

The NHS Cancer Plan

A plan for investment
A plan for reform

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Foreword by the Secretary of State

Every year 200,000 people are diagnosed with cancer in England. And every year 120,000 people lose their lives to the disease. Cancer is one of the biggest killers in this country, and we have made it one of the central priorities for the NHS.

This Cancer Plan sets out the first ever comprehensive strategy to tackle the disease. It is the first time any government has drawn up a major programme of action linking prevention, diagnosis, treatment, care and research.

There is much in our cancer services of which we can rightly be proud. Research and treatment of children's cancers are among the best in the world. Thanks to the hospice movement and charities we have a strong tradition of palliative care. And the NHS breast cancer screening programme is the most comprehensive of any comparable country. The commitment of those working to fight cancer in the NHS, the voluntary sector, the community and families across the country is immense.

But in too many areas the reality of our cancer services fails to match the level of that commitment. Despite the best efforts of the NHS staff and cancer patients across the country, decades of under-investment alongside outdated practices mean that survival rates for many of the major cancers lag behind the rest of Europe. The poor are still far more likely to get cancer than the rich, and their chances of survival are lower too. Furthermore there are too many variations in the quality of care and treatment across the country, leaving cancer patients frustrated by a postcode lottery.

This Cancer Plan sets out a programme of investment and reform to tackle these problems and deliver the fastest improving cancer services in Europe. It takes forward the work in the NHS Plan – increasing the number of doctors, nurses and other staff and providing more equipment for cancer care, but also modernising the NHS too, through new national standards and new ways of working to prevent and treat cancer. It sets out our approach to tackling health inequalities and perhaps most important of all, it puts the patient at the centre of cancer care.

Like the NHS Plan, this Cancer Plan has been drawn up through extensive consultation with professionals and patients across the country, led by the National Cancer Director, Professor Mike Richards. We have ambitious aims, to raise the level of our cancer services to the best in Europe and to save lives. This Cancer Plan shows how we will deliver on those aims.

A handwritten signature in black ink, reading "Alan Milburn". The signature is written in a cursive, flowing style.

The Rt Hon. Alan Milburn MP
Secretary of State for Health

Executive summary

The challenge of cancer

1. More than one in three people in England will develop cancer at some stage in their lives. One in four will die of cancer. This means that, every year, over 200,000 people are diagnosed with cancer, and around 120,000 people die from cancer. So better prevention of cancer, better detection of cancer, and better treatment and care, matter to us all.
2. The Cancer Plan sets out the first comprehensive national cancer programme for England. It has four aims:
 - to save more lives
 - to ensure people with cancer get the right professional support and care as well as the best treatments
 - to tackle the inequalities in health that mean unskilled workers are twice as likely to die from cancer as professionals
 - to build for the future through investment in the cancer workforce, through strong research and through preparation for the genetics revolution, so that the NHS never falls behind in cancer care again.

For the first time this plan provides a comprehensive strategy for bringing together prevention, screening, diagnosis, treatment and care for cancer and the investment needed to deliver these services in terms of improved staffing, equipment, drugs, treatments and information systems.

The Cancer Plan

3. The NHS Plan, published in July, set out the government's plans for investment and reform right across the NHS, to develop a health service for the 21st century, offering fast, convenient, high quality care, with patients at the centre. The Plan identified cancer services as a high priority to benefit from these improvements. It promised progress on cancer prevention, on research and on improved access to services. This Cancer Plan now sets out how these improvements will be introduced. The Cancer Plan shows how cancer services will benefit from increased investment: how investment in staff will respond to shortages in key specialities and enable services to expand; and how investment in new updated equipment will enable faster access to diagnosis and treatment.
4. And the Plan sets out how this investment will need to be accompanied by reform: through new ways of working to streamline cancer services around the needs of the patient; through extending the roles of radiographers, nurses and other staff; and through guidance to ensure high standards of treatment and care are in place right across the country.
5. The Cancer Plan is a practical document for the NHS and its partners, setting out the actions and milestones that will deliver the fastest improvement in cancer services anywhere in Europe over the next five years. By 2010, our five year survival rates for cancer will compare with the best in Europe.
6. At the heart of the Plan are three new commitments. These will be:
 - **In addition to the existing *Smoking Kills* target of reducing smoking in adults from 28% to 24% by 2010, new national and local targets to address the gap between socio-economic groups in smoking rates and the resulting risks of cancer and heart disease:**
 - we shall reduce smoking rates among manual groups from 32% in 1998 to 26% by 2010, so that we can narrow the health gap
 - we shall set local targets making explicit what this means for the 20 health authorities with the highest smoking rates.
 - **New goals and targets to reduce waiting times for diagnosis and treatment so that:**
 - the ultimate goal is that no one should wait longer than one month from an urgent referral for suspected cancer to the beginning of treatment except for a good clinical reason or through patient choice.

- **for some uncommon cancers like acute leukaemia, children’s cancers and testicular cancer, this is what most patients already experience.**
 - **for other cancers this will take time to achieve, so we will set milestones along the way:**
 - **by 2005 there will be a maximum one month wait from diagnosis to treatment for all cancers**
 - **by 2005 there will be a maximum two month wait from urgent GP referral to treatment for all cancers.**
 - **An extra £50 million NHS investment a year by 2004 in hospices and specialist palliative care, to improve access to these services across the country. For the first time ever, NHS investment in specialist palliative care services will match that of the voluntary sector.**
- 7.** These new commitments will strengthen the fight to prevent cancer; ensure that all who need it are guaranteed fast diagnosis and treatment; and provide increased support for people living with cancer right across the country.

Cancer services now

- 8.** The past three decades have seen important progress in reducing the impact of cancer. Death rates from lung cancer among men have fallen as rates of smoking have declined. Death rates from breast cancer and cervical cancer have fallen with the introduction of national screening programmes and of new and better treatments. Survival rates for some cancers have improved dramatically: almost two thirds of children with cancer are cured now, as are over 90% of men with testicular tumours.
- 9.** At its best, cancer care in this country leads the world. Many British medical researchers are playing a leading role in extending the understanding of cancer and of ways of treating it effectively. Amongst comparable countries Britain has the most comprehensive nationwide breast screening programme. There are excellent services for children with cancer. And hospices and palliative care services in this country, largely developed by charities, are among the best in the world.
- 10.** But there is much that needs to improve. There are real inequalities in this country in terms of who gets cancer, and what happens to them when they do. People from deprived and less affluent backgrounds are more likely to get some types of cancer, and overall are more likely to die from it once they have been diagnosed. In the early 1990s, deaths from lung cancer among men were nearly five times higher among unskilled workers than among professional groups.

11. For a number of reasons, cancer patients in England often have poorer survival prospects than in other European countries. For some cancers, such as breast cancer and bowel cancer, that is partly because patients tend to have a more advanced stage of disease by the time they are treated. This may be because they are not certain when to go their GP about possible symptoms, because GPs, who see relatively few cases of cancer, may have difficulty identifying those at highest risk, or because of the time taken within hospitals to progress from the first appointment through diagnostic tests to treatment.
12. While many cancer patients receive excellent treatment, services are patchy. Too much equipment is out of date and inadequate, and the NHS has too few cancer specialists of every type. Patients in different parts of the country receive varying quality and types of treatment – the postcode lottery of care – when they want to be confident of receiving what is best for them, wherever they live.
13. Experience of cancer care also varies. Some patients say they receive excellent care, with sensitive and thoughtful communication, clear information about their disease and its treatment, and good support when it is needed. Others report being given bad news in a deeply insensitive way, being left in the dark about their condition and badly informed about their treatment and care. Long waits and uncertainty add to their inevitable anxieties.
14. These delays and variation in cancer care are unacceptable in a 21st century NHS. Despite the best efforts of dedicated staff, decades of under-investment have taken their toll. Staff want the opportunity to provide better cancer services and patients and the public are hungry for improvement.
15. A start has been made. Since 1997, the government has pledged that it will cut the death rate from cancer in people under 75 by at least a fifth by 2010, and will aim to improve the health of the worst off in particular. The White Paper *Smoking Kills* launched a comprehensive tobacco control programme.
16. The government has also focused money and energy on driving up the quality of cancer services. Targeted resources totalling £80 million a year are being invested to improve standards and cut out patient waiting times. The biggest ever programme to replace and update equipment for screening, diagnosis and treatment has begun. But there is much more to do.

What the Cancer Plan will mean

17. The Cancer Plan sets out new ambitions for cancer services, and the action that will make those ambitions a reality. The Plan shows how the government's programme of investment and reform will support the expansion that is needed,

streamline cancer services, and offer new opportunities for staff to use their skills and talents to the full.

18. The Plan will be supported by new funding, rising to an extra £570 million a year for cancer services by 2003/04. By 2006 there will be approaching 1,000 extra cancer specialists, more radiographers, more nurses, and targeted action to respond to shortages of other staff who contribute to cancer diagnosis and treatment. In partnership with voluntary organisations, with the New Opportunities Fund, and others, we shall extend the range and accessibility of cancer services right across the country. We cannot make all the changes overnight. But as the Plan is rolled out and milestones are reached, people will begin to see the improvement that will mean we no longer lag behind Europe, and in time will compare with the best in Europe.
19. These are the changes that people will see.

Reducing the risk of cancer

20. **Reducing smoking** Smoking is the biggest single preventable risk factor for cancer. And it disproportionately affects those already disadvantaged by poverty. That is why the NHS Cancer Plan sets out new national and local targets to address inequalities, backed by new programmes of targeted action, building on new and effective interventions to help people who want to stop smoking.
21. **A healthier diet** It is less well known that a poor diet is the second largest risk factor for cancer. Increasing fruit and vegetable consumption is the second most effective strategy to reduce the risk of cancer, after reducing smoking. People who don't eat fruit and vegetables regularly are at greater risk of getting several common cancers. Children's consumption of fruit and vegetables is particularly low, and children in disadvantaged families are 50% less likely to eat fruit and vegetables than those in high income families.
22. Two new initiatives were announced in the NHS Plan:
 - the national "five-a-day" programme will support initiatives to improve access to fruit and vegetables
 - the National School Fruit Scheme will make a free piece of fruit available to school children aged from four to six years old, each school day.

23. Action to tackle smoking and poor diet will only be effective if the underlying causes are also tackled. Poverty, unemployment and other broader causes of ill health are linked to cancer too, and action across government to tackle health inequalities will in time have an impact on cancer.

Detecting cancer earlier

24. **Raising public awareness** There will be more, and more accessible, information to help people recognise signs and symptoms that could be cancer, so that they can seek medical advice early, when treatment is most likely to be effective. Although more women now seek early medical advice about symptoms of breast cancer, for example, too many people are too uncertain or too embarrassed to consult their doctor about bowel symptoms, or rectal bleeding, even though there are good prospects of recovery from bowel cancer if it can be treated at an early stage. The National Cancer Director will work with voluntary organisations to review the information available on all the common cancers, and see what more can be done to reach those most at risk.

25. **Extending cancer screening** Where screening programmes are effective they will be extended and new programmes rolled out:

- the successful breast screening programme will be extended to all women aged 65–70 by 2004, meaning that 400,000 extra women will be screened each year and screening will be available on request to women over 70
- the cervical screening programme will be upgraded: unnecessary repeat smears will be reduced, and access to further tests for those who need them will be improved
- pilots for colorectal screening will be completed by 2002 and if they prove successful screening will be introduced for all people aged 50–69
- PSA testing to detect prostate cancer will be made available, supported by information about the risks and benefits, to empower men to make their own choices
- a trial of ovarian cancer screening is underway, and a research study into lung cancer screening is being considered.

Improving cancer services in the community

26. Family doctors and community nurses play a crucial role in helping people reduce the risks of cancer, in promoting early detection and fast referral for investigation when necessary, in providing support for patients and their families in living with

cancer, in support for patients who are dying, and in support for their carers in bereavement. This Plan includes:

- a new partnership between the NHS and Macmillan Cancer Relief to provide £3 million a year to support a lead clinician for cancer within every PCT
- £2 million a year new investment in training and support in palliative care for district nurses and other community based nurses to extend the support available for cancer patients in the community.

Faster access to treatment

27. New waiting times targets for diagnosis and treatment There will be new targets to reduce waiting at all stages of the pathway of care.

