THE NEW CANCER POLICY:

Workforce and Training Implications

cancer research campaign

King's Fund

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Fighting cancer with more than medicine

A report commissioned by the Cancer Collaboration to identify workforce and training priorities of the Calman/Hine Cancer Report. It will provide background material for a conference to be held on 15 July 1996. The Cancer Collaboration is an alliance of three charities: Cancer Relief Macmillan Fund, Cancer Research Campaign and the King's Fund, supported by the Pharmaceutical Industry and the Department of Health, working together to find ways of improving the quality of cancer services.

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Preface

The Cancer Collaboration Group commissioned Kim Rogers to write a background paper on the workforce and training implications of the Expert Advisory Group on Cancer Report, *A Policy Framework for Commissioning Cancer Services*. The information was collected in January 1996 and up-dated in April. The paper is to be presented to delegates at a national seminar planned for the summer of 1996.

The Cancer Collaboration Group is an alliance of three charities: the Cancer Research Campaign, Cancer Relief Macmillan Fund and the Kings Fund, with support from a consortium of pharmaceutical companies acting corporately. The Collaboration was set up in 1993 and ran a conference *Setting the National Cancer Agenda* in November 1993. The aim of this conference was to identify priorities for improving the quality of cancer care and services in the UK. These priorities were identified as:

* prevention (especially of smoking) and earlier detection of cancers
* the development of patient focused cancer care in place of disease centred treatment
* professional and patient education in cancer and cancer services
* the improvement of outcome data and the data collected and published by cancer registries
* the recognition of the importance of clinical research and its role in improving services
* the establishment of minimum standards of care linked to protocols for clinical research
* the efficient use of current resources
* the establishment of minimum standards for professional education
* public and professional education and debate of the implications of genetic research for individuals and the health services

Since then, the Collaboration has mounted a series of national and regional workshops on these issues. The regional meetings have focused on the purchaser's role in planning cancer services.

Research for this paper was compiled from conversations with a number of leading cancer specialists in the United Kingdom; reading the Royal Medical Colleges' response to the EAGC Report; meeting with the Cancer Collaboration Group; meetings with Department of Health representatives; reading published reports and articles on cancer care.

Executive Summary

This report examines the workforce and training implications of the Expert Advisory Group on Cancer report recommendations, *A Policy Framework for Commissioning Cancer Services.*

Current Workforce

The report outlines the current workforce in cancer care and looks at the medical workforce in depth, highlighting shortages in three major cancer specialties, clinical and medical oncology and palliative medicine.

Medical

The workforce implications of the new cancer policy for general surgery, pathology, obstetrics and gynaecology, general medicine and general practice are also discussed outlining key issues that need to be resolved before services can be reorganised.

An increase in consultant numbers of the current medical workforce in cancer care is required if the new framework for cancer services is to become operational. Currently there are inequalities in access to specialist care across the country. These inequalities should disappear when the new framework is fully operational.

Nursing and PAMs

Numbers of clinical specialist nurses in cancer care are inadequate in some areas. The paper highlights the difficulty of collecting and analysing figures on the current nursing workforce in cancer, where baseline data is almost non-existent.

At present, the Regions are analysing questionnaires sent to the Trusts on the numbers of nurses and PAMs working in cancer care.

The report notes that nurses are multi-skilled practitioners. The many variables that need to be considered when planning the cancer nursing workforce are highlighted.

The role of the PAMs in cancer care is discussed. The PAMs are a generic workforce and present particular difficulties for workforce discussions and calculations.

Workforce Requirements

The workforce requirements for implementing the EAGC Report are discussed.

At present, only 66% of the required medical workforce needed to implement the new cancer framework is in post.

In nursing, significant numbers of new posts will need to be created if cancer units and centres are to be fully operational. Comparisons between the current nursing workforce and future requirements are plagued as statistics on current cancer nurse specialties do not exist.

Increases in numbers of PAMs are critical to the implementation of the new policy. However, the Report notes a decline in posts since 1982 and hence the creation of new posts in the near future may be contentious.

Training Implications

Part two of the report examines the training implications of implementing the EAGC Report.

Specialist teams will help to implement the recommendations of the new cancer policy.

The introduction of the Certificate of Completion of Specialist Training is hailed as a timely reform, is likely to benefit the cancer patient in the long run.

The number and type of clinical nurse specialists continue to grow and expand. However, significant numbers of nurses will need further training if the new framework for cancer services is to function properly.

Short term measures in training nurses in cancer care are discussed along with the need to plan cancer nursing education over the long term.

The need for standards in cancer nursing education are highlighted.

The PAMs need to be supported and encouraged to further specialize in cancer care although as the Report notes, they do not generally sub-specialize within their discipline.

Whilst long term planning in cancer training is being discussed the Report argues for a number of short-term measures to be taken to train significant numbers of nurses and PAMs.

It argues for the establishment of several medical 'one holder' training posts to be established in the short term whilst the new entrants in higher specialist training complete their programmes.

Timescales and Priorities

Part three of the Report looks at the timescales and priorities of implementing the new cancer policy.

It points out that until baseline data on the numbers of consultants, nurses and PAMs is collected and properly assessed, there is no point in designing accreditation type schemes for cancer units and centres.
The top priority at present is to complete the information gathering stage; then to identify gaps in the workforce and deficiencies in the training systems.

It may seem that the scenarios presented in this paper are un-achievable. Clearly they are more likely to be realised if the government earmarks additional resources are earmarked. In short, the issue is not one of simply introducing specialisation into the workforce, but there are economic implications to deal with as well. The NHS budget for 1996-97 is to be increased by 1.6% in real terms, but the demands placed on the health care system will be such that competition for extra funds will be great.

In light of the above, one cannot forget the important contributions the major cancer research organisations, charities and the voluntary sector have made to the provision of cancer services, both in terms of funding medical and nursing posts as well as to contributing to the training of health care personnel in cancer care.

*The EAGC Report refers to *A Policy Framework for Commissioning Cancer Services.*

*PAMs refer to Professions Allied to Medicine and Radiographers.

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1. INTRODUCTION

The lack of consistent high quality cancer care in the UK has been highlighted in recent years and represents a major challenge to the NHS. Hence, the Report of the Expert Advisory Group on Cancer Services was both timely and critically needed.

The EAGC Report clearly outlined the demand for cancer services but did not discuss the resource implications of implementing its recommendations. It is difficult to separate workforce planning from training as one is directly related to the other. If training in cancer care is planned with a long term view, shortages in manpower will decrease and a more specialised workforce will be available. However, in the interim, many short term measures will need to be taken to increase the workforce in cancer care. The re-organisation of cancer services will be an evolutionary process with milestones achieved along the way. Clearly, there are some who will find the exercise difficult, but there is no short cut to implementing the new cancer policy.

At present discussions are occurring within the professional bodies, between Regional Health Authorities, purchasers and providers, the Department of Health, the voluntary sector and University and Research Institutes as to how the recommendations of the EAGC Report can be implemented.

The main objective of the EAGC Report was to achieve consistency in cancer services through a three tier framework of primary care, cancer units and cancer centres run by specialists with a particular interest in oncology. Achievement of this objective is inevitably linked with workforce planning and training.

