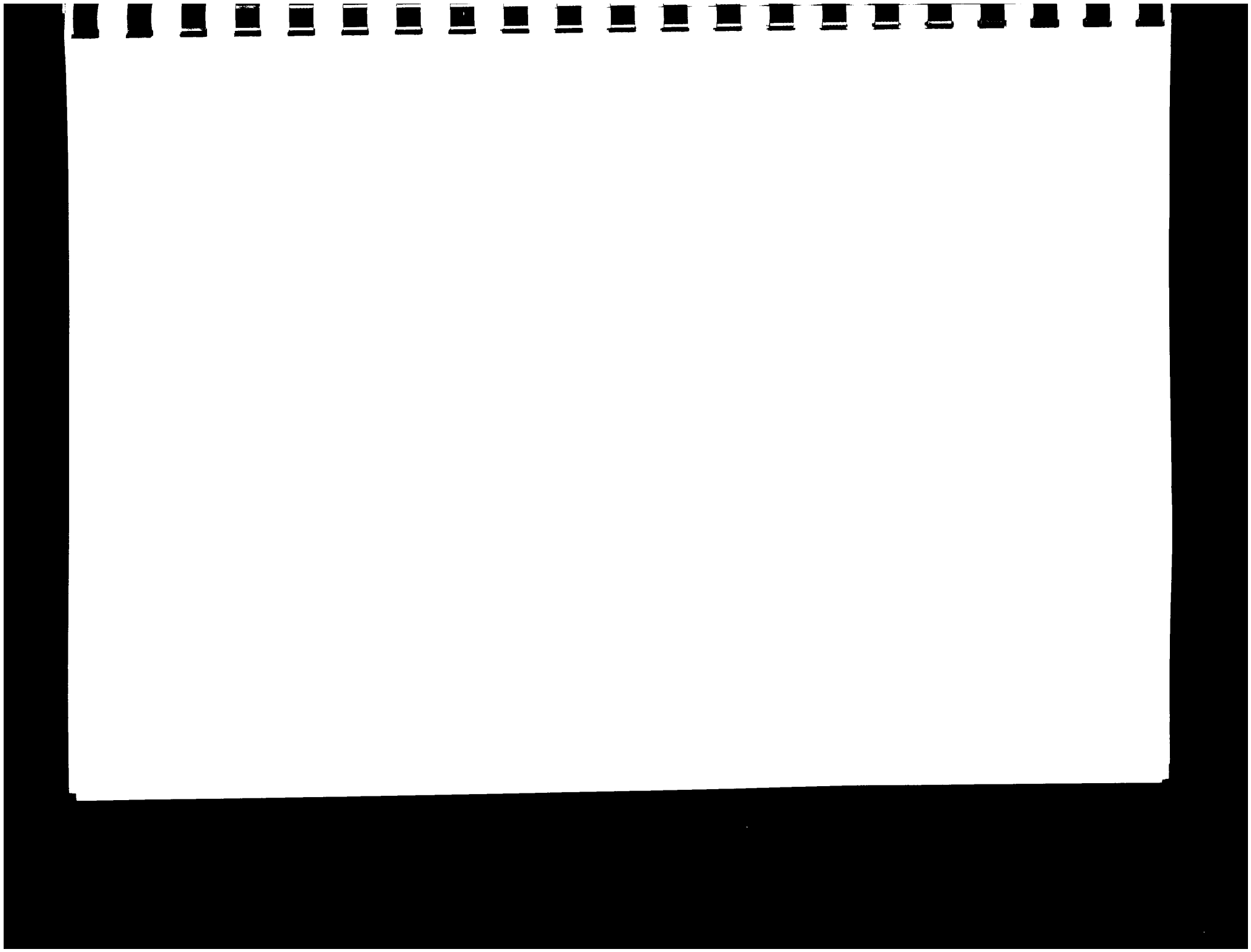
In summary, the options for each of the colleges were somewhat similar with the review groups identifying one hospital as the site for most of the regional specialties namely the Royal London Hospital (Whitechapel), Guy's Hospital, Charing Cross and the University College/Middlesex Hospitals. This did not mean that these subjects would be practised exclusively on these sites but rather that inpatient surgical services and the major equipment would be there while outpatient consultations and day surgery would continue in a range of hospitals. In addition each college was seen to have two major hospitals leading undergraduate education which following the same order were Homerton Hospital and the Royal London Hospital (Mile End), Kings College Hospital and the Lewisham Hospital, St. Mary's Hospital and the Chelsea/Westminster Hospital and the Royal Free Hospital and Whittington Hospital.

The review groups thought the Special Health Authority Hospitals should pursue clinical partnerships within the "college" framework and the integration of managerial relationships. Alternatively the Royal Post-graduate Medical School at the Hammersmith Hospital might prefer to stay outside the college network and consideration might be given to exceptional funding within the SIFTR arrangements that would sustain the eclectic clinical services associated with the hospital's research initiatives.

St. George's Hospital should rebuild its cardiothoracic service; develop a renal service; maintain a predominantly secondary paediatric service which would be particularly important in support of the regional cancer and neuosciences hospitals in Sutton and Wimbledon; and strengthen the plastic surgery service.

Constraints

The review groups were very aware of previous occasions on which health services in London and the regional specialties in particular had been reviewed. They had gone by various names such as the Inner London Planning Consortium and the London Advisory Group but shared one thing in common, thoroughly competent work failed to accelerate the pace of change. The review groups therefore noted a number of reasons why this should be the case and what in their view made matters different on this occasion.



a. Development of the NHS

The Health Service has spent forty years growing the clinical and managerial professions and developing the organisational arrangements whereby they can combine their efforts. The introduction of the internal market with purchasers and providers contracting to use revenue allocations based on population is the mechanism now available to cope with London's falling population and patient preference to be treated nearer their homes.

The changes will require the professions to establish new working practices, and depend on the ability to keep track of what is happening using the computerised information systems that are now available. It is against this background that the magnitude of the changes now proposed in London can be contemplated knowing that significant improvement can be made and that the process will not get out of control. These is no spirit of change for change's sake - one of the phrases most often heard in the reviews was "if it is not broken, don't mend it" - rather a recognition that the opportunities should now be seized which have been talked about for a decade or more.

b. Credibility

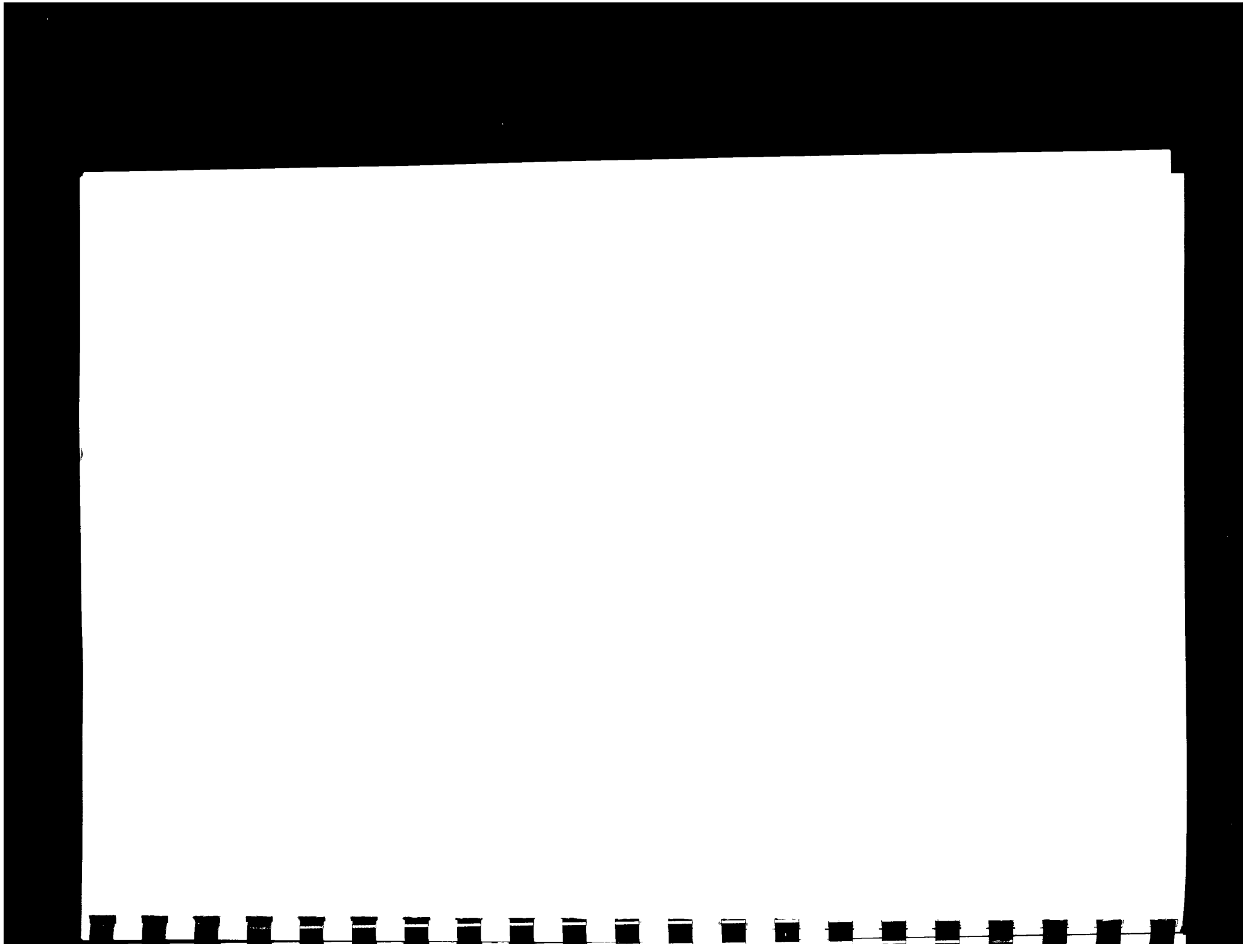
The meticulous research that identified 20 reports recommending changes in the health service for London did nothing to encourage the view that action was now imminent. Cynicism takes many forms but six that the review groups encountered can be summarised in the following questions.

i. Why should we believe the reviews? This question was asked not so much to gain reassurance but rather as a prelude to a catalogue of ways in which the speaker would find it possible to detract from the work if the verdict went against his unit. The review groups reports have attempted to make clear the strengths and the weaknesses of the assessments and hopefully have given the reader a realistic appreciation of the evidence and logic brought to bear on each issue.