- Maximum one month wait from urgent GP referral to treatment guaranteed for children's and testicular cancers and acute leukaemia by 2001
- Maximum one month wait from diagnosis to treatment for breast cancer by 2001
- Maximum one month wait from diagnosis to treatment rolled out for all cancers by 2005
- Maximum two month wait from urgent GP referral to treatment for breast cancer by 2002
- Maximum two month wait from urgent GP referral to treatment rolled out for all cancers by 2005
- The goal is that no patient should wait longer than one month from an urgent referral by their GP with suspected cancer, to the start of treatment, except for a good clinical reason or through their personal choice. Provided that the extra staff can be recruited and the NHS makes the necessary reforms, we hope to achieve this goal by 2008.

28. Investment in staff and equipment The introduction of these new targets will be supported by investment to tackle key gaps in the cancer workforce and make better use of the skills of existing staff, investment in extra equipment for diagnosis and treatment, and action to redesign and streamline existing services to cut out delays.

29. By 2006 there will be approaching 1,000 extra cancer specialists, an increase of nearly a third in the number of cancer doctors since 1999. Other specialities crucial to the treatment of cancer will also increase; for example there will be some 120 more urologists (a 32% increase) and some 200 more gastroenterologists (an increase of over 50%). Numbers of cancer nurses and therapy radiographers will also increase. And the number of general surgeons will increase by an extra 257 (a 20% increase).
30. New equipment will also be coming on stream. There is a lot to do, and there are limits to the numbers of new machines and new buildings that can be manufactured and installed each year. And it will take time to train the extra staff to make best use of new equipment. As a result of the NHS Plan, over the next three years the NHS will get:
- 50 new Magnetic Resonance Imaging (MRI) scanners and 200 new CT scanners, to increase diagnostic capacity;
 - 45 new linear accelerators for radiotherapy treatment.

The investment will be targeted through national and local cancer facilities strategies so as to end the inequalities in access to cancer treatment.

31. **Redesigning services** New investment alone is not enough. Services need to be streamlined, and new approaches are needed to make best use of skills in the cancer workforce.
32. The Cancer Services Collaborative (CSC) is already working with nine cancer networks across the country to redesign services, cut waits, and improve patient experience. The Collaborative has shown that it is possible to reduce waiting times for diagnosis and for treatment by weeks and in some cases even months. For example, the West London and Environs CSC team demonstrated that through multi-disciplinary team working and pre-scheduling of diagnostic investigations they can reduce the wait from first appointment to the start of treatment for patients with lung cancer from 28 days to eight days. The CSC will be rolled out to every cancer network in the country over the next two years.
33. An important first step will be for local cancer services to begin pre-planning the different steps between referral and treatment for different cancer types. This will mean that arrangements for individual patients can be pre-scheduled and pre-booked, offering all cancer patients the certainty of knowing what is to happen next, and when. Arrangements for pre-booking appointments are to be introduced across the NHS by 2005. But as part of the roll out of the Collaborative, every cancer network will commence booking in 2001, and by 2004 every patient diagnosed with cancer will benefit from pre-planned and pre-booked care.

- 34.** There will also be new approaches to tackling shortages of skilled staff. For example, there will be a new £2.5 million a year training programme for surgeons, gastroenterologists, GPs and nurses, to extend the range of health professionals contributing to this fast growing field, which is important for the diagnosis of bowel and stomach cancers.

Ending the postcode lottery

- 35.** Expanding cancer services and providing faster access is not enough on its own. We also need to ensure those services are of top quality and that every cancer patient gets the most appropriate treatment. For the first time ever, there will be a comprehensive programme of guidance setting national standards for effective cancer services; the funding to put this guidance into practice; and new systems to monitor implementation and provide assurance for patients and the public.
- 36. Cancer drugs** It is unacceptable that getting access to new and effective drugs has depended on where people live rather than their clinical need. The new funding announced in the NHS Plan will mean that when the National Institute for Clinical Excellence (NICE) publishes its guidance on 13 new cancer drugs in summer 2001, health authorities right across the country will be able to take full account of it.
- 37. Cancer treatment** NICE will also commission a comprehensive package of guidance over the next three years on the organisation of cancer services. All parts of the NHS will be expected to implement this. And investment in the cancer workforce will mean care is delivered by specialist teams in line with evidence on best practice.
- 38. Assessing the standard of cancer services** The Commission for Health Improvement's review of cancer services, due in 2001, will provide an independent assessment of the current state of cancer services and be a baseline against which to measure future progress. To support local clinical governance arrangements, there will also be new consistent peer review assessment processes for cancer services to monitor implementation of national guidance and help drive up quality.

Living with cancer

- 39.** We want patients and their families to be confident that they will receive the information, support and specialist care they need to help them cope with cancer, from the time that cancer is first suspected throughout the subsequent stages of the disease. Good communication between health professionals and patients is essential. The NHS Plan will introduce new joint training across professions in communication skills. By 2002 it will be a pre condition of qualification to deliver patient care in the NHS that staff are able to demonstrate competence

in communication with patients. And for cancer we shall give staff additional training in communication skills, and in the provision of psychological support. We will ensure that high quality written or other forms of information are available.

40. New funding, in partnership with the voluntary sector, will expand specialist palliative care services in the community, in hospital and in hospices, and tackle past inequalities, enabling cancer patients to live and die in the place of their choice wherever possible.
41. By 2004, the NHS will invest an extra £50 million in hospices and specialist palliative care. The Department of Health will agree with the voluntary sector the core services that should be available, so that more patients will have access to these services, and the NHS will make a more realistic contribution to the costs of voluntary hospices. NHS and voluntary sector services will work more closely together.
42. There will be a further New Opportunities Fund initiative for community palliative care services over the period 2001–2005.

Looking to the future

43. Much of this Cancer Plan is about catching up – about bringing resources and services in the NHS up to the levels experienced elsewhere in Europe. But it is also about investing in the future, and ensuring the NHS never falls behind again.
44. Investment in the staff of the NHS through education and development is critical to this.
45. And the research base will be strengthened:
 - a new National Cancer Research Institute (NCRI) will bring together all the key players in research in this country to identify where research is most needed and where it is most likely to contribute to progress
 - the NHS will contribute to the NCRI through stronger support for clinical trials, supported by additional funding
 - the NCRI will co-ordinate research into cancer genetics, with the aim of placing this country at the forefront in this rapidly evolving area.

Next steps

- 46.** We cannot prevent all deaths from cancer. But as this Plan is implemented, improved cancer prevention, earlier detection, and the guarantee of effective treatment and care will mean a lower death rate, improved prospects for survival and improved quality of life for those affected by cancer.

- 47.** This Plan has been developed through extensive consultation with cancer clinicians, cancer patients and others. It will need to be implemented in the same way. Nationally, within regions, and in local cancer networks, clinicians, managers, patients and other partners will need to work together if the ambitions in this plan are to be realised. The new Cancer Task Force, led by Professor Mike Richards, the National Cancer Director, will lead national implementation. Bringing together cancer clinicians, GPs, patients, and managers, and drawing on a wealth of wider expertise from across and beyond the NHS, it will reflect the partnership needed at all levels to drive forward implementation.

1

The challenge of cancer

- good progress in recent years
- relatively poor survival rates
- inequalities in cancer
- a postcode lottery of care
- poor patient experience
- meeting the challenge of cancer

1.1 One in four people in England will die of cancer. More than one in three people will develop cancer at some stage in their lives. Over 200,000 people are diagnosed each year with the disease – 600 new cases each day. Whichever way we present the statistics, it is not surprising that cancer is perhaps the disease that people fear most.

Progress so far

1.2 Over the past three decades progress has been made in reducing the impact of cancer:

- Overall, mortality rates are falling
- Mortality rates for breast cancer have fallen by over 20% over the past decade – due to a combination of better treatment and the introduction of the national breast cancer screening programme
- Falls in the rate of smoking among men since the early 1970s have led to a marked fall in the incidence and death rate from lung cancer
- Overall, the number of people surviving more than five years has improved – an average of 4% every five years. These improvements are almost certainly due to a combination of earlier diagnosis and better treatment.
- Survival rates have improved dramatically for some cancers – especially for childhood cancers and testicular tumours. Almost two thirds of children and over 90% of men with testicular tumours are now cured.

- Cervical cancer mortality rates have fallen by 7% a year since the introduction of the national cervical screening programme. This means 8000 lives were saved between 1988 and 1997.
- Hospice and specialist palliative care services, (largely funded by charities) have been established across the country giving much needed support to patients with incurable disease and to their families.

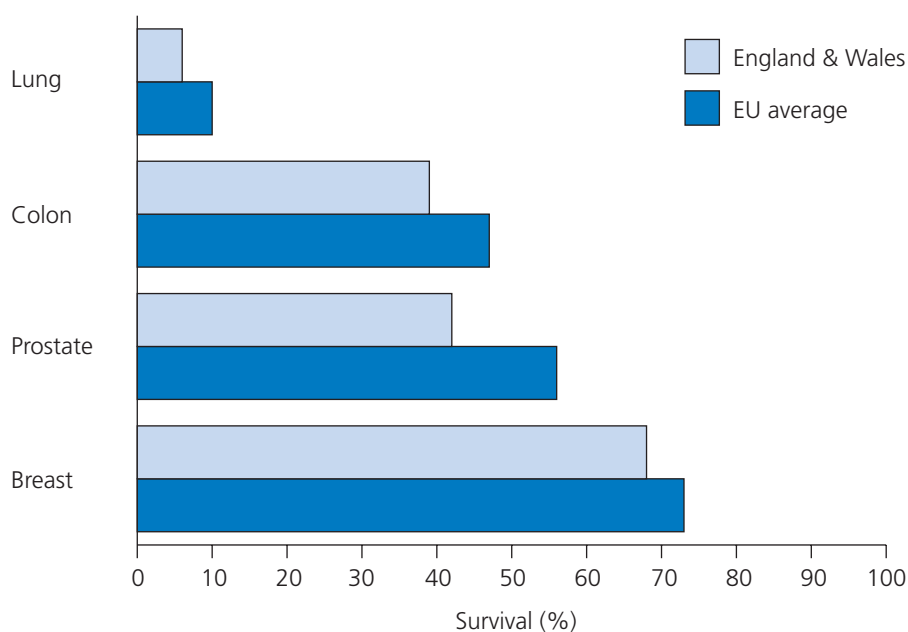
1.3 The NHS has made progress in recent years in improving the organisation and delivery of cancer services. A comprehensive strategy on smoking is in place. There is strong support among health professionals for the strategy for cancer services set out in the Calman/Hine Report and subsequent *Improving Outcomes* guidance, which are designed to spread best practice. And a new *NHS Prostate Cancer Programme* sets out new action and resources to deliver high class services and research for prostate cancer.

1.4 In the last three years the government has focused money and energy on driving up the quality of cancer services. Targeted resources totalling £80 million a year are being invested to improve standards and cut waiting times for cancer patients. And a total of well over £200 million is already being invested by the New Opportunities Fund and the government to modernise cancer equipment and improve access to palliative care.

1.5 Year on year the signs are that international medicine is slowly but surely extending its understanding of cancer and its capacity to treat it effectively. Many British medical researchers are playing a leading role in that work. Nearly a half of women and a third of men diagnosed now with cancer will live for at least five years and cancer survival rates are improving every year.

1.6 But while other developed countries have broadly similar incidence of cancer, there is evidence to suggest that, for many cancers, survival rates for patients diagnosed a decade ago are lower in this country than in comparable European countries.