In recent years evidence from a range of observational studies in the UK and overseas (covering such cancer sites as breast, colon, rectum, oesophagus, pancreas and ovary) have demonstrated that current services are a mix of specialised and more generic practice. In essence these studies have shown that only a proportion of patients are being treated by consultants who would be identified, either by themselves or their peer group, as having a specialist interest in the disease. A proportion, perhaps between a quarter and a half, are being treated by consultants whose caseload in the specific disease is so low that it must be doubted that they have a specialist interest in the particular site of cancer. Whilst the historical nature of non-specialisation in the UK has served the NHS very well, increasing evidence of improved outcomes from specialised care (Selby P, Gillis G, Haward R. *A New Model for Cancer care: Evidence for Benefits from Specialised Care*. EAGC review shortly to be

published) has given a strong impetus to the cancer policy. Similar arguments will influence professional bodies to ensure that appropriately trained and experienced individuals are available in sufficient numbers to staff the resultant service. The EAGC Report was clear that specialisation in cancer care was central to implementing its recommendations. Regrettably, the resource implications for establishing new posts and the lead time involved in training were not addressed in the Report. At present it has been estimated *that less than 50% of cancer patients are referred to a cancer specialist.* [1]

Although much of the cancer workforce is currently made up of generalists in nursing and medicine, opportunities now exist to specialise in cancer care. In nursing there are now stoma, breast, chemotherapy and palliative care nurses, to name a few. Five years ago the concept of the clinical nurse specialist did not exist in its current form. Suffice to say that the nursing workforce in cancer care is rapidly changing and centres of excellence are continuing to develop specialist nurse training in cancer. However, shortages in numbers of clinical nurse specialists working in cancer care still exist.

There is increasing specialisation in medicine and surgery. Cancer in the UK is far less specialised than it is in other parts of Europe and North America. This too is slowly changing. For the purposes of this paper, the Royal Medical Colleges of Surgery, Physicians, General Practitioners, Pathology, Radiologists and Obstetricians and Gynaecologists were consulted. *Hospital Doctors: Training for the Future* [2] (The Calman Report) was published in 1993. Combining the positions of Registrar and Senior Registrar into one grade, the Specialist Registrar, will lead to greater specialisation. The introduction of the specialist grade will officially be launched in April 1996 with two specialties, general surgery and diagnostic radiology, leading the way from December 1995.

The changes in higher specialist training will greatly aid in building up a more skilled specialist cancer workforce. All the Royal Medical Colleges will have now produced curricula for each hospital specialty. By the end of the year 2000 the reforms in specialist medical training will have been fully implemented. The Certificate of Completion of Specialist Training will be awarded by the new *Specialist Training Authority* with the General Medical Council keeping a record of individuals with specialist training.

Coupled with the introduction of the specialist registrar grade, the Medical Workforce Standing Advisory Committee have recently produced a second report (June 1995) *Planning the Medical Workforce.*[3] The report has made forecasts for the demand of doctors up to the year 2020. The report calls for a growth in whole time equivalent doctors numbers of 1% per annum. It further outlines changes in the skill mix of the workforce which may have an impact

on the recommendation of the EAGC Report to introduce more sub-specialisation into medicine.

Whilst the rest of the EEC is experiencing an over-supply of doctors, the United Kingdom is having to deal with a decline in the number of overseas doctors who are increasingly returning to practice in their own country after training. The UK cannot rely therefore on Third World doctors to increase the size of the medical workforce. More European doctors may come to the UK if benefits and conditions are right.

2. A POLICY FRAMEWORK FOR COMMISSIONING CANCER SERVICES: WORKFORCE IMPLICATIONS

Current Workforce: Medical

There are no agreed figures on the current number of cancer specialists in England and Wales. The Department of Health holds figures on the whole time equivalent [WTE] number of consultants in the following dedicated cancer specialties:

* Palliative medicine
* Clinical oncology
* Medical oncology

The National Cancer Alliance *Directory of Cancer Specialists* (1995) reveals other specialists who spend part of their time on cancer care. It is here more than any other area that baseline data needs to be collected and analysed. It will be necessary to identify the proportion of consultant time spent on cancer care before future projections on numbers can be formulated with any degree of accuracy. Such a mapping exercise is currently underway at regional level. Once cancer services are re-organised, a clearer picture will emerge of what percentage of time consultants are spending on cancer care.

The 1994 census for NHS consultant posts in cancer specialties indicated that there were:

250	Clinical oncologists
80	Medical oncologists
50	Palliative medicine consultants

Although the NHS has 80 medical oncologists on its registrar, 35 of these posts are funded by charities, universities and pharmaceutical companies.The actual number of consultants in palliative medicine is given as 157 WTE in 1994, which indicates that 107 of the posts are funded by the major cancer charities and the voluntary sector.

Posts in palliative medicine, medical and clinical oncology are clearly supported by cancer charities. Many of the posts are funded directly by hospice units and other cancer charities. Cancer Relief Macmillan Fund (CRMF) funds a number of medical posts in the community, hospitals and universities. The Cancer Research Campaign (CRC) and Imperial Cancer Research Fund (ICRF) also fund a number of medical posts, some at the registrar and senior registrar grades.

The current number of NHS consultants in cancer specialties is 370. This figure does not include general surgery, general medicine, pathology or obstetrics and gynaecology which is discussed below.

Clinical Oncology

The Royal College of Radiologists Board of the Faculty of Clinical Oncology produced a report entitled *Medical Manpower and Workload in Clinical Oncology in the United Kingdom* in 1991. In that report, it was found that clinical oncologists see *"on average 560 new patients per year, or 12 new patients every working week".*[4] The report goes on to say that *"due to patients treated in previous years, a cancer specialist in Britain will have as many as 2000 patients under his care at any one time, the equivalent of a general practitioners list but all cancer patients."*[5] In other European countries, numbers of new patients per consultant per year are far lower, with *"Norway at 75 new patients a year, Belgium 100, Germany 140, Austria 150, USA, France, Spain and Portugal 200, Netherlands 250, Switzerland 270 and the UK 560."*[6] In 1991, the Royal College of Radiologists recommended a maximum case load of 350 new patients per year per consultant.

In order to have fully operational cancer units and centres by the year 2001, (the year that the EAGC recommendations should be fully implemented), significant increases in numbers of consultant clinical oncologists will be necessary. This is nothing new. Work going back to the early 1980's highlighted the extreme shortages of consultants in clinical oncology. In *Risk Management in Clinical Oncology*, prepared by the Board of the Faculty of Clinical Oncology in 1995, the shortage of clinical oncologists was raised. *"The incidence of cancer is increasing at 2.3% per year in the general population and this translates to a workload increase of 4% per year in cancer centres."*[7]

In 1981 there were 203 clinical oncologists in the United Kingdom. Ten years later, there had been no increase. Table 1 shows the number of clinical oncologists required assuming a relationship between overall workload and number of clinical oncologists (assuming that workload continues to increase at 4% per year), between 1981-1996.

Table 1 Number of Consultants Required in Clinical Oncology Based on 4% Annual Workload Increase, 1981-1996

Year	No. Of Consultants Needed (based on 4% Annual Workload Increase)
1981	203.00
1982	211.12
1983	219.56
1984	228.34
1985	237.47
1986	246.96
1987	256.84
1988	267.11
1989	277.79
1990	288.90
1991	300.46
1992	312.48
1993	324.98
1994	337.98
1995	351.51
1996	365.56

Source: Based on Risk Management in Clinical Oncology, Board of the Faculty of Clinical Oncology, 1995

At present, there are 250 consultant clinical oncologists in England and Wales, Based on the above figures, 68% of the required workforce in clinical oncology is in post. If an annual increase of 4% in workload continues to be projected, by the year 2000, 428 consultants in clinical oncology will be needed to meet the demands of cancer patients. This figure is close to the recommendation of the Royal College of Radiologists who indicated that by the year 2000, 470 consultant clinical oncologists should be in post.

Another way of looking at the shortages in numbers of clinical oncologists is to examine the population served per clinical oncologist. In its 1991 *Report on Medical Manpower* [8] the Royal College of Radiologists noted that in the UK there is one clinical oncologist per 224,000 population. This compares in France with one clinical oncologist per 110,000. Assuming that the incidence of cancer in France is similar to the UK, this further supports the argument that urgent action needs to be taken by the Department of Health to bring the number of clinical oncologists in line with other countries. In consultation with the Specialist Advisory Workforce Group, the EAGC recommendation to have eight non-surgical oncologists per 1,000,000 population base has now been adopted by the Royal College of Radiologists as a method for calculating current and future manpower requirements. In this model there will be five clinical oncologists and three medical oncologists. The Royal College of Radiologists has said that at present, 290 clinical oncologists and 150 medical oncologists are needed to implement the EAGC Report.