There has been no malice nor is there any Machiavellian plot to undermine London reputations to the advantage of those working in cities elsewhere. Many members of the review groups have lived, trained or worked in London and now want to see the services transformed to sustain international reputations in the years ahead.

ii. Can they afford it? Relocation costs money not only for the clinical services but also the investigation departments, their laboratories and equipment, and other supporting services. Associated research programmes, many funded by charities have to move as well, and this cost may well have to be met by the health service as instigator of the changes. On occasion, the intended expansion of the service goes beyond the scope of what the current buildings can accommodate so that refurbishment of other stock or new buildings have to be commissioned. Depending on the distance, not all staff will be able to make the move, and where savings in numbers can and should be made, redundancy costs will be incurred. These problems have been anticipated and arrangements are in hand to ensure that clinical practices move in their entirety and that staff interests are fairly handled.

iii. Will the system deliver it? For those who can be convinced that a conspiracy has not sold either them or colleagues in the next hospital down the river, the main concern is that the handling of events may let them down, singly or severally. The proposition that the change will be led through the purchasing programme is not entirely reassuring. The contracting process is in its early stages of development and has yet to involve many of the consultants who actually provide the care, and has shocked other consultants, who have taken part, by its simplicity and disregard for differences in complexity of care. Putting this together with the uncertainty surrounding the effect of relocation on the pattern of clinical referral, and some see a case for deciding the site, planning the move, developing the new practice and then reflecting this in the contracts - a new



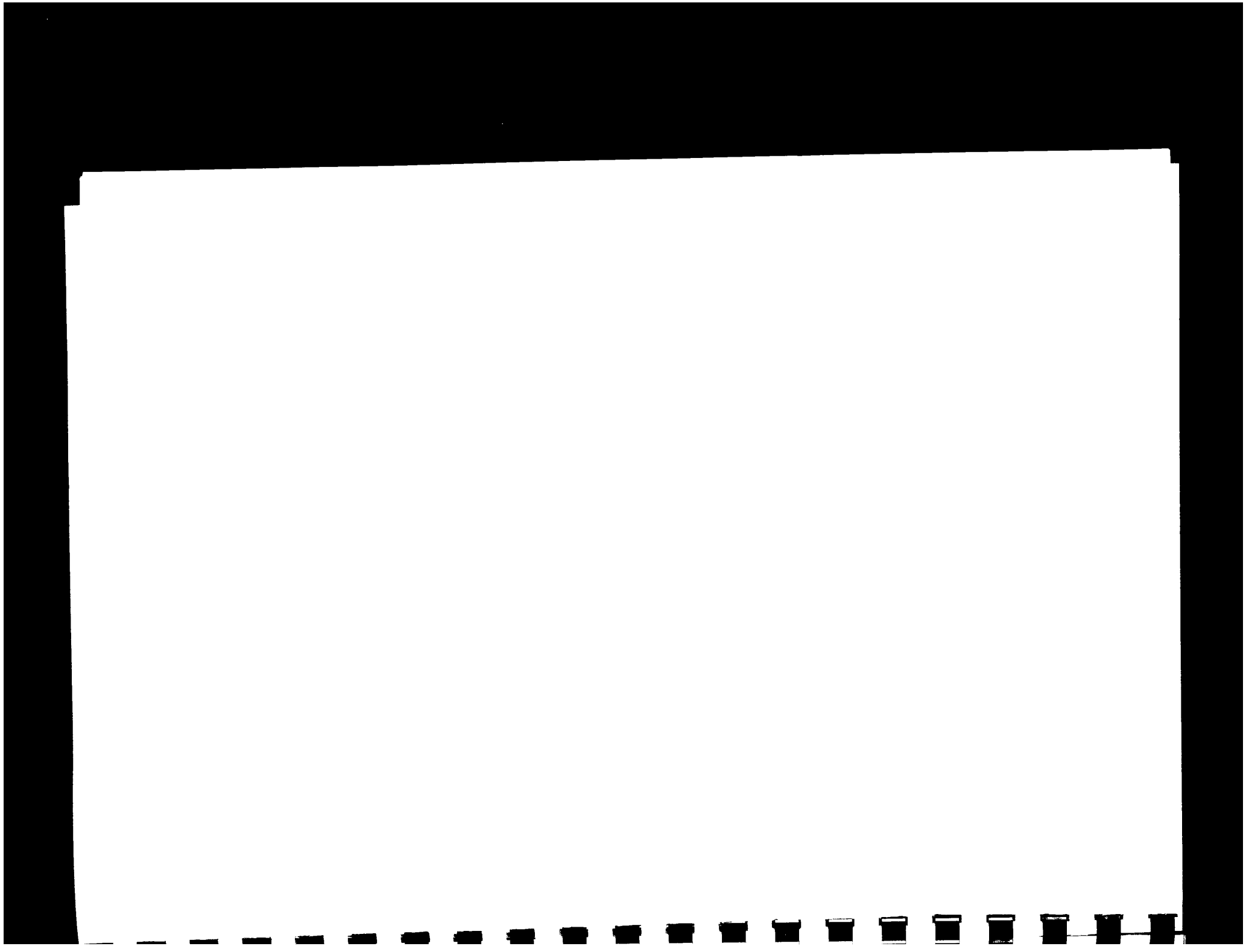
meaning for the phrase "money follows the patients". Limitations in plant and manpower will control volumes and costs simultaneously, but short term inefficiencies may show through in waiting list statistics as a temporary bulge in numbers if not in lengthening of times.

iv. Should these specialist services take so much resources? Special meetings organised by the review groups brought out occasional critical comments that these specialties took an undue proportion of resources, were overly optimistic about their results, tried to do too much too late in the progression of disease, and were too slow to adopt developments in the way the service could be delivered. Each contained an element of truth of which examples could be found, but in the generality the case could not be sustained.

v. Is this the last straw? Conscientious consultants have felt themselves to be under increasing pressure in the 1990s as a succession of changes have required them to alter their lives. Endoscopic approaches and micro-techniques are changing practice; junior doctors are less available and will require a shorter more intense education; multi-professional audit and charter standards are now expected; clinical directorates, Trust management, contracting and fund holding general practitioners all take time; clinical complaints are increasing and the long standing responsibilities in research, writing, lecturing and examining all remain.

This could mean that doctors will lack the will or energy to lead the development of new departments. The problem of motivating hospitals where the clinical team feel they have lost out should not be underestimated.

vi. "You began with principles but have you ended with a fudge?" Principles are absolute as long as they support your preference. As soon as they do not, they become factors that you hope will be lowly weighted and so removed from consideration. Judgement and compromise can lead to an

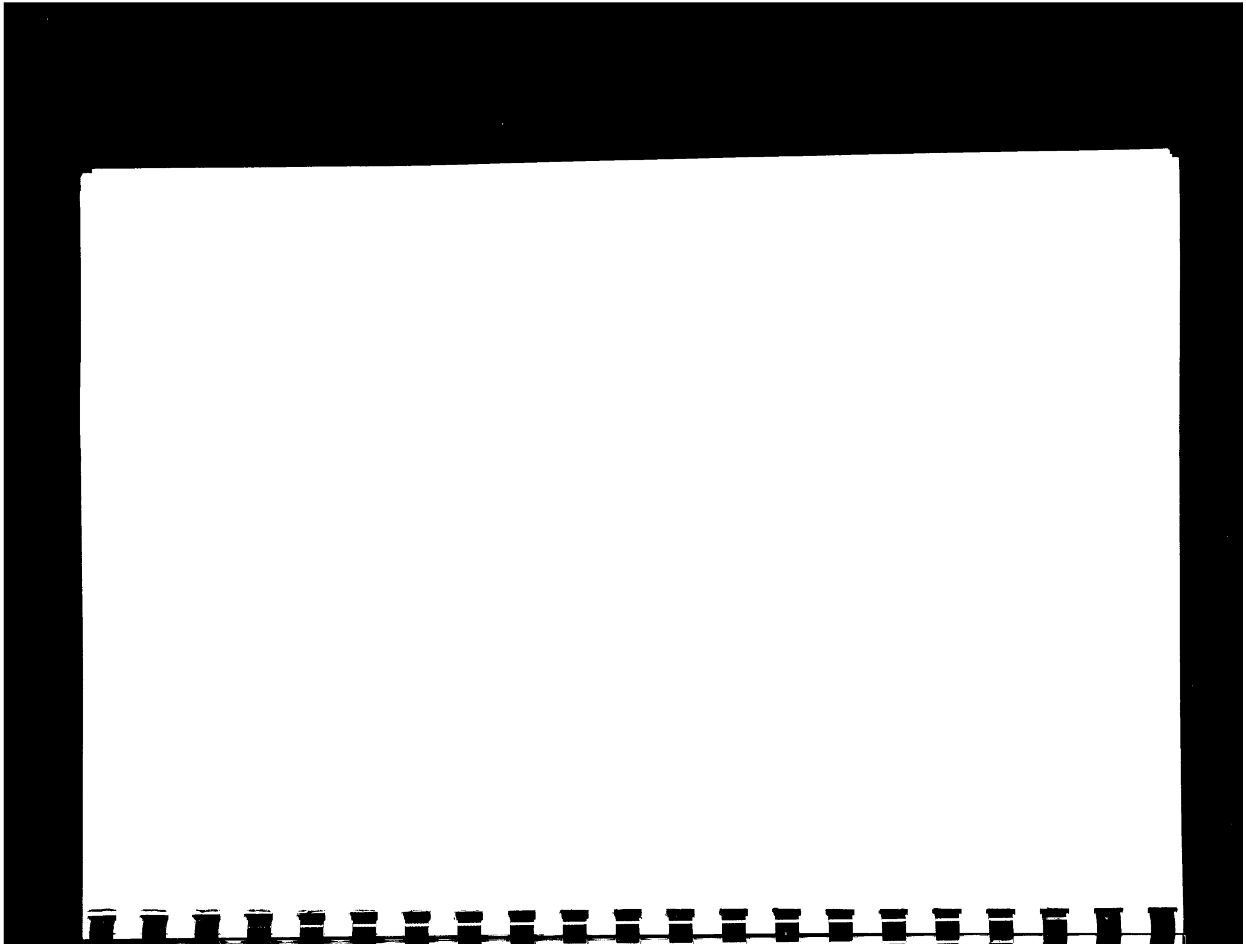


operable solution, but have to pass the test of consistency, will gain from majority support and become the more impressive when the view is unanimous. The review groups have striven for consistency, are unanimous in their ordering of the options but recognise that the staff of medical schools have such pride in their Institutions that they give new meaning to the phrase "arguing from different premises", which makes the accusation of a fudge or worse virtually inevitable.

c. **Site Assessments and Investments.**

The review groups realised that their preference for bringing the specialist services together on particular sites could cause difficulties in deciding what should be accommodated within present buildings and the refurbishment that would be required, and what land was available for new construction and the cost that would be involved. Projects will of course have to be worked up in detail before Ministers take the final decisions, but brief feasibility inspections have been made which have confirmed that two sites are currently tight for space, namely the Middlesex and Hammersmith Hospitals, but the latter may be able to acquire adjacent playing fields. At the Royal London Hospital, Guy's/Thomas's Hospital, St. George's Hospital, Charing Cross Hospital and the Royal Free Hospital, some expansion at low cost is feasible and there are ways of extending further at a higher price. There is capacity on several of these sites which is not currently used to the full.

The proposals are therefore feasible but the capital requirement varies greatly across the segments of London. The review groups feel that these differences should be accepted and that their general recommendation remains that the greatest benefit would come from capital investment in East London. No assessments were made on the site options referred to in the home counties at Chelmsford, Guildford, Maidstone and elsewhere.