Cancer survival in the early 1990s: England and Wales lag behind Europe



Data may not be precisely comparable and are relative survival (not age standardised)

Percentage surviving 5 years after diagnosis

England & Wales data are for cases diagnosed in 1986–1990, EU average are 1985–1989

Sources: Cancer Survival Trends, Office for National Statistics 1999

The reasons for poor survival rates

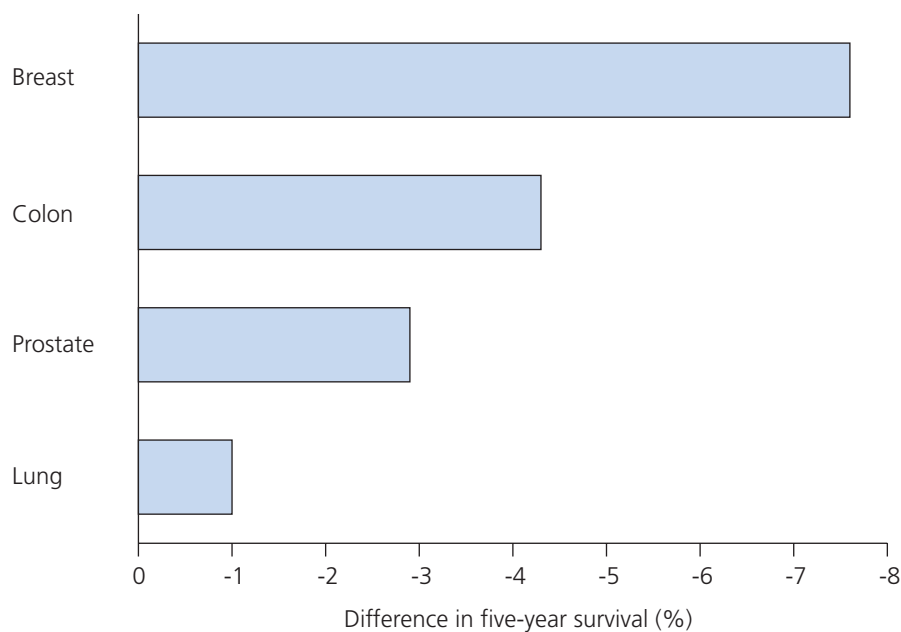
- 1.7** There are a number of reasons why cancer patients in England often have a poorer prognosis than those in other European countries. For some cancers, such as breast cancer and bowel cancer, this is partly because patients tend to have a more advanced stage of the disease by the time they are treated. This may be because they are not certain when to go to their GP about possible symptoms, because GPs, who see relatively few cases of cancer, may have difficulty identifying those at highest risk, or because of the time taken in hospitals to progress from the first appointment through diagnostic tests to treatment. Furthermore, the variation in quality and provision of services across the country means that not all patients are getting the optimal treatment for their particular condition.
- 1.8** Decades of under-investment in people and equipment have taken their toll. A service under pressure has struggled to adopt new ways of working and fully exploit new treatment methods to keep NHS cancer services at the forefront of international progress.
- 1.9** Equipment is out of date and is often incapable of delivering state of the art procedures for diagnosis and treatment. The NHS has too few cancer specialists of every type. For example, we have around 8 oncologists per million population,

less than half that in other comparable European countries. And there has been a failure to modernise services by adopting new ways of treating patients. Incomplete standards of care for cancer services and inconsistent ways of assessing them has led to variations in quality of care.

Inequalities in cancer

1.10 There are wide inequalities in who gets cancer. People from deprived and less affluent backgrounds are more likely to get some types of cancer and overall are more likely to die from it once they have been diagnosed. In the early 1990s 17 professional men out of 100,000 would die of lung cancer, while the rate was 82 per 100,000 for unskilled workers.

Difference (gap) in five-year survival rate between most affluent and most deprived groups, for selected cancers diagnosed in England and Wales during 1986-90 (Adults i.e. 15 years and over)



1.11 There are wide variations in cancer incidence and mortality related to birthplace. Mortality rates for lung cancer are lower in groups born in the Caribbean, Asia and Africa and are higher in people born in Scotland and Ireland, whereas deaths from cervical cancer are more common in women born in the Caribbean.

1.12 There are a number of reasons for these inequalities in cancer. While genetic factors may have some part in explaining ethnic variations in incidence of cancers, different levels of exposure to key risk factors for cancer – notably smoking and diet – are very important. The affluent are less likely to smoke and tend to have more fruit and vegetables in their diet. Lower awareness of the symptoms of cancer

in some social groups, later presentation to GPs, lower uptake of screening services and unequal access to high quality services also play a role.

1.13 There are also inequalities in the treatment patients receive depending on their age. Not all patients are suitable for all treatments and it can be dangerous to give some very frail patients aggressive treatment with harmful side-effects. But frailty and age are not the same thing and some 70 year olds are healthier than some 50 year olds. As within any other disease treated by the health service, ageism is unacceptable in NHS cancer services.

A postcode lottery for cancer care

1.14 In addition to relatively poor survival rates, the NHS also suffers from unacceptable variations in access to high quality cancer services.

- Studies have shown clearly that communities most at risk of ill health tend to have the poorest access to the range of preventive health services, including cancer screening programmes.
- There are widespread geographical inequalities in the quality and type of treatment patients receive, because of shortages of specialist staff, fragmentation of care, inadequate access to surgical facilities, a postcode lottery on prescribing and insufficient radiotherapy facilities.
- Many patients prefer to be able to die at home, but in practice only a quarter are able to do so, as a lack of community or specialist palliative care teams in some parts of the country conspires with inconsistent access to out-of-hours nursing care to prevent their wishes being met.

Poor patient experience

1.15 The way in which staff treat patients and involve them in their own care varies. Some patients report excellent care, with sensitive and thoughtful communication, clear information about their disease and its treatment and good support when it was needed. Others report being given bad news in a deeply insensitive way, being left in the dark about their condition and badly informed about their treatment and care. Many people experience unacceptably long periods of waiting, uncertainty and anxiety at each stage of their care.

Meeting the challenge of cancer

1.16 The NHS has much to be proud of in its cancer services. The testimony of patients to the expertise and dedication of the NHS teams who have cared for them is evidence enough.

1.17 But there are some key challenges that must be met if the NHS is to provide world-class cancer care:

- better prevention
- action on health inequalities
- earlier detection
- faster diagnosis and treatment
- consistent high quality services
- improved quality of life through better care.

1.18 The NHS Plan has set out how a combination of investment and reform can transform the health service. This Cancer Plan sets out what that means for cancer services. The ability of the NHS to modernise and reform its cancer services is a litmus test for the health of the NHS as a whole. This Cancer Plan will mean that over the next five years cancer services in this country will improve faster than anywhere else in Europe.

1.19 So for the first time this Plan provides a comprehensive strategy for bringing together prevention, screening, diagnosis, treatment and care for cancer and the investment needed to deliver these services in terms of improved staffing, equipment, drug treatments and information systems:

- drive new action to prevent cancer, especially cancers related to smoking and diet, focusing help on socially deprived areas where the incidence is highest
- improve early detection of cancer by expanding the existing cancer screening programmes and introducing new ones which are proven to save lives
- improve public understanding of cancer so that people seek advice sooner if they have symptoms that may suggest cancer

- help GPs and other community healthcare professionals to recognise the symptoms of cancer and to support people at risk of cancer or who are living with cancer
- shorten the time taken to diagnose cancer by streamlining the process of care and investing in more equipment and staff
- reduce waiting times for cancer treatment – recognising the urgency of the condition
- expand and support the cancer workforce in the NHS
- increase spending on drugs and treatment so that all patients receive drugs of proven benefit that they need and can be assured of specialist treatment
- reconfigure services, where this has been shown to improve outcomes
- ensure cancer treatment is consistent across the country by introducing new standards for cancer care and new monitoring arrangements
- ensure patients and their families have better support and information throughout their cancer care
- expand the provision of palliative care
- improve the systems for commissioning and monitoring cancer services
- to prepare for the future through education and research.

2

Improving prevention

- new national and local targets to reduce smoking in disadvantaged groups
- new local alliances for action on smoking
- support in primary care to help people quit smoking
- £2.5 million for research into smoking cessation
- national five-a-day programme to increase fruit and vegetable consumption
- National School Fruit Scheme
- raising public awareness

2.1 There are many causes of cancer and the origins of the disease in each person may differ. Genetic, environmental and lifestyle factors interact in many cases. Poverty, unemployment and other broader causes of ill health are linked to cancer too, and action across government to tackle health inequalities will in time have an impact on cancer. But for many of the common forms of cancer, smoking and poor diet are by far the most important factors which we can do something about.

Smoking

2.2 Smoking is the cause of a third of all cancers. Since the widespread availability of cigarettes there has been a huge increase in deaths from lung cancer, which was previously a rare disease. From the 1950s, evidence of the serious health effects and the fatal diseases caused by cigarette smoking has been accumulating. Smoking not only causes most cases of lung cancer but is the major cause of cancers of the mouth, nasal passages, larynx, bladder and pancreas. It also plays a part in causing cancers of the oesophagus, stomach, kidney and in leukaemia.

2.3 Smoking kills people. In total smoking kills around 120,000 people in the UK per year and over half a million in the European Union. It is addictive and two thirds of smokers want to quit across all socio-economic groups. Many smokers have managed to stop and this is reflected in the falling rate of lung cancer in men. The evidence is clear: there are very positive health gains of stopping smoking at whatever age. Stopping smoking, even well into middle age, avoids most of the subsequent risk of lung cancer and stopping before middle age avoids 90% of the risk attributable to tobacco.

- 2.4** Smoking is also the major cause of health inequalities. In 1998 in England, 15% of those in the professional socioeconomic groups smoked compared to 36% in the unskilled manual group. If all men of working age, irrespective of socioeconomic group, had the same mortality rates from lung cancer as those in professional groups then there would be 2,300 fewer deaths from lung cancer each year.
- 2.5** People have a right to smoke, and make their own choices about how to live their lives. But as smoking is so addictive and harmful, the government's role is to ensure people are fully informed about the risks, and have a real choice about whether to quit.
- 2.6** The government's strategy for reducing smoking is set out in the White Paper *Smoking Kills*. Targets were set to reduce smoking in children from 13% in 1996 to 9% in 2010, in adults from 28% in 1996 to 24% by 2010 and in pregnant women from 23% in 1995 to 15% by 2010. Achieving these targets will mean around 1.5 million fewer smokers in England.
- 2.7** The tobacco control strategy already includes:
- the commitment to ban tobacco advertising
 - new specialist NHS smoking cessation services
 - Nicotine Replacement Therapy (NRT) will be available on prescription from GPs
 - the Committee on Safety of Medicines will also be asked to consider whether NRT can be made available for general sale rather than only through pharmacies or on prescription
 - Zyban, a new treatment to help smokers give up, available on prescription from primary care
 - updated guidance on smoking cessation for health care professionals and commissioners from the Health Development Agency (HDA)
 - a new best practice code to enforce the law against cigarette sales to children under 16
 - a new media campaign and an NHS smokers helpline.

New targets to reduce inequalities in smoking

- 2.8** The NHS Plan set out the intention to introduce new national health inequalities targets. With the new interventions such as NRT and Zyban to assist smokers who want to quit, and the new resources now available, the time is right to do this for smoking. So this plan introduces new national and local targets to address inequalities in smoking rates between socio-economic groups. At national level, for the first time we are making the explicit commitment that we shall reduce smoking rates among manual groups from 32% in 1998 to 26% by 2010, so that we can narrow the gap between manual and non-manual groups.
- 2.9** We shall also set local targets making explicit what this means for the 20 health authorities with the highest smoking rates, to help focus action in the areas where it is most needed, and we shall support this with targeted resources and initiatives.

Meeting the new targets

- 2.10** Primary Care Trusts (PCTs) will take the lead in commissioning and, where appropriate, providing smoking cessation services. So all Health Improvement Programmes should set out how PCTs and their partners will develop these services and target the groups most at risk. National Institute for Clinical Excellence (NICE) and HDA guidance on the best interventions will help. By 2002 every PCT will have a trained healthcare professional to support smokers wishing to quit.
- 2.11** The Department of Health will put up to £1 million into funding new local alliances for action on smoking. This will establish a national network to form the bridge between the treatment services and the local authorities and community groups, businesses, schools, churches and faith communities, leisure facilities and minority ethnic groups. They will work with the most deprived sections of their communities to make a difference.
- 2.12** The Healthy Community Collaborative approach announced in the NHS Plan will be used to disseminate information on what works well and to harness primary and community efforts with particular target groups. The first elements of the Collaborative should be in place by the end of 2000.
- 2.13** Businesses have a key role in this challenge. There is a clear business case for helping employees to give up smoking. The government will contribute £250,000 to support a national initiative for major employers to help them develop smoking policies for their employees.

- 2.14** Smoking prevalence is particularly high in Bangladeshi men (47%) and African Caribbean men (32%). Funding for smoking cessation work with black and minority ethnic groups has been increased to £1 million.
- 2.15** There will be new pilots in ten deprived areas to reduce smoking prevalence in communities where there are particular opportunities for focused support, such as prisons and hospitals.