Finally, if workforce numbers are increased to 366 (Table 1), an additional 27,840 sessions a year would be available.

Table 2 Current and Required Number of Clinical Oncology Sessions

	No. of Clinical Oncologist Posts	Minimum Clinical Sessions Per Week, Per Oncologist	Weeks	Sessions/Year
1994	250	5	48	60,000
Additional Required	116	5	48	27,840
Total	366	5	48	87,840

Based on the EAGC Report recommendation 4.2.11

Many clinical oncologists currently do more than 5 clinical sessions a week due to the shortages in manpower and increasing workload. In other cases, patients with cancer are not being seen by a specialist and where they are, patients get less consultant time than they need. If manpower does not increase, clincial oncologists will have to absorb the extra 27,840 sessions a

year that are needed, which would put up the average number of sessions per week per clinical oncologist from 5 to 7.23.

Total number of consultants available	250
Total sessions required	87,840
Annual sessions per consultant	351
Weekly sessions per consultant	7.23

Medical Oncology

Currently there are 80 consultant medical oncologists in England and Wales. This figure represents 45 NHS funded posts and 35 posts funded by CRMF, CRC, ICRF, local cancer funds and pharmaceutical companies. In the UK, medical oncology has tended to develop in large teaching centres with many of the established posts being University posts..

The Royal College of Physicians has expressed concern to the Department of Health over the years about the extreme shortage of medical oncologists. In a 1994 report published by the Association of Cancer Physicians, *Review of the Pattern of Cancer Services in England and Wales*, [9] it was noted that many departments of radiotherapy did not have any medical oncology input. With the rapid development of radiotherapy, particularly from the mid 1970's onwards, large amounts of resources were put into building up some fifty radiotherapy centres in England and Wales. Investment in medical oncology did not keep pace with investment in radiotherapy. In some parts of the country, there are no medical oncologists at all.

There is an issue about the numbers of medical oncologists and how many new posts will be needed in the long term. Based on the recommendation of the Royal College of Radiologists, there should be at least three medical oncologists per 1,000,000 population, which translates into 150 medical oncologists. Thus, currently 53% of the required workforce in medical oncology exists. An important contribution to medical oncology is made by organisations like the CRC who fund clinical fellows for a period of four years with two years spent in research. The CRC have three cancer centres; in Birmingham, Glasgow and Kings in London. The ICRF also fund medical oncology posts and have their own centres. In total, CRMF fund 35 consultant posts in palliative medicine and medical oncology [see Table 3.].

As the incidence of cancer rises and new developments in medical treatment and screening emerge, there will be a need for additional posts in medical oncology. Medical oncologists have the specialist skills and knowledge essential to the care of cancer patients. The NHS reforms have put additional pressures on doctors, including the requirement to participate in audit programmes, contribute time to the management process and be actively involved in contract negotiations with purchasers. With these added pressures, less time is left for research. Indeed, the EAGC Report did not deal with how trainees should encompass research. Medical oncology is a research based specialty and how trainees will get time to spend in the laboratories is yet to be decided within the new cancer framework. It is generally accepted that trainees will need to step outside of their higher specialist training programme for one year to carry out research, increasing the time in training from five to six or more years. Although medical oncology is a research based specialty, equally there is a pressing need for service contributions to patient care.

The Association of Cancer Physicians and the Joint Council for Clinical Oncology have recently established closer working relationships between medical and clinical oncology. A single core curriculum has been developed. This collaboration between medical and clinical oncology will enhance patient care and contribute to the planned reorganisation.

Palliative Medicine

Palliative medicine was recognised as a sub-specialty by the Royal College of Physicians in November 1987. There are 50 NHS funded consultants in palliative medicine with an additional 107 posts funded by the voluntary sector and major cancer charities (Specialist Advisory Workforce Group, 1995 figures).

Palliative medicine tends to be associated with care for the dying and with patients with advanced cancer but purchasers increasingly want consultants in palliative medicine to work more generically and to cover other medical conditions such as chronic airways disease and MND. There is a tension developing in palliative medicine between specialisation on the one hand and generic working on the other. An additional dilemma is the recommendation in the EAGC Report for multidisciplinary team working. The Report emphasises the importance of the palliative care team integrating *"in a seamless way with all cancer treatment services to provide the best possible quality of life for the patient and family."* [10]

Historically, palliative care was delivered predominantly in the hospice setting. This is changing with hospital consultants becoming established to work in hospital based support teams. Other consultants work from community units and yet others visit the local DGH and run clinical sessions in partnership with medical and clinical oncologists. In future, palliative medicine clinics should be an integral part of cancer contracts in hospitals. The number of consultants in palliative medicine is small, especially the NHS funded posts. CRMF is now funding consultants in palliative medicine in both the community and hospital. In addition to these, a number of developments in general practice have been undertaken. Table 3 lists the range of posts funded by CRMF.

Table 3 Cancer Relief Macmillan Funded Medical Posts in Palliative Medicine 1996

Reader in Palliative Medicine	1
Senior Lecturer (covers palliative medicine, oncology, paediatric oncology)	13
Consultant posts (majority are in palliative medicine, some in medical oncology)	35
Senior Registrar	18
Registrar	8
Senior House Officer	16
GP Advisors	2
GP Facilitators	12
(6 pilot study phase)	6
Total	111

Source: Medical Services Dept. CRMF

As in clinical and medical oncology, more consultants will be needed in palliative medicine both to staff the cancer units and centres and to work alongside the primary health care teams.

General Surgery

At present, there are 1,010 consultants in general surgery in England and Wales (NHS 1994 Census). As the EAGC Report noted *"the most common cancers are initially managed by surgeons and the provision of appropriate surgical specialists to manage patients in this phase of their illness, either for their diagnosis or for the performance of a major surgical resection is essential."*[11] The Report goes on to say that in most cancer units the service is surgically led.

The workforce implications for general surgeons are slightly different than those for palliative medicine, clinical and medical oncology. For general surgeons the issue is about surgical sub-specialisation rather than numbers of consultants. At the purchasing level, commissions are now looking at the number of cases making up the workload of a surgeon before considering the funding of a cancer specialist. The purpose of this exercise is to distinguish those surgeons who are generalists from those working in cancer care.

As stated earlier, less than 50% of cancer patients are seen by a specialist in cancer. The British Association of Surgical Oncologists (BASO) recently produced *Guidelines for Surgeons in the Management of Symptomatic Breast Disease in the United Kingdom.* There is increasing interest in surgical oncology as a result of associations like BASO. However, the Royal College of Surgeons has no plans in the near future to make surgical oncology a recognised specialty within general surgery. The World Federation of Surgical Oncology Societies has supported the elevation of cancer surgery to a recognised specialty with training, examination and certification.

The Royal College of Surgeons estimates that there will be manpower implications of increasing sub-specialisation and reduction in the service provision by trainees. *"For general surgeons, and indeed for other surgical disciplines who manage cancer, such as urology and gynaecology, the cancer workload can be managed within the generic service organisation. Patients thus present within routine clinics and those requiring surgery go on normal operating lists. Once the step is taken to define a specialist service and to introduce the concept of a clinical team, then additonal time is required for the necessary team decision-making on diagnosis and management, for example meetings with pathologists, radiologists and clinical oncologists, specialised nurses etc. The importance of careful audit against protocols for cancer care introduces further demands on time. The organisation of specialised clinics, with a range of multi-disciplinary support geared up to the investigation of common relevant symptomatology, and to the fast-tracking of patients to treatment, introduce an opportunity cost. This requires a higher level of sessional commitment in a number of disciplines. These changes are not, therefore, resource neutral and if such steps are taken for a number of sites of cancer then the pressure rises for additonal posts in particular institutions in order to achieve the sub-specialisation in an effective operational way. There will be occasions when the absence of particular skills or interest amongst relevant surgeons will lead to decisions to advertise posts with special interests, additional to current manpower. Surgery as a dicipline is under considerable pressure anyway with the growth of emergency work in hospitals generally and the obligations in respect of waiting times for their general elective work."* [12]

Statistics do not exist on the percentage of time a general surgeon spends on cancer care. Once baseline data is collected there will be a clearer picture of the additional numbers required. The College will be publishing a report in 1996 on cancer services for surgical patients. In its response to the Chief Medical Officer on the EAGC Report, the College pointed out that the vast majority of common soft tissue cancers were managed by surgeons. The College believes *"that the proposed lead clinican in many cancer units would most appropriately be a surgeon."*[13] The EAGC Report was careful to use the term "lead clinician" as opposed to consultant, in order that all clinicians have the opportunity to be considered for the post. It remains to be seen how many units will be led by a surgeon.