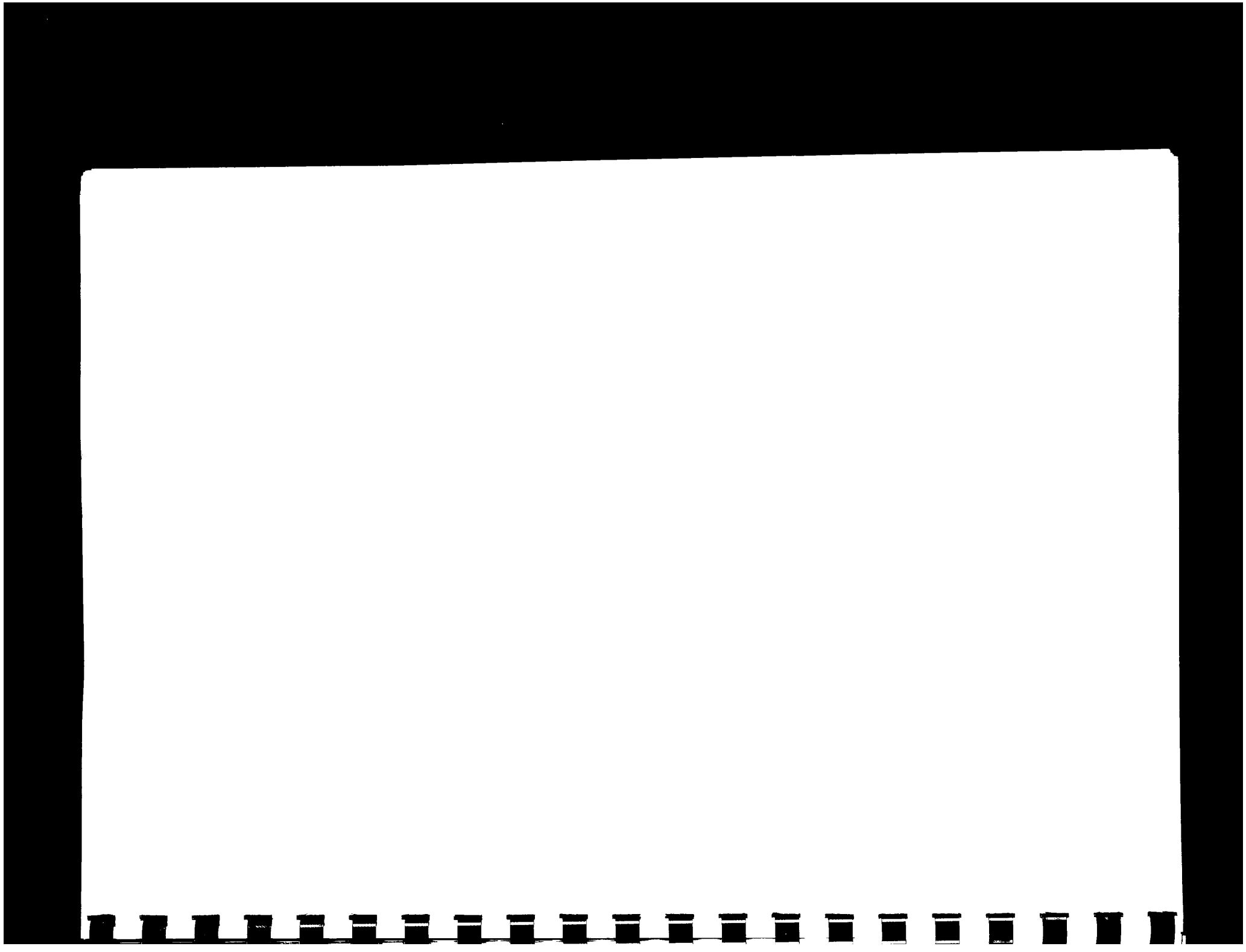


d. Finance

As noted previously the review groups had particular difficulty with the financial data they received in answer to their questionnaires and when they examined the financial returns from the hospitals. It would seem that there are marked differences in the extent to which costs have been disaggregated to specialties and attributed to particular activities. Cost per case comparisons could not be made with confidence and the relationship of costs to prices seemed erratic in so far as it could be analysed. What was possible was to review the financial data along with the clinical activity and the manpower numbers to get a feel of the costliness, and compare this impression with what was seen during site visits. In the end however this was not thought sufficiently robust to form a determining plank in the argument.

For similar reasons it was not generally possible to calculate revenue savings in moving to the larger units which in any case took on a different order of magnitude when in combination a series of changes led to a hospital closure. This potential and realisable saving in the teaching hospitals and Special Health Authorities would be partly offset by the development of services in the acute (district general) hospitals which are the complimentary element on the "hub and spoke" principle. Moreover there is also the possibility that the extra convenience and better geographical coverage provided by the spoke hospitals will increase levels of care and thereby incur at least a marginal increase in costs.

This report is primarily concerned with the provision of clinical services but it is important to bear in mind the possibility that the research programmes could be relocated independently. The cost of such moves has to be remembered as well as the cost of moving research laboratories and facilities when resiting specialty services. The formation of the new medical faculties could also incur costs for preclinical teaching blocks and perhaps for resiting research programmes from a postgraduate institute.



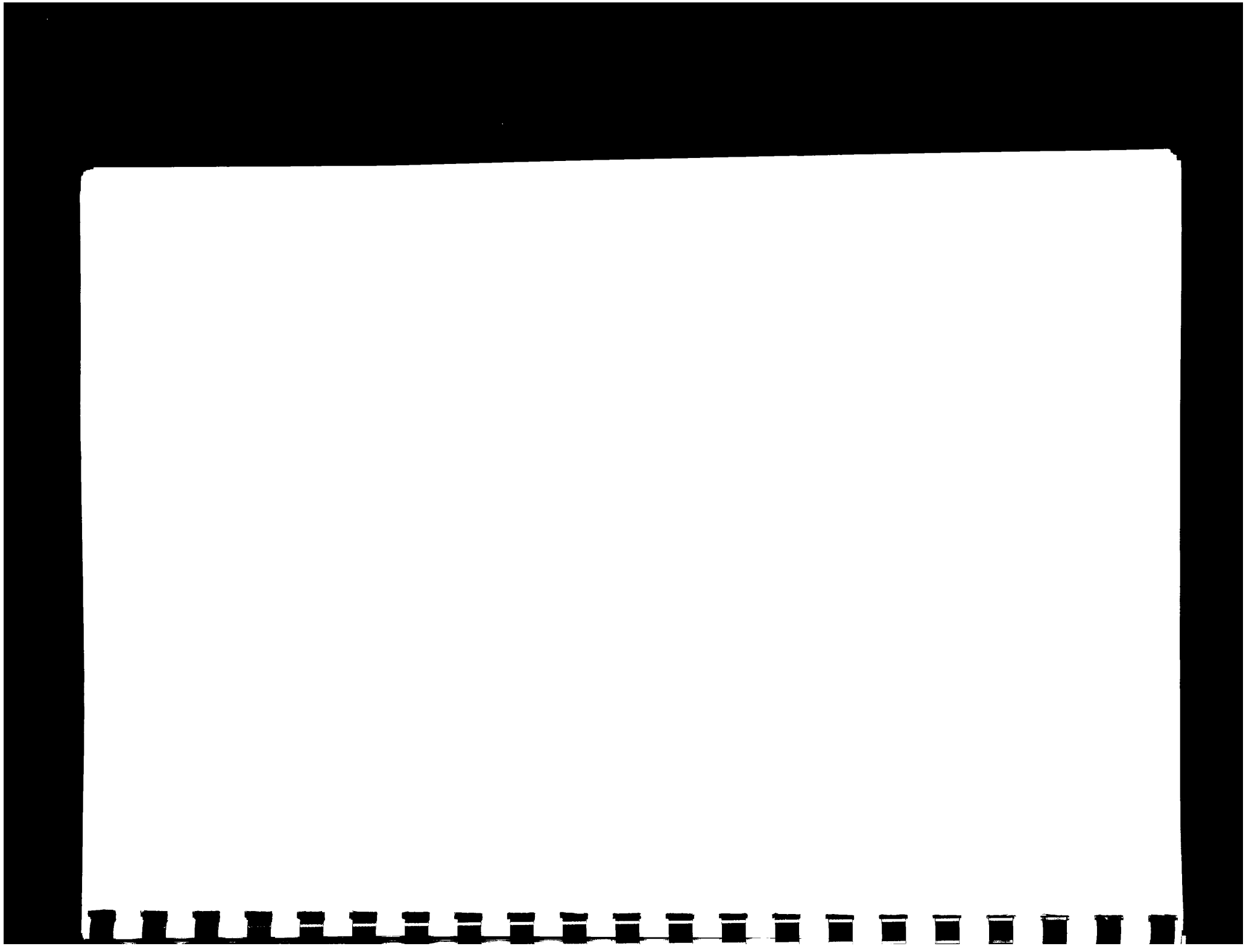
With regard to the funding of the Special Health Authorities, the review groups were aware of the study of excess costs and the discussions that were taking place simultaneously on the "formula" to be used to ease the SHA entry into the market. In so far as the review groups were able to examine this issue, they remained concerned that even with a research subsidy, the SHAs might not be financially viable. They concurred with the view in the Tomlinson Enquiry Report that the treatment of this issue should be evenhanded by comparison with research support to teaching and other hospitals through the SIFTR mechanism.

The groups looked to rapid unravelling of the composite monies in SIFTR so that a realistic attitude could be taken with regard to the cost of educating medical students; and so that research and research support monies are identified and become subject to account. Other expenditures could then be specified and the monies distributed in a way that corresponded with the different but complimentary contributions of hospitals within a college group.

The review groups recognised that the pace of change would at least in part be a reflection of the capital monies available to fuel the change and the wisdom with which transitional funding was used. Making every penny count would mean using current stock and facilities to best account which meant close consideration of the use that could be made of the Charing Cross Hospital and the Royal Free Hospital particularly if other building projects were to be proposed only a short journey away.