Research

- 2.16** The Department of Health is spending £2.5 million on a programme of research to support policy on smoking cessation, with a particular focus on disadvantaged groups, children and pregnant women.

Diet

- 2.17** After smoking, what people eat is the next biggest contributor to cancer deaths, and may be responsible for up to a third of all cancer deaths. A healthy diet is one that is high in fruit and vegetables and cereals, and low in fat, salt and sugar.
- 2.18** Increasing fruit and vegetable consumption is considered the second most effective strategy to reduce the risk of cancer, after reducing smoking. In particular, people who do not eat fruit and vegetables regularly are at greater risk of several common cancers, including colorectal and stomach cancers. There is evidence that people who eat at least five portions of fruit or vegetables a day are much better protected against cancer and heart disease than those who don't. A change to a diet that is rich in fruit and vegetables can reduce the risk of death from cancer in those under 75 within the following ten years.
- 2.19** In the UK the average consumption is only about three portions a day. There are large differences between different social groups. Those in low income groups eat substantially less fruit and vegetables than those in the highest income groups, and this contributes, with smoking, to the cancer health gap in England.
- 2.20** People make their own choices about what to eat, but too many people feel a diet rich in fruit and vegetables is not a real option. Affordable fruit and vegetables are not always accessible, particularly for those in deprived communities, and families may be reluctant to buy food that may not be eaten. It is also partly due to attitudes and awareness. The specific health benefits of fruit and vegetables in preventing cancer and heart disease are not widely known, and many people think they are already eating enough.

New action to improve diet

2.21 A national five-a-day programme Working closely with the food industry, the Food Standards Agency, and key stakeholders, the government will develop a national five-a-day programme to increase access to fruit and vegetables and make a healthy diet a real choice for everyone. It will include a communications campaign to start in 2001. The government will also work with producers, retailers and others to increase provision and access to fruit and vegetables – particularly in deprived communities, schools and hospitals.

2.22 Local five-a-day initiatives are already underway. Five pilot sites, in Sandwell, Somerset, Airedale and Craven, County Durham and Hastings have been set up to increase consumption of fruit and vegetables across the whole population, through coordinated, evidence-based and practical interventions. These projects are being carefully evaluated.

The five-a-day pilot sites

Sandwell

- Preparing a food map of northern Sandwell, showing the price and availability of over 70 foods in 300 shops
- Aiming to provide a community food service to 1000 residents, with free home delivery of groceries
- Promoting fruit and vegetable intake through a football coaching scheme and sponsorship of West Bromwich Albion's children's football teams
- A community café, with fruit tastings

Somerset

- Making fruit and vegetables available from the Intervention Board to four institutions
- Developing a village shop scheme
- Developing opportunities to 'grow your own'
- Running competitions with local schools

Airedale and Craven

- Training sessions in over 20 health centres
- Working with local supermarkets and retailers to promote fruit and vegetables
- Developing a food network in the area and map food outlets
- Developing school food initiatives to promote fruit and vegetables

County Durham

- Promoting fruit and vegetable gardens and allotments
- Tasting and cooking sessions in local shops
- Pricing of fruit and vegetables in food retailers and farmers' markets
- Flyers in wage slips to employees
- Cookery demonstrations in GP surgeries and health centres

Hastings

- Setting up local food co-ops which will also deliver produce to the home
- Providing training to local shopkeepers
- Working with local primary care teams to promote fruit and vegetable consumption
- Setting up breakfast clubs with fruit included
- Promoting use of community allotments

2.23 Learning the lessons from the pilot schemes, and based on evidence of effective interventions to increase fruit and vegetable consumption, the national roll-out of local five-a-day initiatives will begin in 2002. It will link with Health Improvement Programmes (and to the Healthy Community Collaborative).

A new National School Fruit Scheme

2.24 There are clear links between childhood diet and risk of disease later in life, and eating patterns are established early in life. So action now to influence the diets of the very young could have very real long-term health benefits as well as having an impact on the family diet too.

2.25 Children's consumption of fruit and vegetables is particularly low. One in five do not eat any fruit in a week, and three in five eat no leafy green vegetables. Children growing up in disadvantaged families are about 50% less likely to eat fruit and vegetables than those in high income families.

2.26 The National School Fruit Scheme, announced in the NHS Plan, will make a free piece of fruit available to school children aged four to six each school day. Pilot schemes, in Health Action Zones, will start this year.

Other cancer risk factors

2.27 There are a number of other risk factors which can contribute to the development of cancers.

- **Obesity** may contribute to the risk of post menopausal breast cancer and endometrial cancer. A low fat and low energy diet with plenty of fruit and vegetables can lower the risk of these cancers. The National Service Framework on Coronary Heart Disease required health authorities to have in place local schemes to reduce obesity by 2001.
- Regular **physical activity** can reduce the risk of certain cancers, particularly colon cancer. From 2001 health authorities will have physical activity promotion schemes and the Department of Health will issue guidance on supervised programmes of exercise for people whose health may benefit. In addition, the Department of Health is working with other government departments on work to encourage and enable more walking and cycling, particularly in deprived areas.
- **Alcohol** misuse is thought to be a major cause in about 3% of all cancers, and can increase the risk of cancers of the mouth and throat. Liver cancer is associated with heavy drinking and there may also be an association between alcohol and breast cancer. The Department of Health will consult on an alcohol misuse strategy.
- **Sunlight** is the main cause of skin cancer and incidence of this cancer has increased steadily over recent years. Studies show that most people are aware of the risks from exposure to the sun but that fewer people take the necessary action to protect themselves from the risk. The Department of Health is producing education resources on the risks of skin cancer, and also funds the Meteorological Office to provide information in weather forecasts.
- Exposure to high concentrations of **radon**, a naturally occurring radioactive gas, increases the risk of lung cancer. Radon levels vary

considerably between different parts of the country. The Department of Health has worked with the Department for the Environment, Transport and the Regions (DETR) on pilot studies with local authorities, to provide information and encourage remedial action in homes affected by radon. DETR will be running a new radon programme in partnership with 31 local authorities from the areas most affected by radon.

Raising public awareness

- 2.28** The programmes of action to tackle smoking and improve diet will be supported by coordinated information campaigns at national, regional and local level. People make their own choices about whether or not to smoke, what to eat and how to live their lives. The role of government is to ensure that people are informed, and that the choices are real. So the campaigns will highlight the extent of the risks to health through smoking and poor diet. They will make information readily available on the help which is on offer for those, especially in disadvantaged communities, who wish to give up smoking or adopt a healthier diet.
- 2.29** It is also essential that people know how to recognise early signs and symptoms that could indicate cancer, and know when and where to look for advice. This is vital as a first step to ensuring people receive early treatment when necessary, so as to offer the best chances of a good outcome.
- 2.30** The National Cancer Director will lead the development of a new programme to promote public awareness of the symptoms and signs of cancer and the benefits of early diagnosis. We will work in partnership with cancer charities on this programme. For example, the Department of Health is funding CancerBACUP to develop a public and patient version of the *Referral Guidelines for Suspected Cancer* which have been produced for GPs, to help alert people to the potential symptoms of cancer, and this will be available from 2001.
- 2.31** Current levels of public awareness and understanding will be assessed, as will the research evidence related to the impact of different approaches to raise awareness. Further research will be commissioned where necessary.

Action and Milestones

2000

- The Health Development Agency will produce updated smoking cessation guidelines.
- Health Development Agency guidance on effective interventions on smoking, diet, physical activity and obesity.
- Pilots of National School Fruit Scheme begin
- Local five-a-day pilot initiatives begin

2001

- National network of local alliances for action on smoking
- NICE advice on best prescribing regimes for bupropion (Zyban) and NRT
- Local action on smoking, diet, physical activity and obesity
- Pilots in prisons and hospitals to reduce smoking prevalence
- National five-a-day communications campaign begins
- Development of a cancer public awareness programme
- National School Fruit Scheme roll-out begins

2002 onwards

- Trained health care professionals to support smokers wishing to quit in every PCT
- National roll-out of five-a-day initiatives

3

Improving screening

- routine breast screening to be extended up to age of 70 and available on request to women over 70
- improved breast screening techniques to increase detection rates
- new ways of working
- improved cervical screening techniques
- colorectal screening pilots
- the NHS Prostate Cancer Programme
- better understanding of screening

3.1 Reducing the incidence of cancer is vital to long term efforts to reduce cancer mortality. Vigilance against the onset of disease is the next stage in our defence. Where screening is possible, it is an important method of detecting abnormalities at an early stage, allowing treatment when the cancer is most likely to be curable, or in some cases, even before it develops. So the government is proposing a major expansion of the cancer screening programmes, where it is clear that it reduces mortality.

3.2 National breast and cervical screening programmes are already saving lives, screening five million women each year. In 1998/1999 the breast screening programme detected nearly 8,000 cancers, over 40% of which were very small (less than 15 millimetres). And the incidence of cervical cancer has fallen by 43% between 1988 and 1997.

Breast cancer screening

3.3 Breast screening every three years is available for all women aged 50 and over. At present women receive personal invitations between the ages of 50 and 64 and are entitled to request screening every three years thereafter.

3.4 The screening programme was introduced between 1988 and 1991. Recently published research has shown that breast cancer death rates fell by 21.3% in women aged 55 to 69 between 1990 and 1998. 30% of this fall was attributed to screening and the rest to treatment improvement and other factors. Quality improvements in the screening process and the ever-increasing expertise of

screening programme staff means that the observed benefit of screening is set to continue to increase.

Extending the breast screening programme

- 3.5** The NHS Plan announced that the Government intends to extend routine invitations to women up to the age of 70. Pilot studies have demonstrated that women in this older age group can be screened effectively and will accept screening invitations. Women over the age of 70 will also be entitled to screening every three years on request. Evidence of the balance between the benefit and harm of screening is less clear in women over 70, but will be kept under close review.
- 3.6** Further improvements to screening technique are also to be introduced across the country. All women will have two views of the breast taken at every screening, instead of just at the first screening as at present. Research has shown that this could increase cancer detection rates by 43%. This improvement will be introduced across the country by 2003.
- 3.7** These changes to the breast screening programme will entail the biggest expansion to the programme since it was launched. They come at a time when the breast screening programme is already screening more women than ever before as those women born in the post-war baby boom reach their 50th birthdays. And the key screening staff – radiographers and radiologists – are in short supply. The government recognises that this expansion will need to be carefully managed to maintain the standards of the screening programme and to support the staff running it. In some cases, new screening facilities will be required.
- 3.8** As at the start of the breast screening programme in 1988, the extension to older women will be phased in over a period of three years. It is anticipated that the first breast screening programmes in England will begin inviting older women in 2001/02, with all programmes starting by 2004, benefiting 400,000 women each year. The National Co-ordinating Team will support Regional Screening Leads and Quality Assurance Directors in identifying which programmes are able to start in each year and in facilitating the roll out.
- 3.9** Funding for the roll out of the breast screening programme extensions, including investment to fund new equipment and facilities is included in the new funding for cancer announced in the NHS Plan.

Breast screening workforce

- 3.10** The main limiting factor to the roll-out will be the speed at which we can recruit sufficient radiologists and radiographers. Chapter 8 sets out plans to increase the numbers of both. In addition, the Royal College of Radiologists and the Society of

Radiographers are working alongside the breast screening programme to develop new ways to staff the programme. A competency based approach, using occupational standards, will be used.

3.11 At present radiographers are responsible for taking mammograms, and radiologists – or in some cases breast clinicians – are responsible for reporting the mammograms to determine which women should be recalled for further assessment. (The breast screening process itself does not diagnose breast cancer.) Under the new arrangements this ‘two tier’ approach would be extended to four tiers:

- Lead practitioner – registered practitioner (for example, radiologist, breast clinician, radiographer) who leads the clinical team
- Advanced practitioner – registered practitioner (eg radiologist, breast clinician, radiographer) with advanced training to undertake film reading, breast ultrasound and breast investigative procedures.
- Practitioner – state registered (eg radiographer) undertaking all practical aspects associated with mammography imaging with additional supervisory role for assistant practitioners, including mentoring and training support
- Assistant practitioners – someone trained to carry out mammograms under supervision of a practitioner.