General Medicine

General medicine plays an important role in cancer diagnosis and care. Thoracic medicine is a sub-specialty within the Royal College of Physicians, and thoracic physicians are more than likely the largest group of doctors to diagnose lung cancer.

Gastroenterologists have a role in diagnosing stomach, pancreatic and oesophagus cancers. Nephrology physicians may diagnose and treat bladder and kidney cancers. Neurology clinics will diagnose and often treat brain cancer patients.

In short, general medicine has a key role to play in diagnosing and treating many cancer patients. Figures on the number of WTE general physicians working in cancer care are not available.

Pathology

The EAGC Report gave little attention to pathology and indeed largely ignored haematological malignancies in its report.

For pathology, a major issue is one of proper assessment and recognition of the cancer work carried out by haematologists. The Royal College of Pathologists has suggested that haematological oncology become a recognised sub-specialty of haematology.

The Royal College of Pathologists has also expressed concern that little attention has been given in the Report to the specialist pathology support which will be needed in the designated cancer centres and units. *"There is considerable concern that the higher standards of pathology required to deliver specialist care involve more time in the examination and dissection of specimens - looking for lymph node involvement, tumour free margins,*

comprehensive staging and the like. This has been one of the consistent themes in recent large audits such as those in colorectal cancer which have demonstrated real problems. The key to management of many cancers is a very accurate diagnosis with all relevant prognostic information available to the team making decisions about multi-modality management of the patients concerned. The radiologists also have concerns with respect to diagnostic imaging as distinct from clinical oncology. Appropriately trained people in radiology are required to meet the published standards in this field".[14]

The EAGC Report was hopeful that cancer units would integrate with haematological oncology services but did not elaborate on how this would be achieved. Here there could be significant problems as the cancer centres are likely to be located around radiotherapy facilities and these are unlikely to be in the same place as current centres specialising in haematological malignancies. At present, there is no consensus amongst consultants on the number of clinical haematology sessions a cancer unit or centre should have.

Obstetricians and Gynaecologists

The Royal College of Obstetricians and Gynaecologists have developed sub-specialty training centres and programmes in gynaecological cancer. The College fully supports the move towards greater specialisation within cancer care and is planning to increase the number of recognised sub-specialty training centres in gynaecological oncology. There are only a few consultant posts in gynaecological oncology at the present time, but exact numbers are not available. The College is looking for an increase in the numbers of consultant posts but doing so will mean having adequate training facilities. The issue of increasing numbers of consultants in gynaecological oncology remains unresolved while the College seeks further guidance from the Department of Health. The British Gynaecological Cancer Society at the Royal College of Obstetricians and Gynaecologists has established a working party on cancer units. In March 1996 it will be producing a report which may give more information on the requirements of consultant numbers in gynaecological oncology.

General Practitioners

The new structure for cancer services will have three levels, primary care, the cancer units and cancer centres. *"Primary care is seen as the focus of care. Detailed discussion between primary care teams, units and centres will be necessary to clarify patterns of referral and follow-up which will have the best actions."*[15] The EAGC Report was vague on the specific role for general practice within the new framework, yet primary care is seen as the focus of care. The College has said *"while we welcome the central role*

suggested for primary care early on in the document, we are concerned that the rest of the document does not seem to build on that suggestion." [16] General Practitioners will have to deal with operational issues more than manpower issues when it comes to restructuring and reorganising cancer services. The RCGP and the RCP have established a Joint Working Party to look at the implications of the EAGC Report on general practice and palliative care. At this time, no reports have been published.

In its statement to the Chief Medical Officer, the College said *"there is an inherent danger in centralising services too much. Access to cancer centres from many parts of the country is likely to be difficult."* [17]

The RCGP sees its role in primary prevention screening, in symptomatic patients, secondary prevention and the early diagnosis of cancer. There is also a role for general practitioners in commissioning care, contributing to the development of standards, guidelines and protocols and in the routine follow-up of cancer patients. In the immediate future it is unlikely that general practitioners will become specialists in cancer care. What is more likely is that some general practitioners in each geographical area will be linked in with the local cancer unit to work on strategy, standards, guidelines and protocols. One could argue for a part time general practitioner post being created within each cancer unit.

In conclusion, whilst hospital doctors move towards greater specialisation, general practitioners are facing the dilemma of and the expectation that they will know more about a lot of specialist medical conditions.

Current Workforce: Nursing

The cancer nursing workforce consists mainly of breast, stoma, chemotherapy and palliative care nurses. Increasingly, new clinical nurse specialist posts are being developed in cancer, but the numbers are small compared to the requirements. Recent examples are head and neck, gynaecology and gastroenterology nurse specialists.

One of the difficulties in discussing the current nursing workforce in cancer is that statistics do not exist on WTE cancer nurses. There are pockets of information, for example on the numbers of Macmillan and Marie Curie nurses. These statistics come from the organisations concerned and are not amenable to analysis of the NHS cancer nursing workforce.

The DoH has asked the cancer nursing leads in each region to collect baseline figures on the numbers of nurses and PAMs working in cancer care. This information is still being collected and analysed and therefore it was not possible to include it in this paper.

This fact finding exercise has shown the regions the importance of keeping accurate statistics on nursing and PAMs with more clearly delineated breakdowns of specality. In the near future, the United Kingdom Central Council (UKCC) will be setting up a registry for specialist nurses. Two important documents will be published in March 1996 which will also assist in workforce planning and training. They are:

1. Guidelines for Nursing Services Structure, RCN.
2. Cancer Nursing Education Standards, RCN.

Table 4 [below] provides up to date figures on the type and number of nurses funded by Cancer Relief Macmillan Fund.

Table 4 Cancer Relief Macmillan Funded Nursing Posts 1996

Aids Nurse Specialist	1
Breast Care	101
Chemotherapy Nurse	16
Research Nurse	5
Day Care Nurse	2
Gastroenterology CNS	1
Genetic Nurse Specialist	2
Gynaecology Nurse	3
Haematology Specialist	9
Home Care	834
Hospital Liaison	33
Head and Neck Specialist	5
Homeopathic Nurse	1
Hospital Support	244
Lung Cancer CNS	2
Lymphoedema Nurse	10
Staff Nurse	3
Total	1,272

Source: Nursing Services Dept, CRMF

CRMF also fund regional nurse advisors, psychologists, Macmillan carers, fellowship programmes, a child psychologist and counsellors.

The Marie Curie Foundation have 6,000 nurses working part time in cancer nursing. No statistics are available from the Sue Ryder Foundation.

Since Department of Health statistics are almost non-existent with respect to cancer nursing, it would be more useful to draw the reader's attention to the many nursing associations and groups that are working towards the implementation of the EAGC Report.

There is evidence that many generic nurses have an interest in developing specialist knowledge in cancer care. The Royal College of Nursing (RCN) is to publish the two documents mentioned earlier on cancer nursing structures and cancer education standards. There are 3,162 members of the RCN Cancer Nursing Society. Within the RCN, four other key forums in cancer have been established; Haematology and Bone Marrow Transplant Forum, 919 members; Breast Care Nursing Society, 1,215 members; Stoma Care Nursing Forum 621 members and the Palliative Care Nursing Group, 2,751.