Programme for Implementation

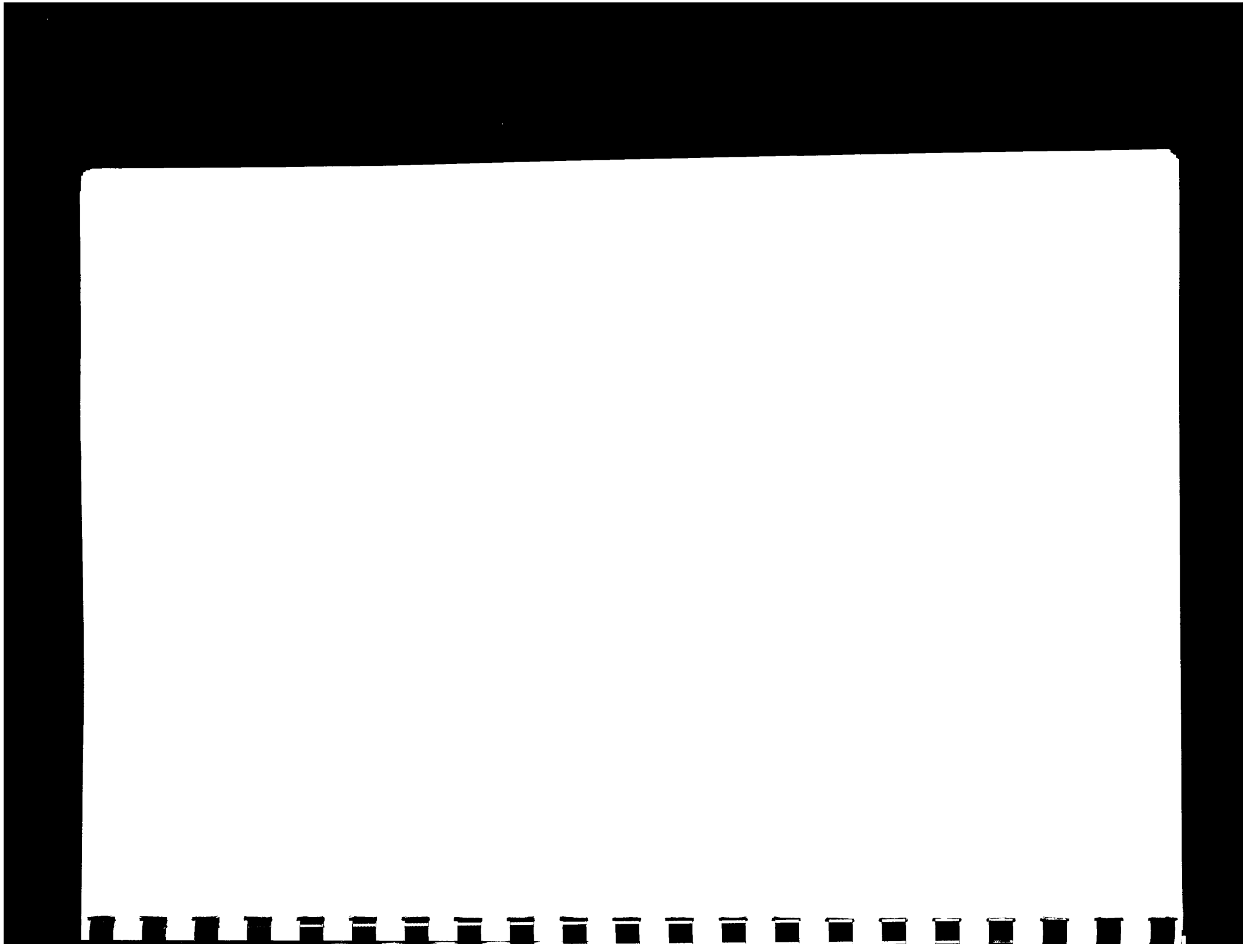
During the last three months, there has been continual evolution in the perception of the future for health services in London, and this will not reach a conclusion by the publication of these reports. The concept of combining the organisation of health care with research and education around the four colleges of London University continues to gain ground but has yet to win general acceptance in the medical profession and to be



agreed in detail by the colleges themselves. The hospitals involved in the new college groupings have been in discussion for some time and have to consider the integration of the complete range of clinical care not just the specialties reviewed here. Attention must be give to the continual viability of teaching hospitals from which a significant withdrawal of specialist services is identified, to ensure the success of their clincial practice overall, and to sustain their important role in affording clinical placements for undergraduate students. It is a major step to move from the concept of the integrity of a teaching hospital to collaboration between hospitals as part of a collegiate system. A written declaration will be an important first step which if it were entered into wholeheartedly could lead to a rapid succession of changes as clinical departments decide how they could integrate their services. This might come to affect directly a third or even perhaps half of the staff in relocation to a neighbouring hospital or in welcoming new colleagues to departments that would now be twice the size of what they were before. These changes will need careful planning to minimise disruption to patient care and to keep general practitioners and colleagues in other hospitals aware of the changes. It will be essential that the plans work in terms of space, access to facilities and timetables in order to minimise the friction that will inevitably occur in what many will see as marriages of financial convenience. Others hopefully will accept the arguments in the review reports that there will be gains from having fewer larger centres in terms of quality of care through increased specialisation and in opportunities for research collaboration. This is not however to deny that equity in funding as between London and the Home Counties, and the Thames regions and the rest of the country are important issues, nor is it to forget the pressure that must inevitably come from the Treasury to contain the public sector borrowing requirement. The sections which follow pick up these concepts in greater detail trying to anticipate the way in which the discussions will develop.

The Colleges of London University - Education and Research

Much of the argument regarding the options for resiting the specialist services is predicated on the development of clinical services in association with an academic focus in particular colleges of London University. Considerable progress has been made in the discussion of what this might mean, but central issues still remain to be decided regarding



the hospitals forming the association, the size of the medical faculties and collaboration between undergraduate and postgraduate programmes in providing an integrated curriculum and continuing education. The HEFCE has written to the multi faculty colleges and the free standing medical schools inviting them to bring forward strategic plans and action plans for merger. The review groups recommendations will inform the response made by the colleges and medical schools and will influence the plans for configuration of teaching and research in the merged bodies. Contracts for nursing and therapist education lie with other universities and it may be appropriate for some mutual discussion to take place that will ensure complementary development.

The scope of the forthcoming changes in both undergraduate and postgraduate education will put at a premium the close collaboration with Deans of Medical Schools, Deans of Institutes and Postgraduate Deans, ensuring the changes in services do not create gaps in teaching and rotational training schemes. In turn this educational requirement has to dovetail with the new deal for junior doctors which is in turn part of the wider programme for achieving a balance throughout medical careers. Availability of specialist doctors from Europe could be a confounding factor and as the programme in London broadens, collaboration with universities and hospitals elsewhere in England, and beyond, will become important as doctors rethink the locations of their careers.

The medical faculties may also take the opportunity to reconsider the pattern of professorial departments and question whether for instance a trio of professors of surgery and a dozen or more professors of pathology match with their ideas on academic development. As the 21 professors of anatomy at University College serve to demonstrate, it is not the number itself which is the critical factor, but rather using chairs to develop an integrated, collaborative programme of original and relevant research and effective education.

There is a further important issue concerning the number of medical students who can and should be trained in London particularly now that the General Medical Council is placing greater emphasis on experience in primary care. Although as many as 300 students might attend each medical faculty of the four colleges, the idea is that they should be attached in

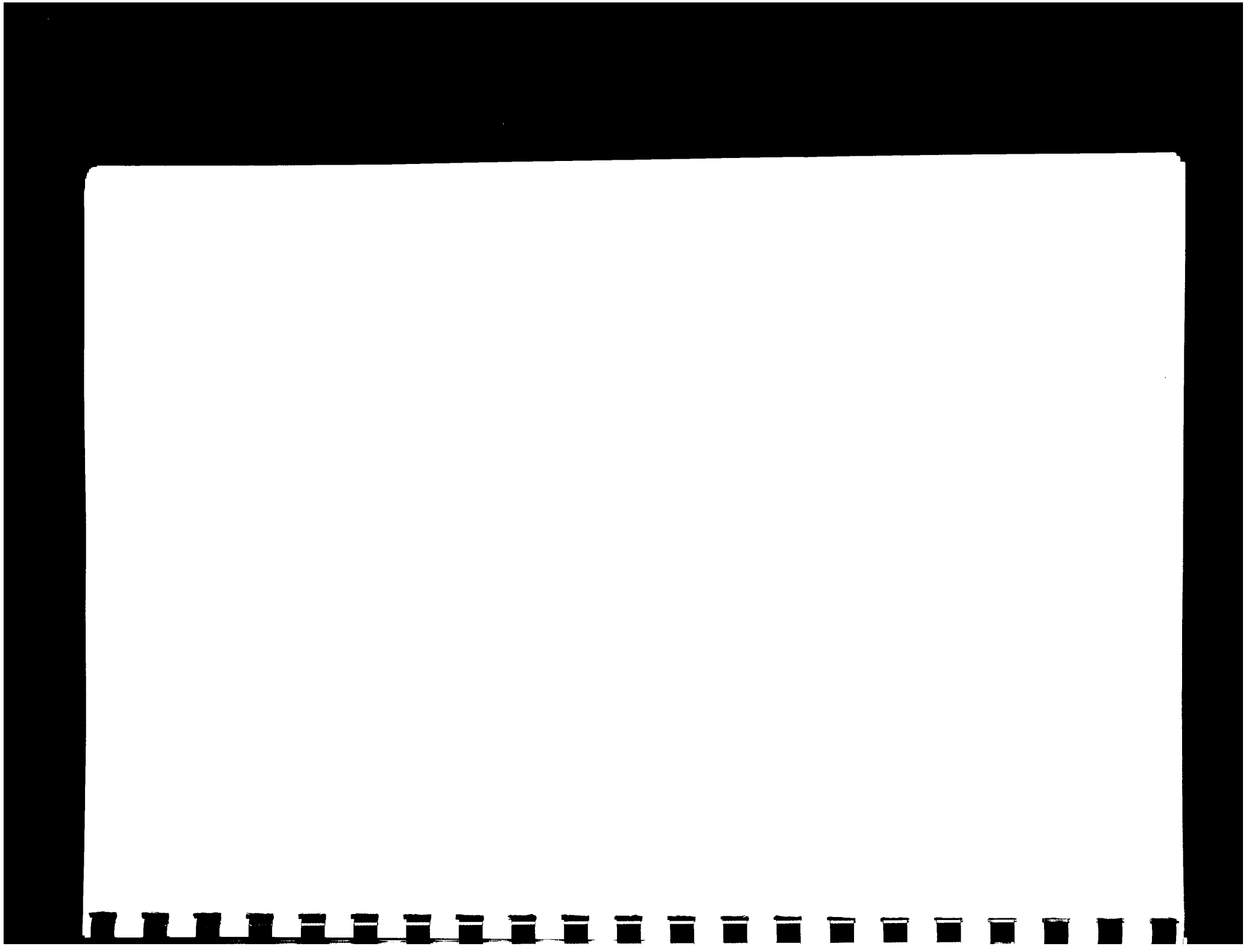
groups of 100 to one of the current teaching hospitals for their clinical training - much as they are at present. The Deans have been working with the professors of general practice to develop programmes in primary care as well as a new integrated curriculum. Whether the colleges see these developments as appropriate has yet to be confirmed. Furthermore some people might take the view that given the rudimentary state of much primary care, it might be wise to think of resiting one medical school at least outside the capital.

Collaboration between Trusts

The integration of clinical services, research and education programmes on a college basis will sometimes require collaboration between separate Trust hospitals or require some Trusts foreseen in Making London Better to be reconsidered. The principles and constraints that led to the proposals for the specialty services will apply increasingly to all departments as differentiation of skills has to be matched by new collaborations to provide a 24 hour, year round service.

The review groups recognised that in several instances the proposals that they made for transfers between Trusts meant that for the period of their implementation it would almost certainly prove impossible to sustain a contract. It might prove necessary in stock market parlance, temporarily to suspend some shares/contracts to be quoted at different figures when restructuring is complete. Given that contracts involve several purchasers, regions may be the best people to broker these arrangements.

In the same way as the faculties will review their professorial staff so the hospitals will have to review their clinical staff. It would be disingenuous to forget that the inner London Commissioning Agencies have less money to spend as their population falls and that the outer London Commissioner will buy services locally for the common conditions because the patients find it more convenient. To date more progress has been made in reducing the numbers of beds in inner London than in identifying posts that need not be reappointed. Few hospitals have been as successful as the Royal Free in containing the size of its staff and there will undoubtedly be tension within college groups as the need for savings bites differentially across the hospitals and the departments. It will not only



be the number of people on the staff which will be debated, but also the ability and work rate of the individuals concerned. This will be particularly difficult to assess when the availability of beds or other facilities has restricted the clinical practice so that teams have not been able to appear at their best.