3.12 These new arrangements will be tested from October 2000 in four development sites. They will be evaluated to ensure that quality standards can be maintained and to assess the training and preparation time needed. If these arrangements are successful they will offer new, alternative ways to meet the staffing requirements of the breast screening programme. They will also offer opportunities for individual practitioners to move from one tier to another.

3.13 New technologies may assist the screening process. The NHS Breast Screening Programme is soon to publish the results of a working party group which has reviewed Computer Aided Detection in breast screening. We are closely monitoring other new technologies such as digital mammography, on-site processing of mammograms and new innovative designs for screening vans and will refer them to NICE for appraisal, if appropriate.

Cervical screening

3.14 Cervical screening identifies cervical abnormalities which, if left untreated, *may* develop into cervical cancer. It is not a test for cancer. Screening was first introduced in the late 1960s but it was not until 1988 that comprehensive call and

recall was introduced. All women aged 20 to 64 are invited for a smear test at least once every five years.

- 3.15** The cervical screening programme in this country is a success story. Since introducing computerised call and recall, the coverage rate of the screening programme has gone up to a national average of 85%. Four million women benefit from cervical screening each year and the cervical cancer death rate has been falling by 7% a year.
- 3.16** However in laboratories, the screening process is a repetitive, difficult task and mistakes have been made which have not been identified until too late. It is difficult to recruit screening staff and morale is low. Laboratories are stretched and in some places there are long delays in getting smear test results.

Developments in cervical screening

- 3.17** New developments in technology may help address these problems and improve the quality of screening. On the recommendation of NICE, pilot studies will begin in 2001 to assess the potential of liquid based cytology (LBC) techniques, where the cells from the cervix are preserved in a chemical solution instead of smeared on a glass slide. NICE will review the outcome of the pilots and will advise on the national introduction of these techniques in 2002.
- 3.18** The LBC pilots will also be assessing the feasibility of using a test for the Human Papilloma Virus (HPV), which is known to be implicated in over 99% of cases of cervical cancer, as a means to identify those women with mild or borderline abnormalities that should undergo further assessment.
- 3.19** New investment in pathology services will benefit the cervical screening programme. Over the last two years, the Pathology Modernisation Fund has allocated over £250,000 to cervical cytology projects. More modern screening techniques are likely to require laboratories to screen a higher volume of tests and NHS Trusts will need to keep the service provision for cervical screening under review to ensure optimal service delivery.
- 3.20** The results of the liquid based cytology pilot will be known in 2001 and the HPV pilot in 2002. If evaluation proves that the pilots are successful, and if recommended by NICE, the government will fund their introduction across the NHS.

Cervical screening workforce

- 3.21** The NHS Plan set out action to support and develop NHS staff. Cervical screening staff are an important group and we will be investing to support their continuing development. A four-tier skill mix model is under development which will encompass all grades. It will explore the potential for an advanced practitioner

grade which will lead to a more flexible workforce. The cytology screening qualification is being examined to see if there is potential for screening staff, with additional study and training, to become state-registered biomedical scientists of whom laboratories are also in need. Chapter 8 sets out action to review pay scales for scientific staff and others.

Colorectal screening

- 3.22** Colorectal cancer is the third most common cancer in both men and women. If identified early, many people can be cured. However, it is difficult to recognise as the symptoms are often not reported at an early stage and can be the same as those for other common, less serious conditions such as piles and other digestive conditions. Research in Denmark and this country has demonstrated that screening for bowel cancer can reduce mortality from the disease by up to 15% if performed to a high standard and if sufficient numbers of people are screened.
- 3.23** A pilot study is underway to determine if screening using the Faecal Occult Blood (FOB) test will be effective in the ordinary NHS setting and acceptable to the public. Two pilot sites, one in Coventry and Warwickshire and one in Grampian, Tayside and Fife are inviting men and women aged 50–69 to undergo screening using FOB tests in their own home. If initial FOB tests are positive, people will be invited for a colonoscopy to look for cancer or other small growths known as polyps. Nine out of ten people found to have blood in their stools using the FOB test will not have cancer but another condition such as piles.
- 3.24** The pilot will complete in 2002. If the pilot demonstrates that colorectal cancer screening is appropriate, feasible and acceptable to the public the government will introduce colorectal screening for all people aged 50-69.
- 3.25** At the same time research is continuing to evaluate alternative approaches to colorectal screening using flexible sigmoidoscopy, a technique which is less invasive than colonoscopy and which need only be undertaken once every ten years. We are also monitoring closely the progress of other emerging technologies such as CT colography (virtual colonoscopy) and DNA testing of stools.
- 3.26** Plans to increase the number of people trained to perform endoscopy, including colonoscopy, are set out in chapter 8.

Prostate cancer screening

- 3.27** Every year around 19,000 men are diagnosed with prostate cancer in England and Wales and around 8,500 men die from it, typically around four to five years after diagnosis. It accounts for around 4% of all male deaths each year.

- 3.28** There is still a lot we do not know about prostate cancer. The *NHS Prostate Cancer Programme* sets out the background to the disease and the action that will be taken. Prostate cancer behaves in different ways in different men. Some cancers grow very slowly, others grow quickly. In some men the cancer is diagnosed only when they start to suffer symptoms from the spread of the cancer, usually in the bone.
- 3.29** There are no known primary prevention measures that men can take to minimise the risk of developing prostate cancer. This, along with the unknown causes of the cancer, highlights that there is a need for further research in this area to help our understanding of the progression of this disease.
- 3.30** Men with prostate cancer tend to have levels of Prostate Specific Antigen (PSA) in their blood that are higher than normal, though this threshold is subject to some discussion. But some men who have prostate cancer do not have raised levels of PSA and two thirds of men who have raised levels of PSA do not have prostate cancer.
- 3.31** To help men understand the basis of the PSA test, the consequences of a positive result and the options for treating prostate cancer, the National Screening Committee will introduce a prostate cancer risk management programme in 2001. The key elements of this will be:
- Informed choice – developing an education programme about prostate cancer for the public, patients and professionals, in particular the risks associated with PSA testing, using written material and videos
 - A standardised test – ensuring that PSA testing is provided to an explicit quality standard
 - Systematic and standardised follow up – developing an evidence based pathway for men whose PSA levels are above the threshold.
- 3.32** Results from a European randomised study of screening for prostate cancer will give an indication of whether population screening for prostate cancer is effective in reducing mortality rates. British researchers have recently submitted a proposal for a further prostate cancer screening trial to the Medical Research Council (MRC). Should the MRC decide to support the proposal, the Department of Health will provide substantial funding for it.
- 3.33** A prostate cancer screening programme will be introduced if and when screening and treatment techniques have developed sufficiently. The evidence to support the introduction of a screening programme will be kept under careful review by the National Screening Committee.

Ovarian cancer screening

- 3.34** Ovarian cancer is the fourth most common cause of cancer deaths in women in this country, causing 4,500 deaths each year. Only 25% of women survive five or more years after diagnosis. This is largely because symptoms are rarely evident until the disease is at an advanced stage. There are two possible techniques for screening for ovarian cancer – trans-vaginal ultrasound and a blood test for a cancer antigen. Women who test positive will not necessarily have cancer. Further assessment is required, including abdominal surgery under general anaesthetic, with the associated risks.
- 3.35** The Health Technology Assessment (HTA) programme has undertaken a systematic review of the evidence for introducing ovarian screening. It concluded that insufficient evidence was available to reach a firm conclusion. Three randomised control trials are underway which should provide an estimate of the effectiveness of screening on mortality but evidence is unlikely to be available before 2003. The HTA will then re-evaluate the evidence.
- 3.36** A further trial being funded by the MRC, Cancer Research Campaign and the Imperial Cancer Research Fund is examining the effectiveness of different screening technologies. This trial will report in 2010. The Department of Health will provide the NHS costs for this project.
- 3.37** The government will introduce ovarian cancer screening as and when research demonstrates that screening is appropriate and cost effective.

Lung cancer screening

- 3.38** Trials of lung cancer screening conducted in the United States and Czechoslovakia in the 1970s using chest x-rays and/or sputum cytology showed no reduction in cancer mortality. However each of these trials had flaws and a further large study is currently underway in the United States. More recently it has been shown that low dose spiral CT scanning can identify lung cancer in asymptomatic individuals at high risk. While the results of these trials suggest that CT scanning may be a useful screening test for the early detection of lung cancer, we now need to know whether this would lead to a reduction in mortality. A proposal for a trial in the UK is currently under consideration by the MRC.

Understanding screening

- 3.39** People invited to participate in screening programmes need to understand the potential benefit and harm in doing so to be able to make an informed choice about whether or not they wish to proceed. Screening needs to be accessible and sensitive to people's needs.
- 3.40** Information provided to those invited must be honest, comprehensive and understandable to its audience. Written information on its own is not enough. The issues are complex and different people find different approaches more helpful. Research is underway to assess what information women want about the breast and cervical screening programmes and the best way to give them that information. For example, the Cancer Research Campaign's Primary Care Unit is undertaking research on women's understanding of breast screening. And the *NHS Prostate Cancer Programme* sets out new initiatives to improve men's understanding of the benefit and limitations of PSA testing.
- 3.41** Many local screening programmes expend enormous effort and time developing their own information leaflets. Whilst some are excellent, others do not have access to latest research and expertise. So we will introduce new national information sources, which all screening programmes will be required to use. The development of the information will be overseen by the Advisory Committees on Breast and Cervical Screening and the National Cancer Director.
- 3.42** The screening process does not end with the screening test. Many women never receive the results of their smear test in writing. This is contrary to stated recommendations for good practice. The NHS Plan sets out proposals to empower patients by making available to them copies of all letters about their care sent to their GP. The same principle should apply to women undergoing cervical screening.

Tackling inequalities

- 3.43** Thirteen health authorities, all of them in deprived inner city areas, do not yet meet the national target of 80% cervical screening coverage. The government has set a target that these health authorities should achieve the national 80% coverage rate by 2002. All PCTs should review their own screening coverage rates and where necessary draw up plans to increase the accessibility of screening among deprived and minority ethnic groups as part of their Health Improvement Programmes.

Action to improve cervical screening in inner cities

A national screening coverage working group has been formed to support the implementation of cost effective approaches to increase uptake of screening in inner city areas. Examples of action taken include:

- Series of training workshops for staff in health authorities and primary care, sharing best practice and lessons learnt
- Improving the accuracy of population registers to ensure women receive their invitations at the correct address
- Specialist nurse practitioners to provide support to practice nurses and single-handed GPs in Ealing, Croydon, Kensington and other districts
- Training of receptionists from ethnic minority backgrounds in Camden
- A cervical screening campaign using local media targeting young women from ethnic minority backgrounds in Lambeth.

These measures aim for fair access to screening for all women and also to improve the quality of service provided to individual women.

- 3.44** People from minority ethnic groups have particular needs. There is evidence to suggest that women from these groups do not come forward for breast and cervical screening. Culturally-sensitive information and different approaches to giving information can often improve the accessibility of screening to these groups.

Good practice in screening for minority ethnic groups

The Woman to Woman study in Rotherham assessed the benefit of using Community Health Educators (CHEs) to inform women from minority ethnic groups about cervical screening. This was an action research project and its findings were implemented and refined as the project progressed. The success of the project was such that one of the CHEs was subsequently employed on a permanent basis by the GP practice with which she was linked. The report of the project was sent to all health authorities to inform local strategies on ethnic minority information. A national conference was also held using CHEs as presenters.

The success of the Woman to Woman study has also led to the development of training materials in the primary care setting, and the learning experience from the study has fed directly into the cervical screening training pack for primary care. This same approach is now being applied to breast screening, where a study in Wakefield will be working with women from different minority ethnic groups and a group of low income white women.

- 3.45** Women with learning disabilities often do not have the information and support they need to decide whether or not to attend for breast and cervical screening or to understand the need for breast awareness. The Department of Health has established a working group, including women with learning disability, to draw up good practice guidance and materials for women and their families, supporters and health care professionals.