Perhaps the single most important implication of the EAGC Report for nurses is that more of them are needed if the new cancer policy is to be fully implemented. Early unofficial estimates have been made on the number of new posts required, but these figures represent very tentative estimates only and therefore will not be quoted in this paper.

The difficulty with planning the nursing workforce is that there are many different variables to consider. The nursing workforce is even more generic than the medical workforce and hence it will take a few years to decide what the exact requirements will be in terms of new posts. More will be said about the staffing requirements of units and centres in the next section of this paper.

Current Workforce : Professions Allied to Medicine (PAMs)

It is not possible to break down figures for the number of WTE PAMs working in cancer care, mainly because most PAMs do not sub-specialise within their discipline although many are heavily involved in cancer care. However, there are a number of new associations which have formed in the last few years in cancer and these groups may well help to influence the shape of a new cancer workforce. For example, the Association of Chartered Physiotherapists in Oncology and Palliative care have published *Guidelines for Good Practice, Physiotherapy in Oncology and Palliative Care*, 1993. [18]

The British Dietetic Association have recently formed an interest group in oncology.

The current number of registered physiotherapists is 27,000; radiographers 17,000; occupational therapists 11-12,000; and dieticians 4,000. In each region, the PAMs are being represented by a lead nurse with respect to the workforce and training implications of the EAGC Report. For the PAMs there exists a potential problem with the newly formed education consortia. In each region only one consortium will be handling workforce planning and training for the PAMs. This will need to be carefully monitored.

3. IMPLEMENTING THE EAGC REPORT: PUTTING NUMBERS TO THE REQUIREMENTS

There is no simple way to plan the cancer workforce. The previous section is helpful if only to draw the readers' attention to the gaps in current information available on the numbers of professionals working in cancer care. For the purposes of this section, workforce requirements are based on England and Wales, population 50.445 million (NHS Calender 1994). The Tables outlined in the preceeding sections are based on the establishment of 150 Cancer Units and 40 Cancer Centres. The EAGC Report recommended one Cancer Centre per 1,000,000 population, which would bring the number of Centres to 50. The Association of Cancer Physicians used the figure of 300,000 as the population size served by a Cancer Unit, which would put the number of Units up to 168. Hence the following estimates are based on minimum requirements in order to be realistic about future workforce requirements.

This paper has taken an overview of the workforce requirements needed to implement the EAGC Report. It is well known that there are variations in recorded outcomes of treatment in different parts of the country and hence local services will need to be studied individually. It is beyond the scope of this paper to discuss these variations.

Medical Workforce Requirements

Tables 5, 6, 7 and 8 project indicative numbers of WTE consultants needed **in addition** to the current medical workforce available. The figures are therefore for **new posts only**. The tables were compiled by looking at the current shortages in manpower (based on NHS census figures for 1994) and linking that information to the views of cancer specialists against the background of the recommendations of the EAGC Report. Extensive consultation with consultants in general surgery, palliative medicine and clinical and medical

oncology took place and it is an amalgam of their views which shaped the projected likely number of new posts required to implement the EAGC Report. (Contributors are listed in the Acknowledgement section).

Table 5 New Consultant Posts Required for Staffing a Cancer Unit (Based on 10 sessions per WTE)

Lead Clinician	2 sessions
General Surgery (covering mainly breast, lung and colorectal)	6 sessions
Palliative medicine	2 sessions
Medical/Clinical Oncology	5 sessions
General Practitioner Post	2 sessions
Total	**17 sessions**
	1.7 WTE

Table 5 indicates that in each Cancer Unit an additional 1.7 WTE consultants will be needed, which when multiplied by 150 Units totals 255 **new consultant posts.**

No increments for clinical haematology are envisaged for cancer units. Palliative Medicine clinics may be run by visiting consultants from the community or by a hospital consultant in palliative medicine where they exist. The suggestion is made to establish a general practitioner post with two sessions per week in order to ensure that links are set up and properly managed between the primary health care teams, the unit and the centre. Much of the work on prevention and early diagnosis should be guided and directed by the general practitioner in the cancer unit setting.

Table 6 New Consultant Posts Required for Staffing a Cancer Centre

Lead Clinician	5 sessions
General Surgery	8 sessions
Medical Oncology*	10 sessions
Clinical Oncology	10 sessions
Palliative Medicine	5 sessions
Clinical Haematology*	2 sessions
Diagnostic Pathology*	10 sessions
Total	50 sessions
	5 WTE

* Where no medical oncology exists at present, it is suggested that 10 sessions a week are needed.

* At present there is no consensus on the number of sessions for clinical haematology and therefore 2 sessions a week is considered the minimum.

* The issue for diagnostic pathology is one of quality in specialist slide reviews. There will most likely be an increase in specialist referral for slide review and hence 1 WTE consultant is needed.

These are the requirements needed **in addition to what is already available**. Table 6 indicates that in each cancer centre an additional 5 WTE consultants will be needed, which when multiplied by 40 centres totals 200 **new consultant posts**.

Total Consultant workforce needed (new posts only):

Cancer Units	255 consultants
Cancer Centres	200 consultants
TOTAL	**455 consultants**

The National Cancer Alliance produced a map indicating the number of cancer centres currently in the United Kingdom. These are comprehensive cancer centres with the facilities and staffing that meet the requirements of the EAGC Report. The number totals fifteen. It is not realistic to assume that we will ever have 40 fully staffed cancer centres and 150 fully staffed cancer units, even by the year 2001. The resource and training implications are too great to achieve within a five year time frame.

Table 7 shows that a significant increase in the numbers of consultants in these specialties will be needed in palliative medicine, clinical and medical oncology.

Table 7 Numbers of New Consultant Posts Needed: Palliative Medicine, Medical and Clinical Oncology

Per Unit	2 sessions	Palliative Medicine
	5 sessions	Clinical/Medical Oncology
	7 sessions x 150 Units	
	Total required WTE Consultants	**105**
Per Centre	5 sessions	Palliative Medicine
	10 sessions	Clinical Oncology
	10 sessions	Medical Oncology
	25 sessions x 40 Centres	
	Total required WTE Consultants	**100**
	TOTAL - UNIT & CENTRE	205

The current number of WTE consultants in palliative medicine is 157; clinical oncology 250; and medical oncology 80. The total number of consultants is 487. Table 7 indicates that an additional 205 posts are required which means that at present there is 70% of the required medical workforce in the above three specialities.

Table 8 Total Number of New Consultant Posts Required in Cancer Units and Centres

	Consultant WTE
Palliative Medicine, Clinical/Medical Oncology	205
General Surgery	122
Lead Clinicians	50
General Practitioners	30
Clinical Haematology	8
Diagnostic Pathology	40
Total	**455**

Nursing Workforce Requirements

It is difficult to say what the increases in numbers of nurses will need to be to implement the EAGC Report: ie to identify the number of new posts required. However, an outline of how a unit and centre should be staffed is possible. Tables 9,10 and 11 project total numbes of WTE nurses needed. They do not differentiate between current and projected additional requirements as information on current staffing levels for this group are not currently available.

Table 9 Total Nursing Workforce For A Cancer Unit (Clinical Nurse Specialists Only)

Breast Care Nurse*	1 WTE
Cytotoxic Chemotherapy	1 WTE
Lead Nurse	1 WTE
Lymphoedema	0.5 WTE
Palliative Care	1 WTE
Stoma Care	0.5 WTE
Total	**5 WTE**

* 2 WTE Breast Care Nurses will be needed where the Cancer Unit also houses the local breast screening unit.

It is essential that a lead nurse be appointed for each cancer unit to work alongside the lead clinician. Clinical nurse specialists will need to be RGNs with appropriate post registration training, either the English and Welsh National Board courses or other recognised post registration training in cancer and palliative care nursing. The lead nurse should ideally have a degree in cancer or palliative care with an appropriate level of work experience in cancer.