Collaboration with providing hospitals, Management Executive Outposts, purchasing agencies and Regional Health Authorities

There is further work to be done in developing the site specific option appraisals and in bringing together the priorities of a full range of patient services. The hub and spoke principle is likely to apply in several surgical departments bringing together inpatient services at the hub while outpatient and day case services remain at the spoke hospital. Repeated reference has been made to the difficulty of arranging emergency medical admissions and it may be that the balance in bed provision will change with a preponderance of medical beds in many hospitals. At the extreme, some hospitals might combine medical and rehabilitation services with no surgical presence at all.
The specialty reviews recognised that their departments were reliant on the services of intensive care and high dependency wards and collaboration with colleagues in anaesthesia, pathology and radiology. The further changes in the nature of the individual hospitals might involve detailed consideration of these departments ensuring that they can cope with changed workloads by appropriate redistributions that reinforce or reduce services.

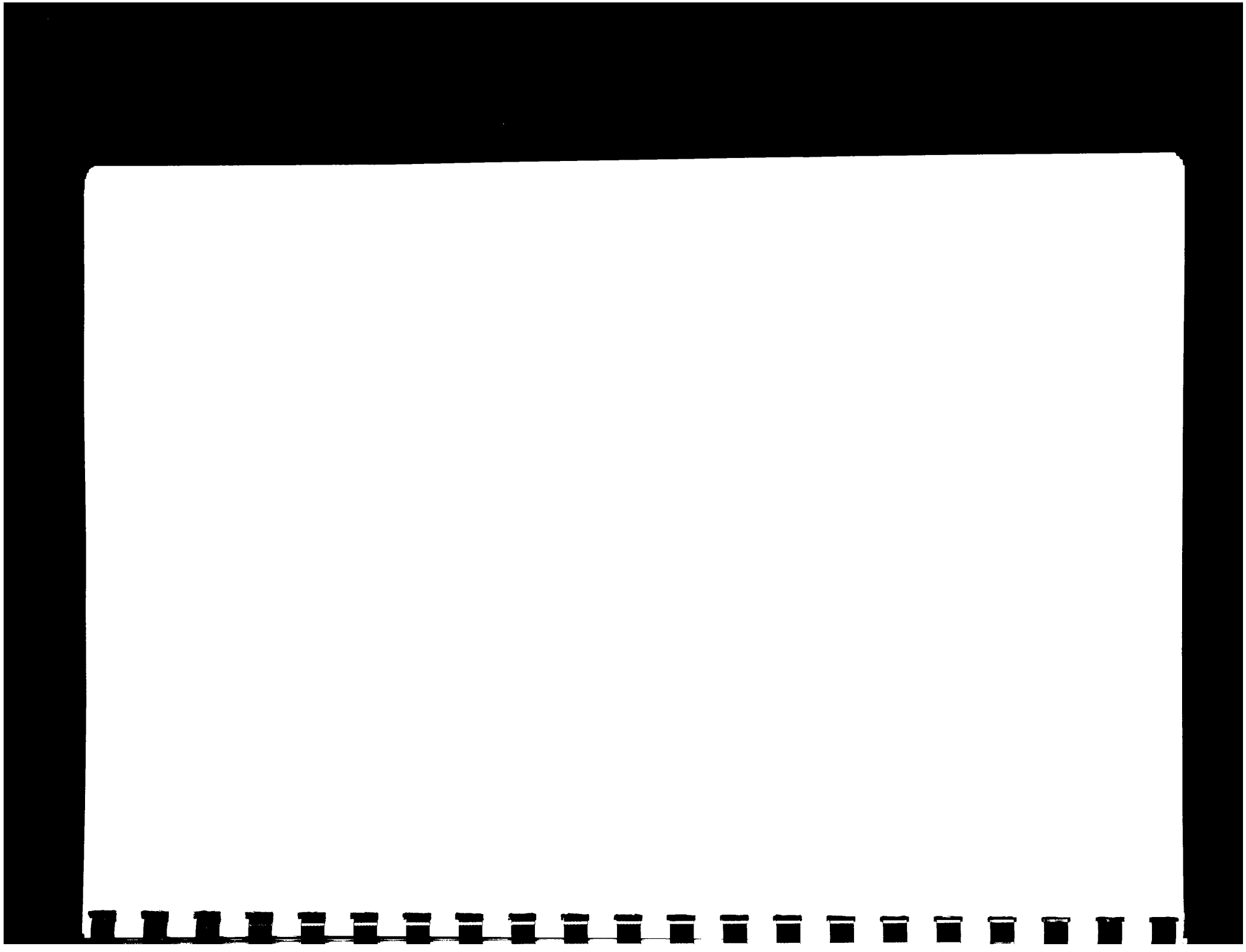
The changes will be recognised, supported and driven by the contracts between the purchasing agencies and providing hospitals with occasional assistance from management outposts and regional health authorities overseeing the use of transitional and revenue monies for the larger schemes that may involve a sequence of hospitals and specialties in major change. One current cause for concern is the potential independence of tertiary referrals from the contracting process. This could result in tertiary centres achieving an expansion of services through creeping development, growing in year by tertiary and extra contractual referrals and seeking to consolidate the extra activity into the following years contracts. There is no objection to this happening per se, after all organisations

naturally grow and recede with accumulating experience. Rather it is that such growth preempts money needed for other patients and where there is an apparent free good, there may be abuse through the ambition of the tertiary provider or sloth of the referring hospital.

The matter can be tackled in either of two ways that incorporate the cost into a tertiary centre budget or require the secondary hospital to meet the cost. Tertiary centres already apply priorities in terms of urgency of admission and the time and resources committed to care, and are in a position to make comparisons on levels of services provided to different communities. What they may not be in a position to do is to compare their service with their competitors and judge it from the patients perspective. New developments may be distributed more quickly if the regional unit has the money to offer the service, while for a mature specialty, the patient may gain more by consultants in local hospitals having the money to chose between tertiary competitors. This could be one of the issues an intermediate tier determines in order to maximise patient benefit.

Subsidiary issues arise when secondary purchasers are unwilling to contribute to new equipment. Should their patients be denied its use, be treated with a surcharge, or treated at standard cost thereby allowing their districts to free load on the system? Conversely if the tertiary centre is supplying the service, how can districts complain and what extent can they require a response? For instance, a visiting neurologist may lose clinical respect or offend general physician colleagues; or general surgeons may feel let down by neurosurgical colleagues over the acceptance of head injury referrals. Each of these examples are more than irritating when they occur, and if they can not be resolved between the parties, will probably need expert opinion from outside the region to act as arbiter.

The review groups were grateful for the help they received from clinical departments, purchasing agencies and the regions with regard to analyses of current practice; thoughts for future developments, priorities for service development and plans that had been devised for delivery of care across geographical areas, and particular projects that would turn this into reality. In this context the specialty reviews make an important contribution



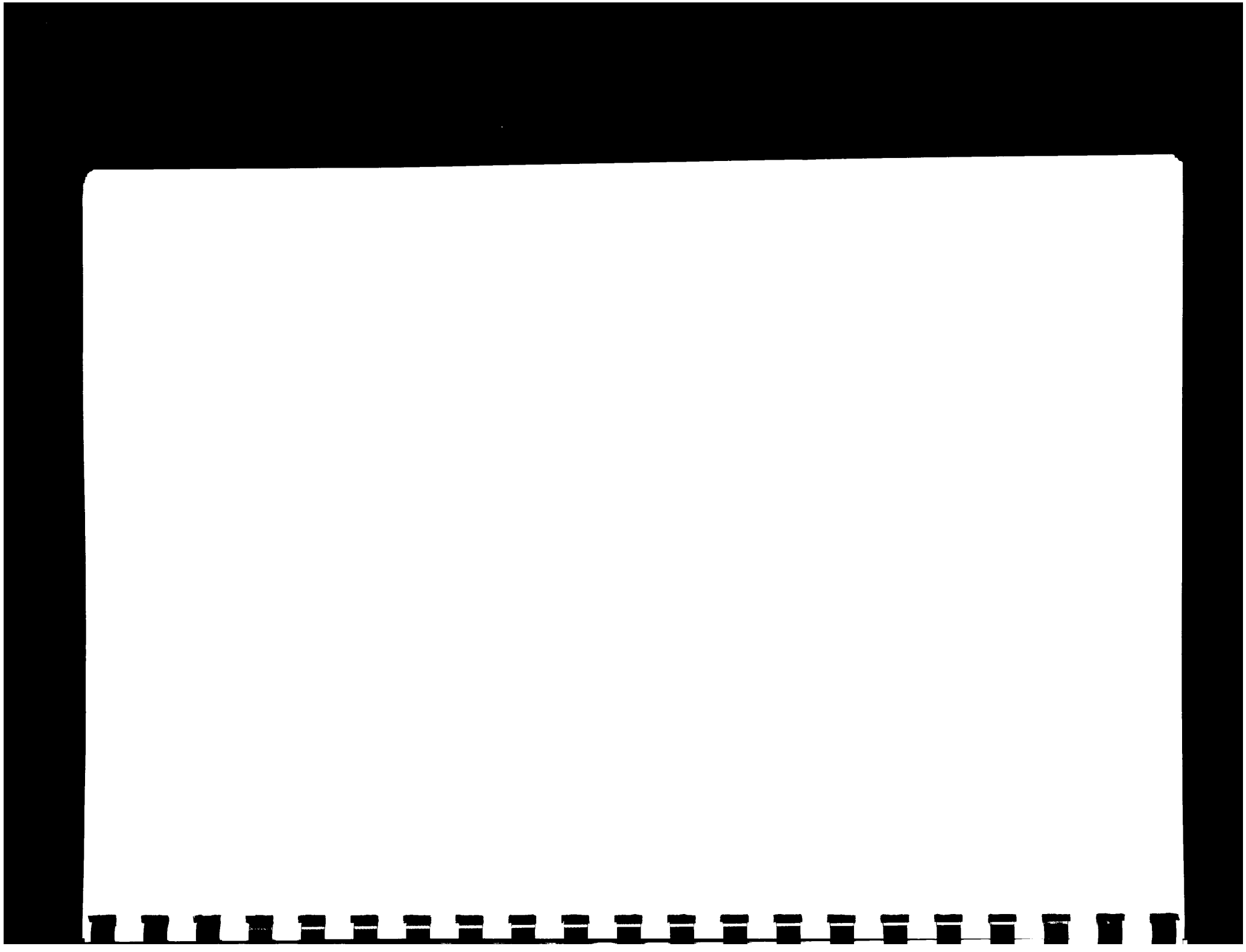
towards the care of the most suddenly and severely ill people but as the groups were the first to emphasise, the tertiary centres function as part of a system of delivering care to the home and work place in collaboration with colleagues in many other disciplines. There is therefore further work to be done in developing the site specific option appraisals, and in bringing together the priorities from the full range of patient services. This must of course include careful consideration of levels of provision in units such as intensive care and high dependency, and the vital work of anaesthetists, radiologists and pathologists on which many if not all specialties depend.