Action and Milestones

2000

- Breast screening development sites trial new workforce arrangements
- National guidance and booklets on screening for women with learning disabilities published

2001

- Prostate cancer risk management programme launched
- All women to receive results of their smear tests in writing
- All women to receive national information leaflet on breast or cervical screening
- All Primary Care Groups to review their screening coverage rates and draw up plans to improve accessibility of screening for women in socially excluded and minority ethnic groups
- Cervical screening development sites trial new workforce arrangements
- National pilots using liquid based cytology report

2002

- Colorectal screening pilot completed
- National pilots using HPV testing as triage in women with mild or borderline smears to report

2003

- All health authorities to have introduced two view mammography
- Subject to evidence of effectiveness, National colorectal screening programme to be introduced
- Health Technology Assessment programme to review evidence for ovarian screening

2004

- All Health Authorities to invite women aged 65–70 for breast screening.

4

Improving cancer services in the community

- a central role for primary care in new cancer networks
- £3 million in partnership with Macmillan for a lead cancer clinician in every PCT
- £2 million for palliative care training for district nurses
- new primary care clinical dataset for cancer patients

4.1 People with cancer spend much more of their time living in their own home than in a hospital or hospice. GPs, district nurses, social services, home nursing services and community specialist palliative care teams provide essential support for patients and their families at different times.

4.2 Health professionals working in primary care advise patients on healthy lifestyles and the benefits of screening, leading to the prevention and early detection of cancer. They assess patients with symptoms which could be due to cancer and decide whether investigation or referral is necessary. They provide continuing professional support for patients and their families during cancer treatment and for patients who are dying and support for carers in bereavement.

4.3 Cancer services in the community are patchy and not as good as they should be. Patients with cancer are not always referred to a hospital as soon as they could be. Primary care teams have been insufficiently involved in shaping cancer services. Support for patients living at home with advanced cancer is sometimes poorly co-ordinated and services may not be available 24 hours a day. There have been insufficient training opportunities to give primary health care teams the confidence to support patients with advanced cancer.

Identifying patients with cancer

4.4 The average General Practitioner will see only eight or nine new cases of cancer a year. They may only see patients with rare cancers once in their working lives. But several hundred patients may go to see their GP each year with symptoms that could potentially be due to cancer. Earlier this year the Department of Health

published *Referral Guidelines for Suspected Cancer*. The guidelines will help GPs to identify those patients who are most likely to have cancer and who therefore require urgent assessment by a specialist.

- 4.5** Primary care pilot sites are being identified to evaluate the use of electronically generated and despatched cancer referral proformas.

Tackling inequalities in access to care

- 4.6** Primary care teams (including GPs, health visitors and practice nurses) have a vital role in ensuring that their patients receive the appropriate advice on screening and lifestyle and access to cancer services where appropriate through prompt referral to hospital. People from minority ethnic groups and people with learning disabilities have particular requirements including culturally sensitive information.
- 4.7** The NHS Plan set out proposals to expand the level of primary care services delivered through Personal Medical Services (PMS) contracts. These flexible contracts reward GPs and other primary healthcare workers for services tailored to the needs of the local community. They have proved especially useful in tackling areas of deprivation where it is difficult to attract GPs to work or where local communities have special needs. Core requirements of the contract include promoting the uptake of cervical screening and rapid referrals to hospital where appropriate.

Shaping cancer services

- 4.8** Primary Care Groups and Trusts (PCTs) offer new opportunities to improve and shape the delivery of cancer services for patients in the community. Through PCTs, primary care will play a central role in the new cancer networks that are being established to plan the strategic commissioning and provision of cancer services. (See Chapter 11).
- 4.9** Involvement of GPs in cancer networks requires dedicated time and commitment. Macmillan Cancer Relief has piloted the role of primary care lead clinicians for cancer. This has brought benefits both to patients and to primary care teams.
- 4.10** Building on this experience, the Department of Health and Macmillan Cancer Relief will together invest a total of £3 million each year for the appointment of a lead clinician for cancer within each PCT. This funding will enable the lead clinician to have dedicated time to contribute to the development of cancer networks and to raise standards of cancer care within the PCT. This will improve communication and understanding across primary, secondary and tertiary care, leading to better co-ordination of care for patients.

Clinical governance in primary care

- 4.11** Patients should be confident in the quality of cancer care at every level. Processes for monitoring the quality of cancer care against national standards are being introduced for cancer units and cancer centres (see Chapter 6). We now need to develop equivalent processes within primary care.
- 4.12** Clinical governance depends upon effective audit and quality assurance. The maintenance of disease based registers is a pre-requisite for effective clinical audit. Whilst each GP will only have a small number of cancer patients to include in such a register, the population numbers at PCT level of between 100,000 – 200,000 would be sufficient to support clinical governance activity. The National Cancer Director will work with GPs to develop an appropriate primary care clinical dataset for all patients diagnosed with cancer. These datasets will form the basis for clinical audit within PCTs and will be a useful source of information for population based cancer registries.
- 4.13** The primary risk factors for cancer are largely the same as those for coronary heart disease (CHD) – smoking and poor diet. Primary care teams are already required to put in place a practice-based register for those at high risk of CHD. This register will help primary care teams plan and monitor the care that they offer for people at risk of cancer such as life-style advice. Accurate primary care patient registers are also essential to ensure all those eligible for cancer screening programmes are routinely invited.
- 4.14** GPs need ready access to up to date information on the investigation, treatment and care of patients with cancer. The new PCT cancer leads will play an important role (alongside Macmillan GP facilitators and others) in promoting continuing professional development related to cancer within PCTs.

Community nursing

- 4.15** Many patients with advanced cancer would prefer to die at home, but in practice only about one quarter of cancer patients do so. Too often a combination of a lack of support in the home, ageing carers who cannot continue with the burden of care and inadequate community services combine to prevent this wish being achieved. Details of new actions to improve specialist palliative care services in the community are set out in Chapter 7.
- 4.16** The government will invest £2 million to provide additional training and support in the general principles and practice of palliative care for district nurses and other community based nurses. The National Cancer Director will work with Marie Curie Cancer Care and Macmillan Cancer Relief to develop and evaluate these new training initiatives, which will raise the quality of care in the community

benefiting a wide range of patients with advanced cancer and other incurable illnesses.

Marie Curie Nursing Service

“They (Marie Curie Nurses) are often the thing that makes 50% of the day when nobody is around manageable.”

District nurse

“Had I not had that help (from Marie Curie Nurses), I think we would have just been overwhelmed by the problems of 24 hour care.”

Carer of a cancer patient

- 4.17** Macmillan Cancer Relief and other key players are currently reviewing the provision of out of hours palliative care services. The Department of Health will build on this work with Macmillan Cancer Relief, Marie Curie Cancer Care and the National Council for Hospice and Specialist Palliative Care Services to develop guidelines and models of good practice.

St Benedict’s Hospice

St Benedict’s Hospice in Sunderland is a palliative care beacon which provides support to all patients within the health authority with advanced progressive disease who wish to remain at home. The service is funded by Sunderland Health Authority. Two registered nurses are on duty every night providing pain management, symptom control and support to patients and carers. Quality improvements include planned visits undertaken within 30 minutes of appointment times and crisis visits within 45 minutes. The service has facilitated better links with local GPs.

- 4.18** The importance of primary care in cancer services and the need for effective links between sectors was highlighted in the Calman/Hine Report. The actions set out in this Cancer Plan will ensure the necessary developments become a reality.

Action and Milestones

2000

- Primary Care Groups and Trusts represented on cancer network management groups

2001

- Electronic referral guidelines pilots begin
- Primary Care Groups and Trusts appoint cancer lead clinicians
- Review of out of hours palliative care services completed
- New support and training in palliative care for community nurses

2003

- New primary care clinical datasets

5

Cutting waiting for diagnosis and treatment

- maximum one month wait from urgent GP referral to treatment guaranteed for children's and testicular cancers and acute leukaemia by 2001
- maximum one month wait from diagnosis to treatment for breast cancer by 2001
- maximum one month wait from diagnosis to treatment for all cancers by 2005
- maximum two month wait from urgent GP referral to treatment for breast cancer by 2002
- maximum two month wait from urgent GP referral to treatment for all cancers by 2005
- roll out of Cancer Services Collaborative to streamline services in all networks
- cancer the first priority for roll out of booked appointments
- by 2004 every patient diagnosed with cancer will benefit from pre-planned and pre-booked care

5.1 Waiting for treatment of any kind is worrying and is often painful and debilitating. Waiting for diagnosis or treatment for cancer is also potentially life-threatening. The drive to end waiting in the NHS Plan is central to the Cancer Plan, which introduces new targets to cut waiting times for referral to diagnosis and diagnosis to treatment.

5.2 Many cancer patients already receive rapid diagnosis and treatment. Maximum two week waits for an outpatient appointment in urgent cases of suspected breast cancer have been in place since April 1999 and over 100,000 women have already benefited. The roll out of the two week maximum wait to all other urgent cases of suspected cancer will be complete by December 2000. Some 60% of breast cancer patients are already admitted for treatment within two weeks of the completion of diagnosis and the decision to go ahead with treatment.

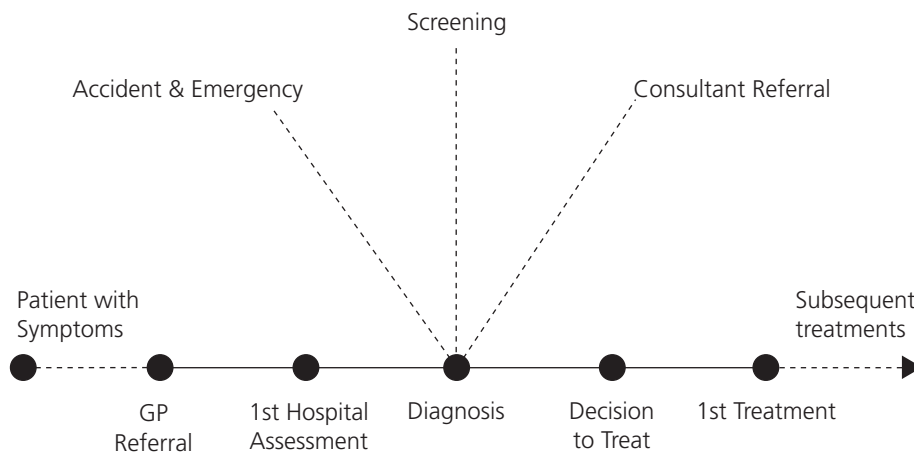
5.3 But too many cancer patients still face waits for diagnosis and treatment. Patients in the UK tend to have more advanced disease by the time their treatment begins than their counterparts in other European countries. This is thought to explain at least some of the poorer survival rates seen for some cancers in the UK.

5.4 The NHS Plan allows us to make further inroads on waiting times for cancer services. Chapters 2 and 3 of the Cancer Plan set out action to help people recognise the signs and symptoms of cancer earlier and to strengthen and extend

screening programmes. Chapter 4 sets out action to support GPs in identifying and referring rapidly those people who need expert assessment.

Care pathways

5.5 Patients with cancer enter the hospital by a number of routes. For some the suspicion of cancer is high when they are first seen by a GP. These patients should be referred urgently for assessment. Others are referred as an emergency (e.g. because of bowel obstruction). In other cases cancer may not initially be suspected. The common factor is that whenever the suspicion of cancer emerges, the patient wants to feel confident that the subsequent stages of diagnosis and treatment will follow as soon as possible.



5.6 The steps required for diagnosis differ for different cancers. For example:

- Patients with breast cancer most frequently present with a breast lump. The essential steps for diagnosis (clinical assessment, imaging and biopsy) can normally be completed at a single visit.
- Patients with stomach cancer usually present with symptoms of indigestion and related symptoms. Diagnosis is most frequently made on a biopsy taken at gastroscopy. Additional investigations such as CT scanning are likely to be needed to assess the stage of the disease and thus the most appropriate treatment option.
- Patients with lung cancer are often referred initially by their GP for a chest x-ray because of prolonged cough, breathlessness or other symptoms. The chest x-ray may indicate the probability of lung cancer, which is then confirmed at bronchoscopy. CT scanning and other investigations may be needed to determine the most appropriate treatment.

5.7 Each patient will need the pathway of care that is right for them. But every patient will want to know that they are moving swiftly through the right steps to ensure an accurate diagnosis and the most appropriate treatment. Both clinicians and patients want the prospect of waits of days rather than weeks between each step in the cancer pathway of care. Patients also want clear information about what is to happen at each step, and when. And they want support in making their own choices about timing – perhaps to take a little time to come to terms with what is happening to them and to consider options for treatment, or to plan treatment around an important family event. They want to be confident that services will be there as soon as they need them, and they want the arrangements to be personalised around their own circumstances and particular clinical needs.