In addition to these core staffing requirements, there will be other RGNs working in the units who will not necessarily be considered specialists. More will be said about this group of nurses in the section on training.

In total, 750 clinical nurse specialists are required to staff the 150 Cancer Units. (Table 9, 5 WTE per unit multiplied by 150 units). Some of these nurses are already in post

Table 10 Total Nursing Workforce for A Cancer Centre (Clinical Nurse Specialists Only)

*Breast Care Nurse	1 WTE
Cytotoxic Chemotherapy	2 WTE
Gastroenterology CNS	0.5 WTE
Head and Neck	0.5 WTE
Lead Nurse	1 WTE
Lung Cancer CNS	0.5 WTE
*Lymphoedema	0.5 WTE
Radiotherapy Nurse	2 WTE
Research Nurse	0.5 WTE
Stoma Care	1 WTE
Palliative Care Nurse	1 WTE
Total	**10.5 WTE**

*It is assumed that most breast care and lymphoedema work will be in the unit and therefore 1 WTE breast care nurse and 0.5 WTE lymphoedema nurse in the centre is considered sufficient. However, if the local breast screeining programme is housed within the centre , at least 2 WTE breast care nurses will be needed.

In total, 420 clinical nurse specialists are required to staff the 40 Cancer Centres (Table 10, 10.5 WTE per centre multiplied by 40 centres).

Table 11 Total Number of Clinical Nurse Specialist Posts Required (Units & Centres)

Units	750 WTE
Centres	420 WTE
Current Number of Clinical Nurse Specialists, Cancer	Statistics Unavailable
Total Required	1170

PAMs Workforce Requirements

For cancer units, it is essential to have dieticians, occupational therapists, physiotherapists and diagnostic radiographers as part of the cancer team. However, it is unlikely that the PAMs will specialize in cancer as many of the posts are only 0.3 WTE. Tables 12 and 13 project total numbers of WTE PAMs needed. They do not differentiate between current and projected additional requirements as information on current staffing levels for this group are not available.

Table 12 Total PAMs Workforce for A Cancer Unit

Dietician	0.5 WTE
Occupational Therapy	0.5 WTE
Physiotherapy	1 WTE
Diagnostic Radiographers*	1 WTE
Total	**3 WTE**

* Diagnostic radiographers would not necessarily play a specialist role in the Cancer Unit, but would more likely be housed in the diagnostic radiology department.

Table 13 Total PAMs Workforce for A Cancer Centre

Dietician	1 WTE
Occupational Therapy	1 WTE
Physiotherapy	1.5 WTE
Therapy Radiographers*	10 WTE
Total	**13.5 WTE**

* 4 WTE therapy radiographers per linear accelerator. Most cancer centres are likely to have on average 2 such machines.

Total required number of PAMs for units and centres is 990 WTE. (Table 12, 3 WTE multiplied by 150 units, Table 13, 13.5 WTE multiplied by 40 centres). It is not possible to compare this figure with what is currently available.

There are many other groups of professionals who participate in the package of care given to cancer patients but have not been included in this paper. They include psychologists, chaplains, social workers, pharmacists, speech therapists, surgical appliances and prosthetic services.

Across all three disciplies, medicine, nursing and PAMs significant numbers of new posts will need to be established to implement the new cancer policy. For nursing and PAMs, the issue may be more about reorganising the current workforce than creating new posts. It is generally agreed, however, that shortages do exist in the numbers of clinical nurse specialists in cancer care. On December 14th 1995, the Royal College of Nursing made the statement that some 200 extra specialist nurses would be needed to look after the 30,000 women diagnosed annually with breast cancer (December 25, Healthcare Parliamentary Monitor). [19]

4. TRAINING IMPLICATIONS

Medical

Throughout this paper, reference has been made to the Report *Hospital Doctors: Training for the Future*: *The Report of the Working Group on Specialist Medical Training*, (The Calman Report) [20] published in April 1993. This paper on specialist medical training and the EAGC Report on cancer, share the common theme of specialisation in medicine. Recently, the Department of Health published *A Guide to Specialist Registrar Training* to assist the Regions, purchasers, providers, trainers and trainees to understand the new system. Specialist training refers to the period between full registration and the award of the Certificate of Completion of Specialist Training. In the long term, the new specialist training grade will help to improve the quality of the cancer workforce, making it more specialised than it is at present. In the short term, it is likely that a whole range of physicians will continue to be involved in cancer care.

Palliative Medicine

The curriculum for specialist training in palliative medicine is currently being reviewed. In the past, the curriculum was oncology based with the main focus on dying cancer patients. The curriculum needs to change so that trainees can sub-specialise in a range of other areas eg children, pain control, and oncology. There will still be a need, however, for generalists to practice in palliative medicine. Palliative medicine trainees spend time in oncology posts, but the reverse is not true. Palliative medicine is being introduced slowly to the curriculum in clinical and medical oncology. At present there are 29 career registrars and 50 senior registrars in palliative medicine training (Source: The Association of Palliative Medicine). The Specialist Working Advisory Group hold different figures; 16 career registrars and 18 senior registrars (Sept 1994, Department of Health). This difference in figures indicates that a number of palliative medicine trainees are being funded by the voluntary sector and the major cancer research charities. Higher specialist training in palliative medicine takes four years to complete.

Clinical Oncology

In clinical oncology, a new curriculum for training will have been designed by April 1996. The Education Department at the Royal College of Radiologists will be producing a report *Structured Training in Clinical Oncology* [21] for those trainees entering the specialty. In addition to this, the Joint Council for Clinical Oncology has established a core curriculum between clinical and medical oncology covering the first two years of higher specialist training. The Curriculum Committee, a sub-committee of the Joint Council for Clinical Oncology, is monitoring the curriculum and will recommend changes where needed. At present, there are 84 career registrars and 53 senior registrars in clinical oncology training. Higher specialist training in clinical oncology takes 5 years to complete.

Medical Oncology

In medical oncology, the Royal College of Physicians has introduced changes to higher specialist training programmes. The SAC in Medical Oncology has reviewed the requirements for entry to the specialty and developed a syllabus. The Joint Council for Clinical Oncology has a representative on the SAC. A training record for each trainee in medical and clinical oncology has been established. Each year a formative assessment will be carried out. Once the final cumulative assessment is complete the CCST is awarded after the college agrees. The training infrastructure in medical oncology is not as well developed as clinical oncology. Medical oncology evolved from academic units and is only now moving into mainstream NHS activity. The main issue for medical oncology is therefore to develop unified training. There are two different sets of figures for the number of trainees in medical oncology. The Royal College has put the number of trainees at 55 (career and senior registrars) including research. In addition to these 55 manpower approved posts, there are another 54 in training funded by CRMF, ICRF and CRC. The Department of Health numbers are slightly different, with 21 career registrars and 29 senior registrars. Higher specialist training in medical oncology takes 4 years to complete.

General Surgery

The Royal College of Surgeons has recently changed the curriculum for Basic Surgical Training and the Specialist Advisory Committee in General Surgery has defined the syllabus for the specialist registrar grade. General surgery was one of the first two specialties to move into the new grade in December 1995. The Royal College of Surgeons is working with the Breast Group of the British Association of Surgical Oncology to develop an educational programme in breast disease. All disciplines within surgery have a cancer interest. The main issue for general surgery is sub-specialisation in cancer care, as surgical oncology is not a separately recognised specialty. According to data from the Department of Health, there are around 500 registrars in general surgery who will be incorporated into the specialist registrar grade. Higher specialist medical training will take six years to complete.

Pathology

The Royal College of Pathologists has recommended that haematological oncology become a recognised sub-specialty of pathology. A new curriculum for higher specialist training will therefore need to be developed. At present there are 125 career registrars and 99 senior registrars in haematology training. (Sept. 1994, Department of Health). Higher specialist training in haematology takes five years to complete.