Human Resources

The six review groups expect the workload in their specialties to change comparatively little except in cardiac disease, where higher rates of operative intervention are probably justified. Not surprisingly therefore they did not identify major changes in the numbers of permanent clinical staff, though they did expect to see reductions in junior doctors hours, changes in some grade mixes and shift overlaps for nursing staff and savings in general staff overheads through fewer larger units. However, it was obvious that the resiting of the units could put them out of reach of some nurses and therapists even if the medical staff were able to make the journey. This could be a personal tragedy as well as a major set back for the health service if numbers of senior and experienced staff had to leave. Opportunities for relocation, redeployment and retraining are of the greatest importance along with the clearing house and ring fencing scheme aimed at helping all clinical workers find work in their specialties. Discussions are also taking place with London University regarding the employment of academic staff the results of which are yet to be published.

Conclusion

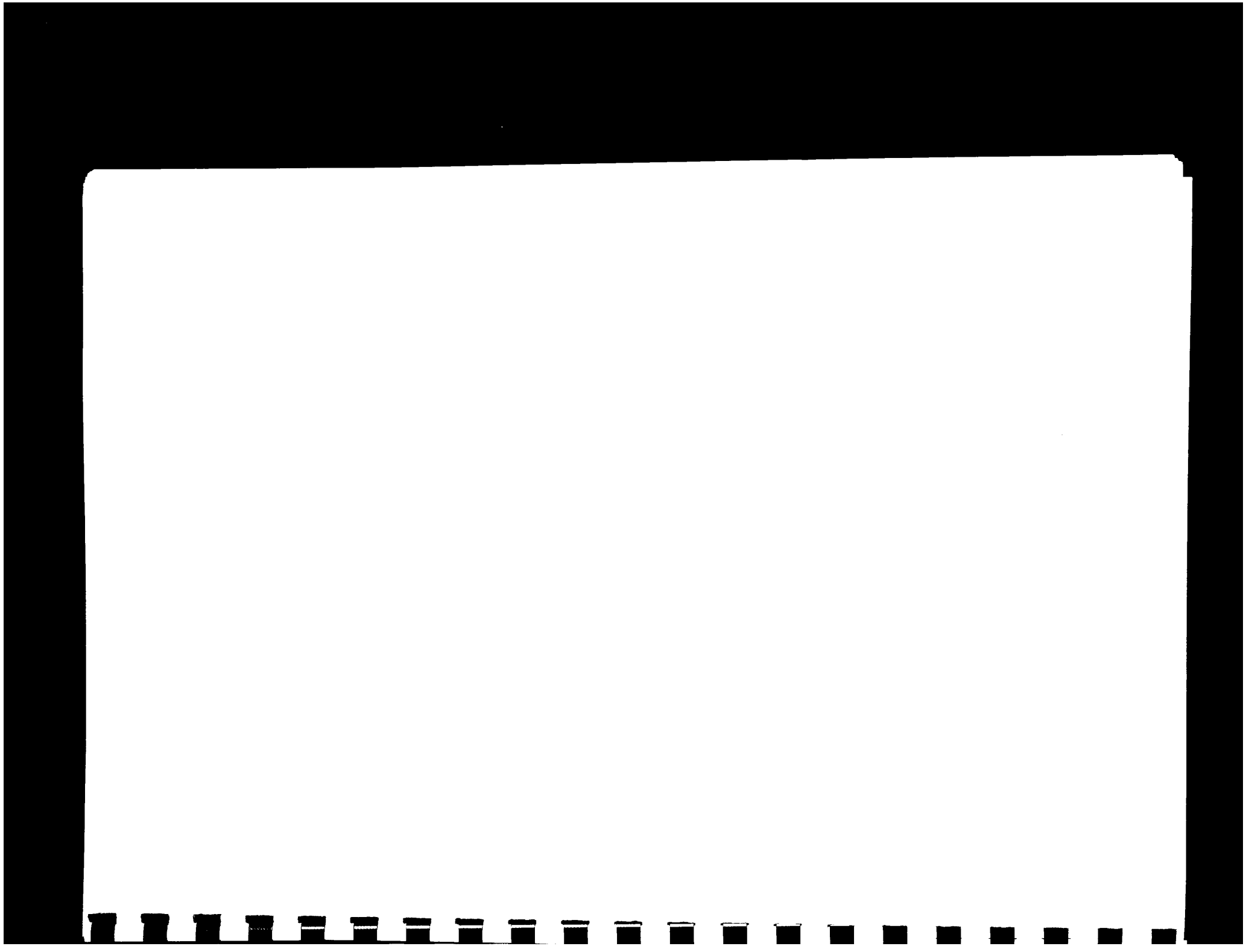
There is only so much that advisors can contribute no matter how deep their commitment to be helpful. They can say too much and create an agenda too formidable to tackle or they can take too long and outstay their welcome. On the last charge, the review groups can surely plead not guilty but the stage has been reached when the regions, outposts,



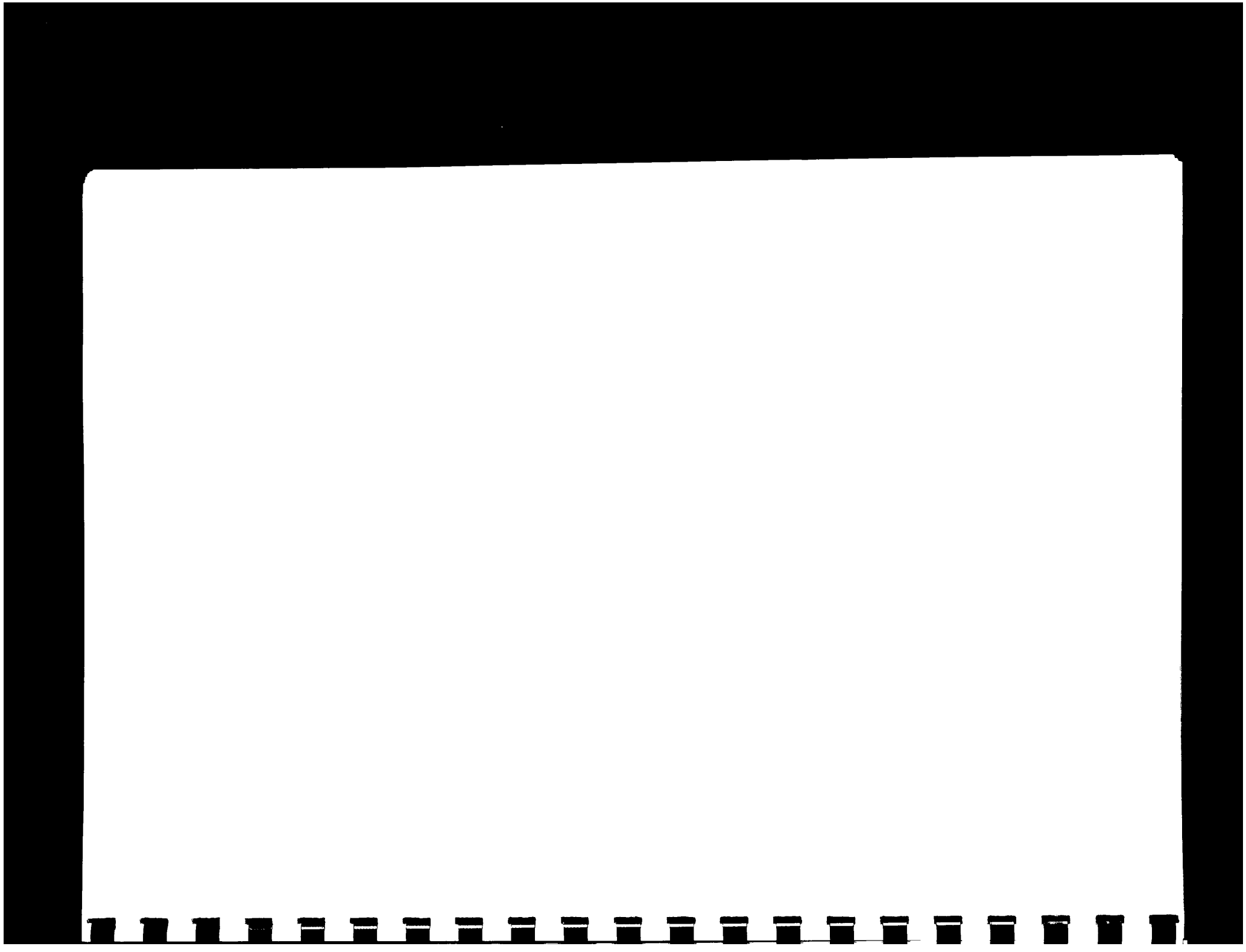
Appendix 1

MEMBERSHIP OF REVIEW GROUPS

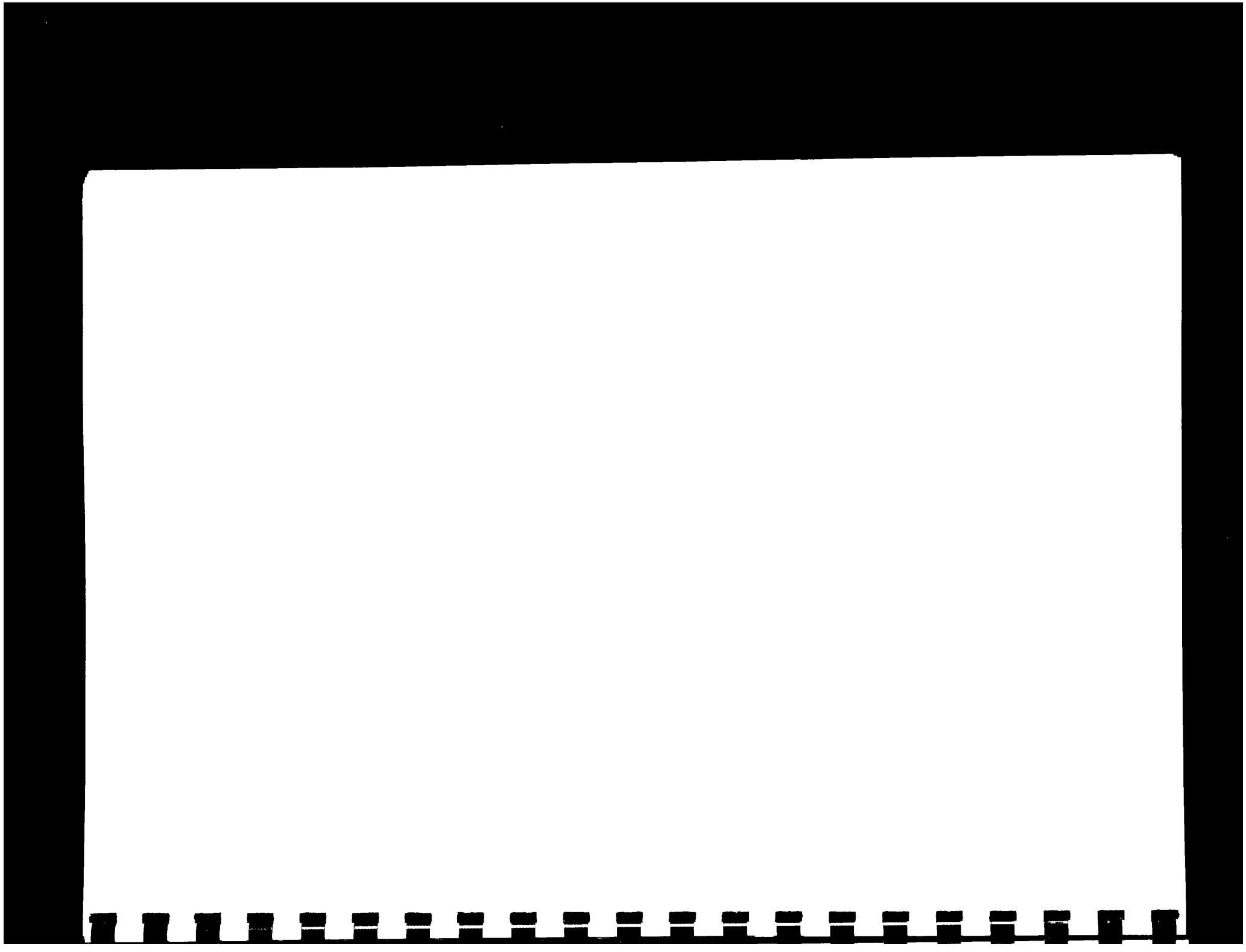
CARDIAC SERVICES
Chairman Professor Geoffrey Smith, Northern General Hospital, Sheffield
Chief Executive Mr John James, Kensington Chelsea & Westminster Commissioning Agency
Physicians Academic Professor Keith Fox, Edinburgh Generalist, Dr Andrew MacLeod, Poole, Dorset
Thoracic Surgeon Mr John Bailey, Groby Road Hospital, Leicester
General Practitioner Dr Ewen Bramwell, Dorking, Surrey
Anaesthetics Dr Bethune, Papworth Hospital, Cambridge
Nurse Ms Ann Townsend, Freeman Hospital, Newcastle
Economist Professor Martin Buxton, Brunel University
Voluntary Organisation Sir Richard Lloyd, British Heart Foundation