A new goal for cancer waiting times

5.8 The government believes the ultimate goal should therefore be to offer patients a maximum one month wait from an urgent referral for suspected cancer to the beginning of treatment. Where patients wait longer, this should be because of the needs of the diagnostic process or their personal choice, not because of in-built delays in the system of care. This one month goal is in line with the best that patients experience in Europe and the USA. It represents the kind of care that clinicians would like to offer and patients to receive.

5.9 Past decades of under investment mean this goal is not yet within reach. It will need more equipment and additional staff, working in new ways. It will take time and effort to achieve. But it is important to have a shared direction of travel. Provided that we can recruit the extra staff, and the NHS makes the necessary reforms, we hope to achieve this goal by 2008.

Achieving the goal

5.10 Clinicians and patients are equally clear that we need practical and realistic plans to help the NHS make progress. So this Cancer Plan sets milestones between 2000 and 2005 to drive forward change rapidly. The milestones take account of the need to expand capacity through investment in the workforce and in equipment for diagnosis and treatment (see Chapters 8 and 9). Investment will also need to be matched by reform in the way cancer services are delivered.

Reshaping services

5.11 To help cancer networks reshape the services they provide to ensure fast, efficient, streamlined care, the new NHS Modernisation Agency will lead the roll out of the Cancer Services Collaborative to all cancer networks over the next two years. The new resources for cancer announced in the NHS Plan will support this initiative.

The Cancer Services Collaborative

The Cancer Services Collaborative is a national initiative to improve the expertise and outcomes of care for patients with suspected or diagnosed cancer by optimising systems of care delivery. Nine cancer networks have taken part in the first phase of the programme which commenced in September 1999. The second phase of the programme, commencing in April 2001, will include every cancer network in the NHS.

The Cancer Services Collaborative has shown that delays in getting treatment for people with cancer are often caused by the way that the system for delivering care is organised. By redesigning the system, significant improvements can be made. Teams within the nine networks taking part in the Cancer Services Collaborative are redesigning services for patients with suspected and diagnosed breast, bowel, lung, ovarian and prostate cancer. Many of the projects have been able to demonstrate reduction in time to diagnosis and/or time to treatment of weeks or even months. A major emphasis of the Cancer Services Collaborative is on redesigning services from the patient perspective, building skills for improvement, and on multi-disciplinary teams working together to diagnose problems and make effective and sustainable changes.

At the Central Middlesex Hospital, the West London and Environs Cancer Collaborative Team have demonstrated that through multi-disciplinary team working and pre-scheduling of diagnostic investigations they can reduce the wait from first appointment to the start of treatment for patients with lung cancer from 28 to eight days.

- 5.12** This means that all cancer networks will be able to draw on work already carried out by cancer clinicians on what works best for different tumour groups, and on tackling the key bottlenecks on the way to diagnosis (in particular radiology and pathology) and treatment (radiotherapy).

Certainty and booked appointments

- 5.13** An important theme for the Collaborative will be ensuring that all patients with suspected cancer have information about what they can expect and when. The steps along the pathway of diagnosis and treatment for different cancers are in large measure predictable and it is possible to plan and schedule these tests and treatments. The Collaborative has already begun to demonstrate how this helps to streamline the delivery of care, cuts down waits, and gives patients the certainty of having all the stages of a diagnostic or treatment process booked in advance. Arrangements for pre-booking appointments are being introduced across the NHS

by 2005. But for cancer we can and should move faster. So the Cancer Services Collaborative will make booking of cancer services a priority as it rolls out across the country and by 2004 every patient diagnosed with cancer will benefit from pre-planned and pre-booked care.

“I feel, through my experiences of cancer, that if the waiting time for test results could be shortened, it would make a great difference. I have found that during this period it causes unnecessary worry, anxiety and depression.”

**Macmillan Cancer Relief
Open Space initiative**

Early local targets

- 5.14** The Collaborative will ask networks to identify local bottlenecks and plan local improvements. So there will be an important emphasis, especially in the early stages, on local targets for improvement. It will also be important for networks and clinicians to look carefully at the experience of those patients who do have long waits, to identify the causes.
- 5.15** So the new clinical datasets that are being introduced (see Chapter 6) will include information, for each cancer patient who begins treatment, on the key dates along the pathway: the first GP referral, or other point of entry; the first out patient appointment; the date of decision to treat and the date of first treatment. This will enable clinicians to review cases which exceed local or national targets. There may have been a good reason for the wait, for example because of a particularly complex diagnostic path or because the patient chose to defer a step in the process, but this audit process will also help identify organisational problems that need to be solved.

Staged national milestones

- 5.16** National targets will be introduced in stages. The ultimate goal is to shorten the whole period of waiting from the point of urgent GP referral up until first treatment. Milestones will be set towards this, recognising that it will be possible to make progress more quickly for some types of cancer than for others. National monitoring systems will be developed, building on local experience.
- 5.17** To help ensure progress, there will also be targeted action to cut down waits at each step along the pathway. Targets are already in place for maximum waits for urgent outpatient appointments. The next task will be to focus on waits between diagnosis and treatment.

- 5.18** A key step in the pathway of care for all cancer patients is the wait between diagnosis and treatment. The initial target will be to reduce maximum diagnosis to treatment waits to a month, with an average wait of two weeks.
- 5.19** Cutting down waits for individual steps along the pathway of care also makes it possible to plan to reduce the total wait for the period from the GP's urgent referral through diagnosis to the beginning of treatment. With a maximum two week wait in place for an urgent outpatient appointment, and with waits of two to four weeks from diagnosis to treatment, it becomes possible to set a maximum target of two months wait for the whole period from urgent GP referral through to treatment.

National Milestones

1. Acute leukaemia, children's cancer and testicular cancer

For some cancers the wait between urgent referral and treatment is already generally very short. In these cases the ultimate goal (less than one month from urgent referral to treatment) is already being achieved. Cancer networks will need to ensure that this can be guaranteed for all patients referred urgently with these cancers by 2001.

2. Breast cancer

Over 90% of women referred urgently with suspected breast cancer are already being seen within two weeks. The diagnostic phase is generally short (days). Most patients are already treated within four weeks of diagnosis.

Target

- i All patients to be treated within one month of diagnosis by 2001.
- ii All patients to be treated within two months of urgent referral by 2002.

3. Other cancers

For other cancers the two week standard for urgent referrals is only just being rolled out. The diagnostic phase can be protracted. The wait between diagnosis and treatment varies considerably according to tumour type. Progress on other cancers will depend on implementation of the major programme of investment in staff and equipment. The Department of Health will work with clinicians, cancer networks and the NHS Modernisation Agency, to firm up later milestones in the light of early local experience.

Target

- i All patients to be treated within one month of diagnosis by 2005.
- ii All patients to be treated within two months of urgent referral by 2005.

For some rare tumour types, and for some individual cases, it may take a little longer to ensure an accurate diagnosis that will enable the most appropriate treatment to be offered. Some patients may make an informed choice to defer their treatment. So there will always be a small number of cases which, for good reason, fall outside the national targets.

Targeted supporting action

5.20 The programmes of investment in diagnostic and radiotherapy equipment, and in the cancer workforce set out in Chapters 8 and 9 will help build extra capacity where that is needed. There will also be special initiatives to help tackle the key pressure points.

5.21 For example, endoscopy services, which are important in the diagnosis of bowel and stomach cancers, have been growing extremely rapidly, for example, the use of flexible sigmoidoscopy has doubled in the last five years. Around half a million people need a gastrointestinal endoscopy each year, whether for cancer or other possible disease, and waiting times for endoscopy can be long. In response:

- The National Patients' Access Team (NPAT) has co-ordinated a review of the action needed to get the best out of existing services, by redesigning systems to cut out unnecessary delays. The review recommends arrangements for GPs to refer patients directly for endoscopy, using standardised electronic referral protocols and cutting out the need for an unnecessary outpatient visit.
- The Department of Health will invest £2.5 million a year in training for GPs, nurses, surgeons and gastroenterologists to undertake endoscopy within agreed national standards for education, practice, supervision and audit.

5.22 The planned increase in histopathology training will be an important addition to diagnostic capacity. (Chapter 8)

5.23 These are ambitious targets. But it is right to be ambitious. Waits that stretch to several months can affect the outcome of treatment. And both patients and clinicians are agreed on the importance of rapid diagnosis and treatment to relieve anxieties and help patients cope with the potential threat of cancer. Progress will be phased to allow time for existing services to be streamlined and new capacity brought on stream. The process of improvement will begin immediately. Provided the NHS can recruit the staff it needs and the necessary reforms are put in place, by 2008 access to treatment – not just for some cancers, as now – but for all types of cancer, will compare with the best in Europe.

Action and Milestones

2000

- Roll out of two week maximum wait for an urgent out patient appointment for all suspected cancers completed

2001

- Maximum one month wait from urgent GP referral to treatment guaranteed for children's and testicular cancers and acute leukaemia
- Maximum one month wait from diagnosis to treatment for breast cancer
- All cancer networks enter Cancer Services Collaborative second wave
- All cancer networks set local improvement targets
- All cancer networks to commence pre-planning and booking arrangements

2002

- Maximum two month wait from urgent GP referral to treatment for breast cancer

2003–04

- Roll out of Cancer Services Collaborative complete
- Roll out of one month and two month targets to other cancer sites continues
- By 2004 every patient diagnosed with cancer will benefit from pre-planned and pre-booked care

2005

- Maximum one month wait from diagnosis to treatment for all cancers
- Maximum two month wait from urgent GP referral to treatment for all cancers

6

Improving treatment

- extension of guidance programmes to all cancers
- NICE appraisals of cancer to end postcode lottery of care
- establishment of specialist teams
- care of all cancer patients to be reviewed by specialist teams
- monitoring progress to achieve standards
- national cancer datasets
- strengthening cancer registries

6.1 Reducing the length of time a patient has to wait for diagnosis and treatment of cancer is crucial to high quality care. Equally important is to ensure that the treatment they receive is of the highest standard and quality.

6.2 In the past patients could not be confident that the staff treating them were specialists in their type of cancer. And for too many years, patients' entitlement to some cancer drugs has depended on where they live and the funding policy of their health authority.

6.3 We will get high-quality cancer services through

- Setting out an evidence-based framework for the configuration of services, high quality care and effective drugs and technologies
- Implementing the guidance with appropriate resources
- Monitoring progress to achieve agreed standards.

6.4 The 1995 Calman/Hine report and subsequent evidence-based *Improving Outcomes* guidance began this process but progress needs to be much faster and more consistent across the country. This chapter sets out the action that will be taken in each of these steps, to ensure that high quality services are provided in all parts of the country.

Guidance

- 6.5** The NHS Plan set out the intention to make available authoritative guidance on all aspects of NHS cancer care. Building on the *Improving Outcomes* series of cancer guidance reports, the National Institute for Clinical Excellence (NICE) will commission a comprehensive package of guidance on cancer services covering all cancers, including those affecting children and adolescents, over the next three years which all health authorities and NHS trusts will be expected to implement.

Cancer service guidance

Improving Outcomes in breast cancer	1996
Improving Outcomes in colorectal cancer	1997
Improving Outcomes in lung cancer	1998
Improving Outcomes in gynaecological cancers	1999
Improving Outcomes in upper gastro-intestinal cancer	2000/01
Guidance on supportive care	2001/02
Review of breast cancer guidance	2001/02
Review of colorectal cancer guidance	2001/02
Review of lung cancer guidance	2001/02
Improving Outcomes in urological cancers	2001/02
Improving Outcomes in haematological cancers	2001/02
Improving Outcomes in head and neck cancers	2002/03
Improving Outcomes in other cancers	2002/03
Review of Referral Guidelines for Suspected Cancer	2002/03

Appraisals of cancer drugs

Taxanes for advanced ovarian cancer	2000
Taxanes for advanced breast cancer	2000
13 recently licensed drugs used in:	2001
pancreatic	
lymphoma	
brain	
colorectal	
lung	
breast cancers	

The *Improving Outcomes* guidance is available on the Department of Health cancer website www.doh.gov.uk/cancer

The Taxanes Appraisals are available on the NICE website www.nice.org.uk.