Department of Health figures (Sept 1994) on the number of career and senior registrars in palliative medicine, clinical and medical oncology, record a total of 221 doctors in higher specialist training at present. (Table 14)

Table 14 Total Number of Career and Senior Registrars in Training (Department of Health Census, September 1994)

Specialty	Career Registrar	Senior Registrar	Total
Palliative Medicine	16	18	34
Clinical Oncology	84	53	137
Medical Oncology	21	29	50
		Total	221

Source: Department of Health, Specialist Workforce Advisory Group

Table 7 suggested that 205 WTE consultants in palliative medicine, clinical and medical oncology were needed in addition to the current workforce, to staff the future cancer units and centres. Providing that the wastage rate is not too high, the workforce in the above specialties (Table 14) will increase by approximately 200 (10% wastage rate) by the year 2001. However, factors such as retirement of consultants and part time trainees need to be considered in this analysis. The fact that more than 50% of medical students are women also needs to be considered Moreover, not all trainees will become consultants. The indications are that there will still be shortages in palliative medicine, clinical and medical oncology by the year 2001.

The Specialist Workforce Advisory Group Secretariat of the Department of Health is currently working on an expected increase in the numbers of trainees from 1 April 1996. In general surgery and radiology the numbers have been agreed. There will be 90 additional trainees in general surgery and 69 in radiology. The expected increases in trainee numbers for medical oncology are 10; palliative medicine 7; clinical oncology 7 and haematology a nil increase. These figures are low in relation to predicted need and should be significantly increased for 1997-98.

The preceding discussion has looked at training in the long term. There are other issues that need to be considered when analysing the training implications of the EAGC Report. Firstly, what short term measures can be taken to increase the cancer workforce in terms of numbers? Bob Haward, Professor of Cancer Studies at the University of Leeds has said *"progress should be made towards funding a variety of both nursing and clinical posts, to provide a bolus of newly qualified staff to fill some of the acute shortfalls in the current system."* [22]

Another short term measure to increase the number of consultants in the cancer workforce may be to review the current skill mix of doctors The Royal College of Radiologists reviewed both staffing and standards in departments of clinical oncology and clinical radiology in 1993. The College *"believes it is appropriate to ask whether some tasks currently performed by medically qualified staff could be as effectively undertaken by other professional groups with whom they work."* [23]

The June 1995 publication *Planning the Medical Workforce* also discusses the idea of changing the skill mix of doctors. The report notes, *"the consequences of changing the skill mix on the future requirement for doctors are not clear cut. At present we cannot judge the future need for doctors should there be widespread substitution of significant tranches of medical work by other health professionals."* [24]

It has been suggested by the Cancer Collaboration Group that additional training courses for one-post holder training posts be established in the immediate future. These posts would not prejudice long-term manpower planning. Postholder training posts exist only for as long as it takes to train the postholder to produce adequate numbers of consultants to fill the required posts.

Informal education also has a role to play. The EAGC Report suggests that education should flow outwards from the Cancer Centre to the Unit to the primary health care teams. The Royal College of General Practitioners expressed concern over this recommendation stressing the point that education is a two-way process.

The short and long term goals of training in cancer care should be to ensure that a critical mass of doctors is educated to an appropriate level. The desire of some will be to recruit and put in place all the expertise required as quickly as possible. Long lead times in training are unavoidable. Coupled with this is the added pressure of attracting trainees to oncology which has been difficult in the past.

Short and long term measures for training need to be considered hand in hand. Whilst manpower is being planned up to the year 2001, short term measures such as crash courses at designated cancer units and centres should also be considered. The EAGC Report suggests that cancer units will play an important role in education and research. It goes on to say that trainees in oncology will have to be trained in the management of patients in a cancer unit.

The preceding section on medical training has not discussed the initiative on continuing medical education (CME). In an article published in Healthcare Management, October 1994 *"Ups and Downs of Continuing Medical Education"* it was noted that CME will become mandatory for all doctors. CME goes on throughout a doctors' career, from registration to retirement. Short workshops and seminars to help doctors keep up to date have typically been the type of CME offered in the past. It has been shown, however, that workshops and seminars are not always the best way to learn. The Standing Committee on Postgraduate Medical and Dental Education (SCOPMDE) suggests *"setting up a complex system based on self and peer review, supported and managed to produce an individually focused development plan."* [26]

Nursing

Currently, there are shortages in the number of clinical nurse specialists in cancer care. The impact of the reorganisation of cancer services on the nursing profession has yet to be fully understood. It is too early to know how many more nurses will be needed in order to adequately staff the cancer units and centres. Many of the issues raised in the previous section affect nursing in the same way. However, in nursing there may be more of an opportunity for multi-disciplinary training, with specialist modules offered in different areas of cancer care. Furthermore, nurses have long been multi-skilled practitioners. Multi-skilling of more nurses may be one short term measure for increasing the number of specialists in cancer nursing, whilst the longer term manpower implications of the EAGC Report are worked out.

Cancer units will need to have a lead nurse with post registration education in oncology. Other nurses in the unit will need *"site specific expertise; specialist skills; expertise in related areas, for example symptom control, post operative analgesia, counselling and psychosocial support."*[26] In cancer centres *"nurses will need a post registration cancer qualification, for example in intravenous cytotoxic chemotherapy, palliative care, breast care, rehabilitation/psychosocial support, lymphoedema management and stoma care."*[27]

The United Kingdom has some well developed training programmes in post registration oncology, but overall training in cancer nursing is not well organised. The Royal Marsden Hospital is currently the leader in cancer and palliative care education for nurses and should be used as an example of what a comprehensive model of post registration education in oncology looks like. The English and Welsh National Boards accredit several courses in cancer and palliative care, in over nineteen centres at present. Table 15 gives figures on the number of nurses who have completed specialist training in cancer and palliative care.

Table 15 Number of Nurses Who Have Completed ENB Courses In Cancer And Palliative Care (Cumulative totals) 1996

Course	Course Name	Total number of Nurses who have completed course
ENB 237	Oncology Nursing	2,017
ENB 285	Specialist Course in the Continuing Care of the Dying Patient & Family	414
ENB 931	The Continuing Care of the Dying Patient & the Family	8,773
A11	Breast Care Nursing for Registered Nursing	153
A18	Palliative Care for Nurses & Health Visitors	66
N10	Caring for Patient Receiving Radionuclides	11
N23	Principles of Care Related to Bone Marrow Transplant	40
N29	Supporting Patients & Relatives, Experience Loss for Nurses, Midwives and Health Visitors	29
N37	Developing Clinical Practice in Palliative Care for Nurses	130
N59	Care of the Patient Having Chemotherapy for Nurses, Midwives and Health Visitors	19
N92	The Nature of Cancer and its Treatments for Nurses and Health Visitors	0
N93	Working with the Person with Cancer for Nurses & Health Visitors	0
Total		11,652

Source: English National Board, Statistics Department

In addition to the ENB courses, many nurses are now pursuing higher education. Diplomas, Bachelor and Masters degrees have been established in different parts of the country. The Centre for Cancer and Palliative Care Studies at the Royal Marsden offer the following programmes:

Diploma in Cancer Nursing
Diploma in Palliative Nursing
BSc Hons in Cancer Nursing
BSc Hons in Palliative Nursing
MSc in Cancer Care
MSc in Palliative Care

Opportunities also exist to pursue post-graduate research degrees. Individual modules can be taken which lead to a diploma, bachelor or masters degree. They include:

Bone Marrow Transplantation
Breast Care Nursing
Stoma Care Nursing
Rehabilitation
Death and the Child
Palliative Care for Cancer Nurses
Research in Action
Health Promotion and Cancer Care
Cancer Nursing and Patient Care
Introduction to Cancer Nursing
Education Applied to Nursing Practice
Professional Issues
Psychosocial, Spiritual and Supportive Care
Theory and Practice of Symptom Control
Organisation and Management
Cancer Care for Palliative Care Nurses
Theory and Practice of Counselling

A number of hospices in the United Kingdom offer short workshops, seminars and conferences, predominantly in palliative care. Some are accredited to run ENB courses. The Marie Curie Foundation offer Diplomas in Cancer Care and Ethics of Cancer and Palliative Care.