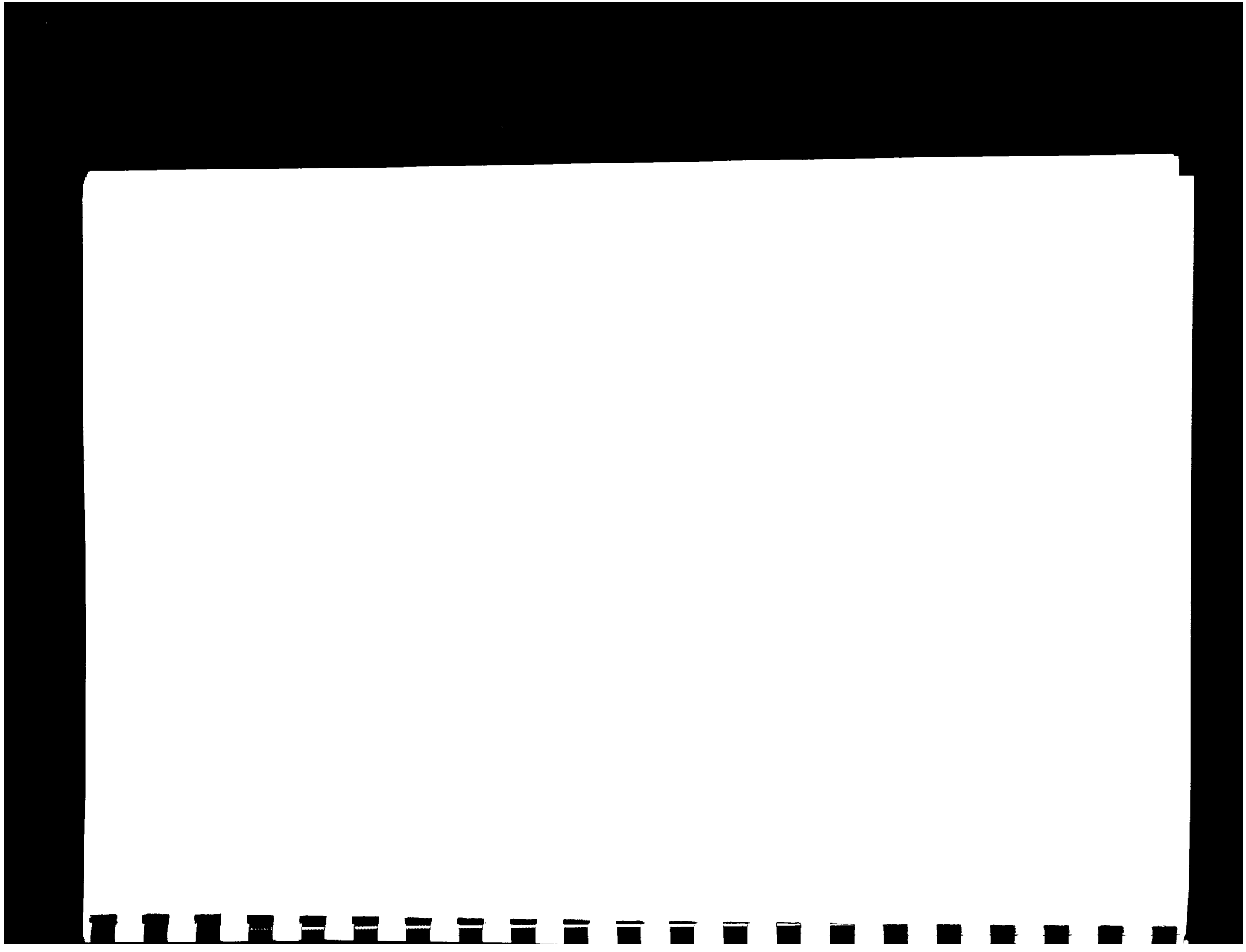
NEUROSCIENCES REVIEW
Chairman Mr Thomas "RAB" Hide, Southern General Hospital, Glasgow
Chief Executive Ms Victoria Hardman, Camden and Islington Health Authority
Neurologist Professor Alastair Compston, Cambridge
Therapist Dr Cicely Partridge, Surrey
Nurse Ms Kate Newlands, Oxford
Voluntary Organisations Ms Mary Baker, Parkinsons Disease Society
General Practitioner Dr Colin Smith, Rochester, Kent



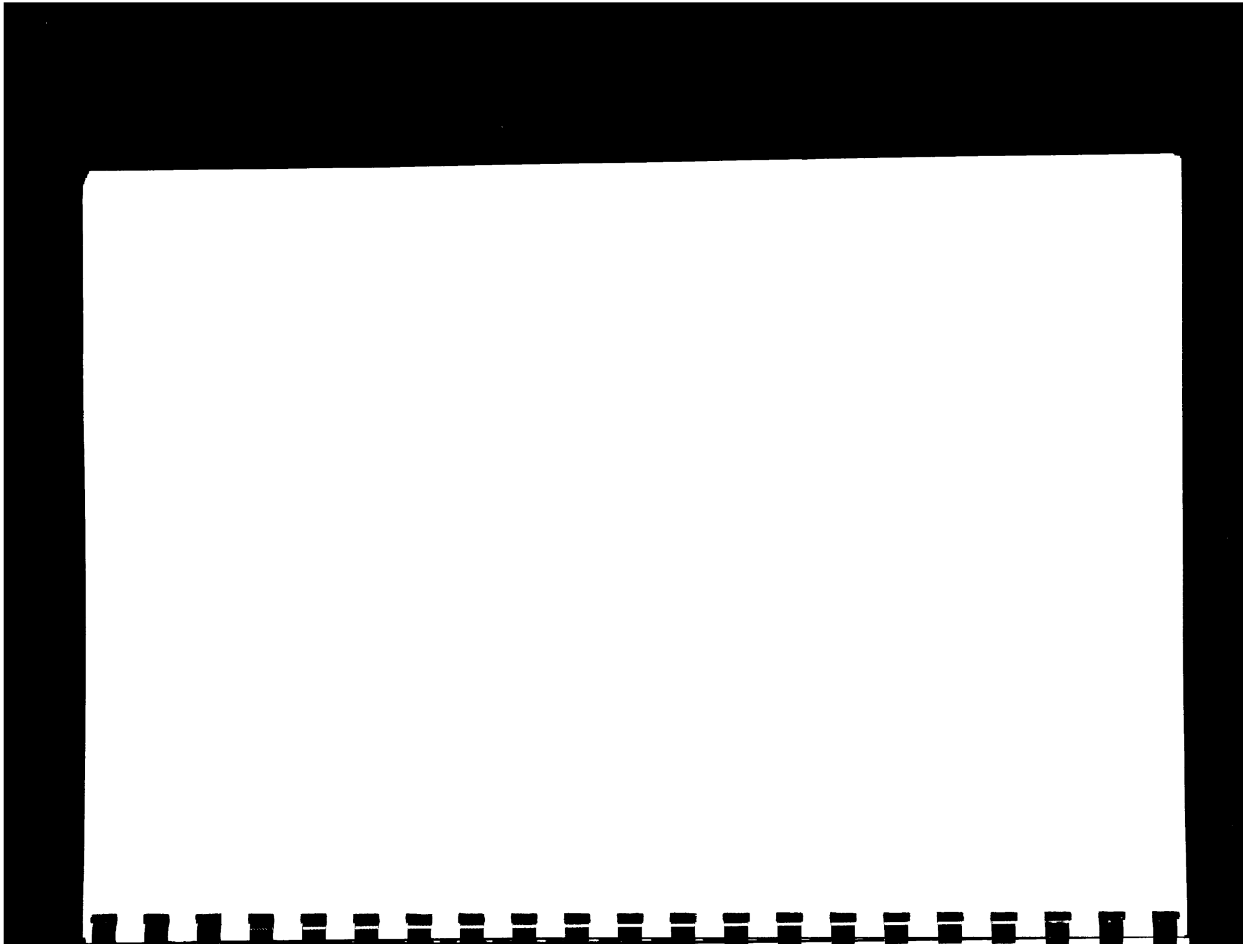
PLASTIC/BURNS SERVICES
Chairman Mr Philip Sykes, St Lawrence's Hospital, Chepstow
Chief Executive Ms Mary Whitty, Brent & Harrow Health Authority
Consultant Surgeon Mr John H James, Shotley Bridge Hospital, Durham Mr Douglas Murray, Worsley Hospital, Stourbridge
General Practitioner Dr Tom Davies, Peterborough
General Adviser Sir Geoffrey Slaney, Birmingham
Nurse Mrs Anne Driver, Leicester Royal Infirmary



RENAL SERVICES
Chairman Professor Netar Mallick, Mancester Royal Infirmary
Chief Executive Mr Peter Coe, East London and City Health Authority
Nephrologist Dr Mary McGeown, Belfast
Non Teaching Consultant Dr Andrew Williams, Swansea
General Practitioner Professor Denis Pereira Gray, Exeter
Patient Interest Mr James Wellbeloved
UKTSSA Dr John Evans, Chairman, Bristol
Nurse Mrs Linda Whitworth, Manchester
General Academic Professor David Kerr, London
Renal Surgeon Professor J R Salaman, Royal Infirmary, Cardiff
General Physician Dr Geoffrey Maidment, Windsor



CANCER SERVICES
Chairman Dr Christopher Paine, PRCR, Oxford
Chief Executive Mr Michael Bellamy, Ealing Hammersmith & Hounslow Commissioning Agency
Oncologist Professor Stanley Kaye, Glasgow
Surgeon Professor Robert Mansell, University Hospital of Wales
Epidemiologist Dr Hugh Sanderson, National Case Mix Office, Wessex R.H.A.
MacMillan Nurse and Director of Nursing Services Mrs Gill Oliver, Clatterbridge Hospital, The Wirral
General Practitioner Dr Elizabeth Murray, Kilburn
Research and Development Prof Mark Baker, Regional Director of R&D, Yorkshire RHA
Voluntary Organisation Ms Loretta Tinckham, Cancer Relief MacMillan Fund
Palliative Medicine Dr Graham Thorpe, Moorgreen Hospital, Southampton



SPECIALIST CHILDREN'S SERVICES
Chairman Professor Sir David Hull, Nottingham
Chief Executive Mr Martin Roberts, South East London Health Authority
Consultant Dr Roderick MacFaul, Pinderfields Hospital, Wakefield
Nurse Mrs A M Craft, Freeman Hospital, Newcastle
Patient Interest Lady Jean Lovell Davies
Epidemiologist, Director of Public Health Dr Robert Cooper, Solihull Health Authority
General Practitioner Dr John Oldham, Glossop, Derbyshire
Paediatric Surgeon Professor David Lloyd, Institute of Child Health, Liverpool
Public Health Dr Zarrina Kurtz, South West Thames Regional Health Authority
Paediatric Anaesthetist Dr Peter Morris, Salford

APPENDIX 2

THE SPECIALTY REVIEW PROCESS

The task

Each of the six specialty review groups was asked to advise Ministers on how services in London should be organised and where they should be located to:

- improve services to patients
- achieve critical mass for each specialty
- strengthen the academic base for the future
- reduce unnecessary and unwarranted duplication
- be cost effective

The key tasks were to:

- assess current and projected population needs
- define models of appropriate care
- develop criteria for a tertiary centre and service specifications

The terms of reference

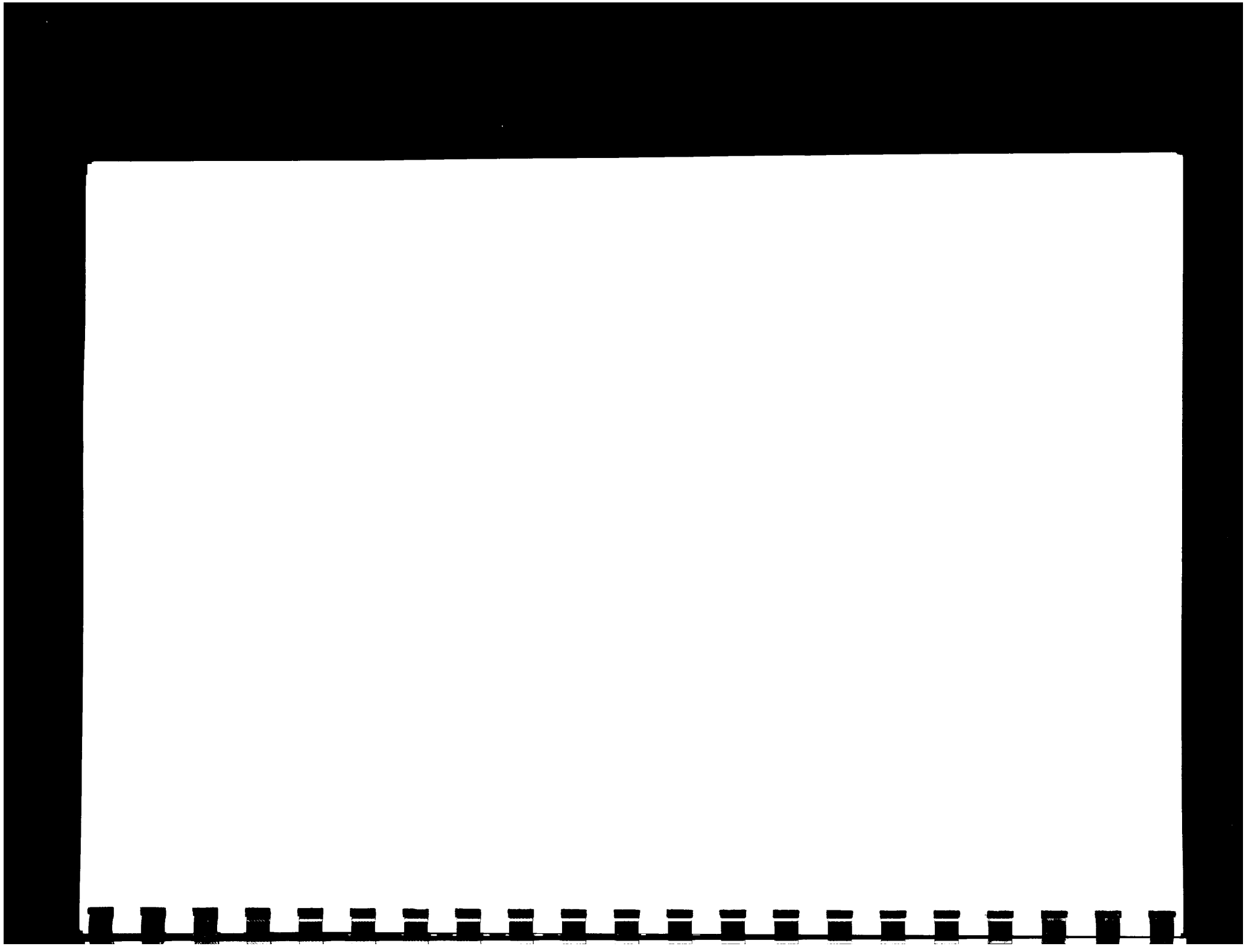
The terms of reference given to the review group were:

1. To review the literature concerned with the organisation and financing of the specialty, with particular regard for studies of services in London.

2. To assess the opportunities for prevention and the need for treatment for the disease usually cared for by the specialty and incorporate views on the likely development arising from research initiatives, demographic trends and changes in the incidence of prevalence of disease.

3. To define appropriate models of care for the patient at home, in outpatients, in day care facilities in hospitals, hospices and hotels covering all stages of disease including the management of long term disability.

4. To define within this framework the criteria for a tertiary centre and specify the service the centre should provide.



5. To specify the contribution of individual departments to a multi-disciplinary tertiary centre such as neurosciences, and also other departments that should be present on the same site though not part of the centre itself.

6. To describe the contribution the tertiary centre would make to teaching undergraduate and postgraduate students and the requirements necessary for a research base.

7. To comment on issues of access ability and timeliness in the provision of care and communication with the patient and relatives particularly regarding the burden of care that the family will carry.

8. To consider the arrangements necessary for collaboration with the Social Services and voluntary agencies.

9. To analyse services currently available in London; the volume and quality of the work and its geographical distribution.

10. To bring together these considerations and such other information or advice as is deemed appropriate into a set of proposals for the delivery of care in London, with particular regard for the critical mass that optimises clinical performance.

11. To write a report by 31 May 1993.

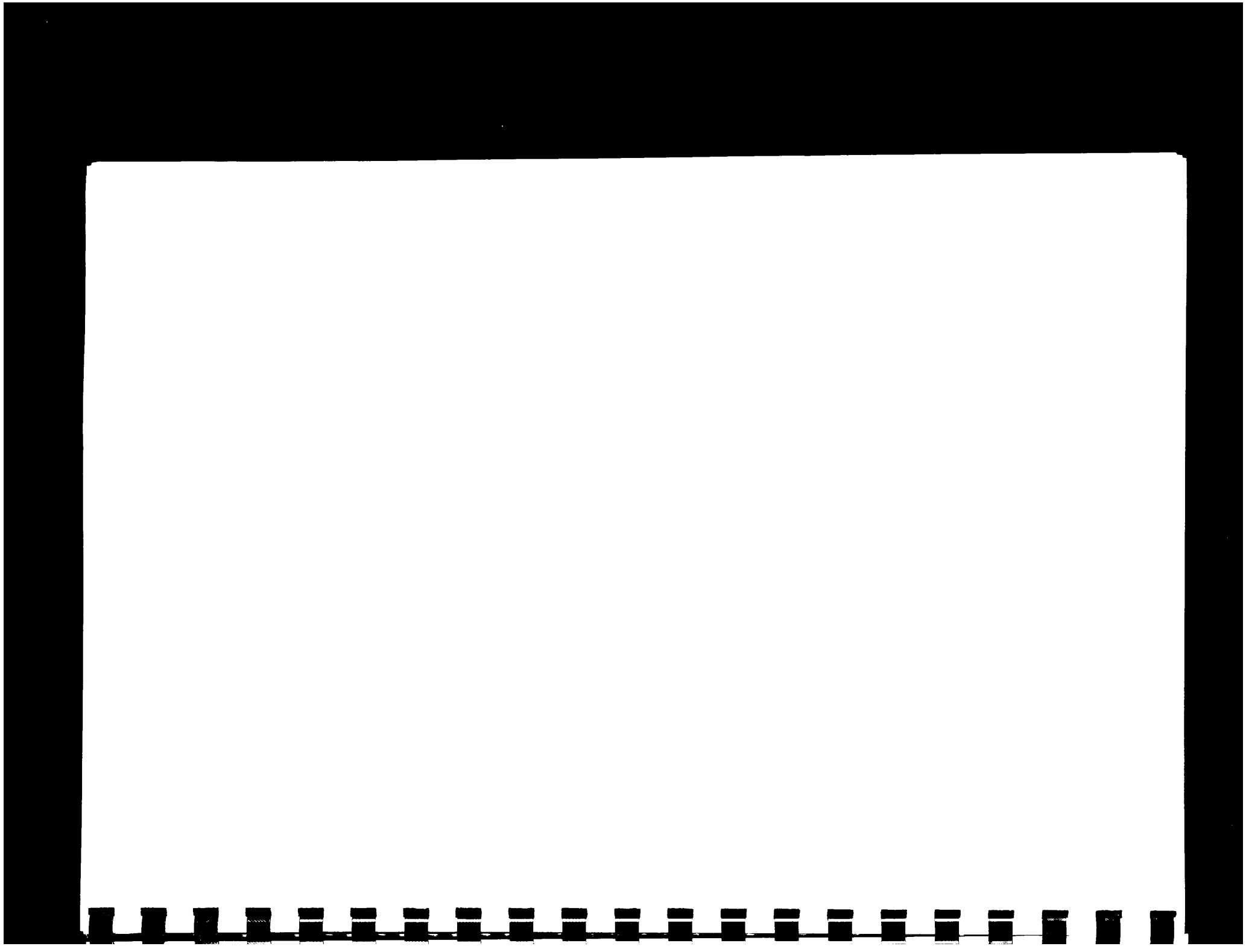
The general approach

The way the group considered these issues varied with the nature and stage of development of the specialty and the volume of previous work on needs, effectiveness and costs. As a result, some groups were able to build on a more solid empirical foundation than others and this is reflected in the varying amount of detail in the reports.

Information

The review groups

- drew on previous epidemiological studies and work on the organisation, financing and distribution of specialist services in London
- devised a questionnaire to obtain accurate, up-to-date data about activity, manpower and costs of all specialty services in the last three years
- visited hospitals providing specialist services in London and its environs and discussed the best way forward with the staff involved
- convened groups of experts and patients to explore key issues
- met with representatives of professional bodies and kept them informed of progress



Review groups also sought written evidence from health authorities and commissioning agencies about their contracts and regional health authorities about their strategic plans. In addition the review groups received many written submissions from interested parties.