The above is not a comprehensive list of post-registration education offered in England and Wales in oncology. It represents only a sample.

With the introduction of the UKCC Standards for Post Registration Education Practice [PREP], nurses have a manditory responsibility to have effective registration. This is demonstrated by the standards set in the PREP documents. What is needed to implement the EAGC Report with respect to training, goes beyond the basic PREP requirements. It is suggested in this paper that selected groups of nurses be sent to specialised cancer units and centres for further training in cancer care. Once completed, these same nurses would have the responsibility of disseminating new information to generic groups of nurses at the ward level. Longer term training needs to be planned whilst the above is happening. One might refer to this short term plan as an exercise in crisis management. It is critical that continuing education in cancer care is directly relevant to the specific changes as the knowledge nurses have about cancer from their pre-registration programmes varies widely. Hence the need for standards in cancer care.

Anglia and Oxford Region have issued a census of nurses working in the cancer field. Whilst detailed workforce planning is being undertaken, the Region has recognised the importance of training in the short term and have asked nurses to help them identify the training and workforce hot spots. Similar exercises could be undertaken in other regions.

PAMs

In the DoH report *NHS Workforce in England 1992*, [28] the percentage of directly employed PAMs staff showed a decline from 8.1% in 1982 to 5% in 1992. This is a worrying sign. Similar to medicine and nursing, extra resources are needed to train more professionals in the PAMs. It has not been possible to give statistics on the number of occupational therapists, physiotherapists, diagnostic radiographers and dieticians directly involved in cancer care. During 1995-96 the Department of Health has asked the nursing leads in each Region to prepare workforce plans for the PAMs. Many of the posts in this group are not whole time equivalents and this has a direct effect on training. Resources will need to be significantly increased if the PAMs are to receive the same specialist education in cancer care that the nursing and medical professions expect and need. Common modules could well be established for nurses and PAMs in the future.

Conclusion

Some common issues have arisen from this preliminary consideration of training implications of the EAGC Report for medicine, nursing and PAMs. With the development of education consortia, training has been devolved to the local level. This could be a mistake for specialist disciplines such as cancer care and the EAGC report points out the importance of planning cancer care at a macro level, with centralist direction. The specialised

knowledge required to plan training in cancer care does not always exist at the local level. In future, it may be possible for a few consortiums in each Region to take on the responsibility for planning the workforce and training in cancer care. In the short term, the Department of Health will need to be involved in setting up national training programmes in cancer care. Who will pay for the education? The grant programmes in nursing and PAMs are slowly disappearing and this may mean that individuals will have to pay for their own specialist education. There is a lack of resources for training in the United Kingdom and this cuts across not only the health service but other sectors as well. A national consensus on cancer training needs to be built if the new cancer policy is to be implemented.

It remains unclear who is ultimately responsible for training in the short and long term. Depending on where you live, specialist training can be very good or non-existent. Hence, gaps in educational provision need to be identified. The Department of Health might consider setting up a national working party to look at specialist training in cancer care in medicine, nursing and PAMs so that standards can be agreed. The Cancer Nursing Society is one example of how this can be achieved.

5. TIMESCALES AND PRIORITIES IN IMPLEMENTING THE EAGC REPORT

Timescales

No one expected the EAGC Report to be implemented in a short space of time. Implementing the new cancer policy will be an evolutionary process. Currently the responsibility for development lies with the regions; ultimately, responsibility rests with the purchaser and it is perhaps this group more than any other that will need the most assistance in achieving the goals of the new framework. The regions are at different stages in implementing the EAGC Report. Some have taken a centralist approach to the new cancer policy, whilst others have devolved the responsibility for implementation to the local trusts and commissions. The remaining regions are in between, combining centralist intervention with devolution of certain aspects of the work.

The Department of Health issued Executive Letter (96)15 on 8th March 1996 on the implementation of the EAGC Report.

In a paper written by Bob Haward entitled *"Key Issues in Implementation"*, a number of criteria for implementing a successful policy were outlined; *"It would have to involve managers and clinicians together, create the right climate for decision making, promote those clinical arrangements that are most associated with good outcomes, adopt realistic timescales and acknowledge constraints, utilise normal business processes within mainstream NHS activity, objectively monitor performance and progress and not easily be set aside or subverted."* [29] It needs to be remembered that the above are long term objectives. There will be no *"immediate or comprehensive provision of resources in order to achieve the improvement in outcomes"*[30]

The Department of Health is assisting implementation of the new policy by mapping out a series of milestones. Table 16 has been developed from the research compiled to prepare this paper and is in no sense 'official'.

Table 16 The Reorganisation of Cancer Services 1993 - 2001

1993	The Expert Advisory Group of Cancer is set up by the Chief Medical Officers of England and Wales to advise on the organisation of cancer services
1994	18th May the Consultative Paper on Cancer Services is distributed for comment. Over 300 responses are returned.
1995 - 1996	April - A Policy Framework for Commissioning Cancer Services is published.
	The Department of Health hands down to the Regions the implementation of the EAGC report. EL(95)51
	Regional Network Groups are set up with a named cancer representative in each region to identify the current provision of cancer services.
	Royal Medical and Nursing Colleges begin to discuss the implications of the Report.
	The Chief Medical Officer of England asks Professor Bob Haward to chair a sub-group of the Clinical Outcomes Group to oversee the development of cancer site specific guidance to help purchasers commission care for people with cancer.
	Purchasers begin discussions with local District General Hospitals and cancer centres where they exist.
	Department of Health issues a circular asking regions to look at current and future manpower and training needs for nurses and PAMs.
	Department of Health issues Executive Letter (96)15 on the 8 March, 1996 on the implementation of the EAGC Report.
Proposed	
1996	Clinical Outcomes Group to report on cancer site specification guidance for breast and colorectal cancer.
	New Higher Specialist Training grade in hospital medicine fully implemented.
	July -Regions will be working on ensuring that standards and patterns of care are agreed and common monitoring mechanisms are devised and agreed. Deadline is likely to be July of 1996 for this work.
1997	Substantial implementation of the EAGC Report likely during this year. Units and centres to be accredited. Post registration oncology education for nurses and PAMs needs to be agreed and standardised.
	New contracts for cancer services to be commissioned, implementing the EAGC recommendations.
1998-2001	During this period the new framework for cancer services will continue to evolve.
2001	New trainees who started specialist training in 1996 will complete their CCST.

Source: Based on research done on behalf of the Cancer Collaboration Group by IHG, 1996

The above outlines the major milestones that need to be achieved for the full implementation of the EAGC Report. It is not a comprehensive list. If success is measured in the medium term, the national cancer lottery should have disappeared and variations in treatment and survival rates will have narrowed.

Priorities

The NHS has a fixed level of resources and hence priorities and choices will be inevitable. There must be therefore an element of pragmatic reality with respect to implementing the EAGC recommendations.

The list of priorities outlined below represent might be seen as a starting point only for further discussion between the professional groups and bodies.

Table 17 List of Priorities in Implementing the EAGC Report

Priority 1	The collection and analysis of baseline data at regional level to identify gaps in services provision and workforce requirement
Priority 2	The Department of Health to earmark additional funds for increasing the workforce in cancer care. It also needs to become more active in the debates and issues surrounding the implementation of the new cancer policy.
Priority 3	Gaps and variations in education and training should be identified. Generic health care professionals who have an interest in cancer care need to be encouraged and supported to pursue further training. The current cancer workforce needs to be supported and encouraged to specialise where appropriate.
Priority 4	Crash training in cancer care at designated units and centres needs to be planned in medicine, nursing and PAMs with the support of the Department of Health.
Priority 5	Systems to ensure that the network of cancer units and centres is up to standard and develops appropriately need to be developed.
Priority 6	Processes of external review, informed by explicit standards need to be refined and developed over time.

Source: Based on research done on behalf of the Cancer Collaboration Group by IHG, 1996

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