Cancer drugs

6.6 Appraisals of the effectiveness of taxanes in breast and ovarian cancer were published by NICE earlier this year. A further thirteen chemotherapy treatments are currently being assessed. When the appraisals of these drugs are complete next summer there will be evidence based advice on effectiveness of chemotherapy drugs for a range of cancers including colorectal, lung, brain, breast, pancreatic and ovarian cancer. The funding for cancer announced in the NHS Plan will mean that the NHS is able to implement NICE's recommendations, tackling the postcode prescribing lottery for cancer drugs.

Implementing the guidance

6.7 A consistent theme in the *Improving Outcomes* guidance is that cancer services are best provided by teams of clinicians – doctors, nurses, radiographers and other specialists – who work together effectively. Team working brings together staff with the necessary knowledge, skills and experience to ensure high quality diagnosis, treatment and care. It also improves the co-ordination and continuity of care for patients.

6.8 For common cancers, such as breast cancer, patients treated by specialist teams are more likely to survive. For the less common cancers – stomach, pancreas and ovarian cancers – patients who are treated in hospitals that care for larger numbers of patients with that condition are likely to do better.

6.9 Progress has been made in establishing specialist teams for the most common cancers – for breast, colorectal and lung cancers – and also for children's cancers. This has been facilitated by the provision of targeted funding for each cancer type.

6.10 We now need to establish teams across the country for other cancer types as guidance becomes available. The additional resources being made available for cancer services over the next three years will mean we can make much more substantial progress than in the past. However, there will still be constraints until the planned increases in the numbers of clinicians and other essential team members are realised.

6.11 The care of all patients with cancer should be formally reviewed by a specialist team. This will be done either through direct assessment or through formal discussion with the team by the responsible clinician. This will help ensure that all patients have the benefit of the range of expert advice needed for high quality care. The service delivery plans to be prepared by cancer networks (see Chapter 11) should set out a timetable for the achievement of this standard.

Monitoring progress

- 6.12** The Commission for Health Improvement (CHI), working in association with the Audit Commission, is currently undertaking a study to review progress in implementing the Calman/Hine Report. This will provide an independent assessment of the current state of cancer services and will be a baseline against which to measure future progress. CHI will also inspect every NHS organisation every four years to assure the quality of local clinical governance arrangements.
- 6.13** Experience in several regions over the past few years has shown that regular peer review is a valuable way of improving and developing the quality of cancer services in support of local clinical governance. This enables a more focused assessment of the future development needs of local cancer services across a cancer network than the CHI inspections will be able to provide. Peer review is now being extended to cancer services in all parts of the country. The report from the peer review assessments will be made available to CHI to assist in their four-yearly inspections.
- 6.14** Peer review visits will be undertaken by multi-disciplinary teams with membership extending beyond the health authority and PCT. The panel will include relevant clinicians to facilitate peer support and development. The first round of peer review visits will begin in 2001.
- 6.15** To ensure consistency, new national cancer standards, drawn from the NICE cancer guidance and the Calman/Hine Report will be published in autumn 2000. All Regional Offices have been asked to establish Regional Cancer Steering Groups which will oversee the peer review process.
- 6.16** Performance indicators are also being introduced to measure the outcomes that will be achieved as a result of the national cancer standards and these will be integrated into the national set of performance indicators. NHS trusts will use these standards and indicators as part of their clinical governance arrangements.

Cancer information

- 6.17** Assessment of the quality of cancer treatment depends upon the availability of accurate and relevant information about the process and outcomes of care for patients. Too often though information about cancer treatment is collected on an ad hoc, local basis. The result is duplication of effort, inconsistency and gaps in information availability.
- 6.18** The need for national cancer datasets to ensure consistency of information collection was identified as a high priority in the *Cancer Information Strategy*, published in June 2000. These datasets will build on those already developed for some cancers by professional groups.

- 6.19** So the National Cancer Director, working with the NHS Information Authority and leading clinicians, is drawing up national datasets for cancer. The first datasets will be available in 2001 and will cover lung, breast, colorectal and head and neck cancers. Datasets for the remaining tumour groups will be developed by 2002.
- 6.20** These datasets will meet the needs of clinicians, cancer registries and managers. They will put an end to the duplication of effort currently entailed in gathering data. Patients can be confident that the quality of their treatment is properly co-ordinated and monitored.

Collecting data

- 6.21** The next step is to work with the clinical professions to develop information systems to enable clinicians to use the datasets. From 2001/02 funds will be made available nationally within the *Information for Health* programme to support audit database development for the clinical priority programmes including cancer.
- 6.22** In 2001/02 local health communities will be asked to give priority to support for collection and analysis of cancer data through Local Information Strategy (LIS) development. Local health communities will be required to provide sufficient support to ensure that complete and accurate cancer data can be collected and analysed on a timely basis. In collaboration with local cancer networks, it will be for each health community to decide what support should be supplied, building on existing provision in their area.
- 6.23** New initiatives to exploit the potential of information technology will facilitate the collection of cancer data.

Electronic Record Development and Implementation

Camden and Islington Health Authority and the Wirral Health Authority are currently taking part in the NHS Information Authority Electronic Record Development and Implementation Programme to develop an Electronic Health Record for cancer patients using the core cancer datasets. This will provide valuable learning and important lessons across all cancer networks.

Cancer registries

- 6.24** Cancer registries collect population based data on the incidence, survival and mortality from cancer. These data can help to identify the causes of cancer leading to strategies for prevention. Cancer registry information is also vital for assessing the effectiveness of screening programmes and cancer treatment services in improving survival rates and reducing mortality.

- 6.25** These public health benefits depend on the completeness of cancer registration in the population. The government is determined to secure the future of cancer registration and will take the necessary action to ensure this.
- 6.26** Earlier this year, Professor Charles Gillis, Director of the West of Scotland Cancer Surveillance Unit completed a major review of cancer registration in England, on behalf of the Department of Health. There is variation in data quality and not all registries are currently using electronic approaches to data collection.
- 6.27** The government will set out its plan to strengthen cancer registries, taking account of the Gillis review, in autumn 2000.

Action and Milestones

2000

- All Regional Offices to set up Regional Cancer Steering Groups

2001

- All cancer networks to assess local services against national standards as basis for peer review visits
- All Regional Offices to begin peer review visits
- All health authorities to take full account of NICE recommendations on cancer drugs
- National minimum data sets for breast, colorectal, lung and head and neck cancers introduced

2002

- All health authorities, PCTs and NHS trusts to take full account of NICE guidance on cancer services when published
- National minimum datasets for all other cancers developed

7

Improving care

- new supportive care strategy
- NICE to develop guidance for supportive care
- new training in communication skills
- improved information for patients
- new Cancer Information Advisory Group
- new internet resources for patients
- £50 million extra for hospices and specialist palliative care services
- New Opportunities Fund money for palliative care in deprived communities

7.1 The diagnosis and treatment of cancer can have a devastating impact on the quality of patients' lives and that of their families and carers. Cancer patients face uncertainty and may have to undergo unpleasant and sometimes debilitating treatments. Patients, families and carers need access to support from the time that cancer is first suspected through to death and into bereavement.

7.2 Surveys of cancer patients have shown that they give a very high priority to:

- Being treated with humanity – with dignity and respect
- Good communication with health professionals
- Being given clear information about their condition
- Receiving the best possible symptom control
- Receiving psychological support when they need it

7.3 Hospices and palliative care services in this country, largely developed by charities, are among the best in the world. But as with treatment services, the provision of supportive and palliative care services is uneven across the country. It has not been given the priority it deserves by the NHS.

Supportive care strategy

- 7.4** The National Cancer Director is leading the development of a supportive care strategy. A key element of this strategy is the development by NICE of guidance on supportive care, using the same approach as that for the *Improving Outcomes* guidance.
- 7.5** The guidance will provide evidence-based recommendations on how best to ensure patients receive high quality information, communication, symptom control, psychological support, social and spiritual support. The guidance will cover care given in the community, in hospitals and in hospices. It will also cover the needs of carers both during a patient's illness and after bereavement. The evidence relating to the benefits of complementary therapies will also be reviewed.
- 7.6** The supportive care strategy will include standards for supportive and palliative care and new approaches to monitoring the quality of services. The additional resources for cancer announced in the NHS Plan will enable the NHS to strengthen these services where necessary. Supportive care networks will be established alongside cancer networks, to improve coordination of care. These services will be of benefit to the 200,000 patients diagnosed with cancer and the 120,000 patients who die from cancer each year as well as their families and carers.
- 7.7** Whilst clinicians are increasingly undertaking audit of the treatments they give to patients, there is no comprehensive audit tool available to measure patients' experience of care. The Department of Health will commission the development of audit tools as part of the supportive care strategy.

Communication

- 7.8** Good communication between health professionals and patients is essential for the delivery of high quality care. It is also central to empowering patients to be involved in decision making. Research evidence indicates that 'a willingness to listen and explain' is considered by patients to be one of the essential attributes of a health professional (along with sensitivity, approachability, respect and honesty).
- 7.9** In practice, many complaints by patients and their relatives relate to a perceived failure of the doctors and health care professionals to communicate adequately or to show they care, rather than to problems of clinical competence.

“If only the surgeon would talk to me properly – they arrive in a group of five round my bed in hospital – and he talked quickly to me – he discussed something with them and moved on – I had no chance to ask questions... the surgeon gave me the impression he was busy BIG TIME in front of his juniors – and not caring about my feelings – however he is a clever surgeon but has a bad way with patients in the ward.”

Macmillan Cancer Relief ‘Open Space’ report (2000)

7.10 Communication skills can be taught to both doctors and nurses and such training can improve clinical practice. Despite this a large survey of hospital consultants showed that only 45% of them felt that they had had adequate training in communication skills.

7.11 This shortfall is recognised in the NHS Plan. There will be new joint training across professions in communication skills. By 2002 it will be a pre-condition of qualification that they are able to demonstrate competence in communication with patients. Advanced communication skills training will form part of continuing professional development programmes.

Support for patients and carers

7.12 Patients with cancer and their families commonly experience psychological problems. Some experience severe levels of anxiety and/or depression. Nurse specialists and other health professionals provide essential support for patients with mild psychological distress. Patients with more severe distress need access to counsellors, psychologists and psychiatrists. These services are integral to supportive care.

Information

7.13 While good face to face communication skills are vital, patients also need access to other sources of information. Studies have shown that some patients only remember one tenth of what they were told during a consultation. Face to face communication needs to be backed up with high quality, accurate information that the patient can return to in their own time.

7.14 All NHS Trusts and cancer networks are being required to make high quality information available to all cancer patients. Information must be culturally sensitive and specific to local provision of services, as well as information about the type of cancer and treatment options.

Lynda Jackson Macmillan Centre for Cancer Support and Information, Mount Vernon Hospital: cancer beacon

A support and information centre built by charitable donations in the grounds of a local hospital is an excellent example of a partnership between the voluntary sector and the NHS. It helps individuals and their families cope with the impact of cancer on their lives by offering a comprehensive range of information, support and complementary therapies and providing a source of advice for others wishing to set up similar schemes. The benefits for patients are that they have access to clear, unbiased information and a service which meets the emotional, psychosocial and physical needs of the patient and their carer or family.

Assuring the quality of information

7.15 A new Cancer Information Advisory Group is being set up, to oversee the development, content and availability of cancer information for patients. The Group, which will be chaired by the National Cancer Director, will include patient representatives and voluntary organisations. It will not produce all the information itself but will draw up guidance notes for good practice. The first tasks of the Advisory Group will be to assess current gaps in information and to prepare guidance notes.

Using the internet

7.16 Cancer patients today expect modern approaches to receiving information. A National electronic Library for Health (NeLH) will provide reliable information on the internet for the public, patients, their carers, clinicians and service providers. As a first step, this approach is being piloted for cancer. The cancer library will be launched in October 2000 and will initially focus on five cancers – breast, colorectal, lung, gynaecological and stomach cancers.

7.17 The internet offers new opportunities not just for information but for sharing experiences with others. A new database of individual patient experiences – DiPEX – will be funded, in part, by the Department of Health. DiPEX will combine people's experience of illness, through videos, interviews and written material, with the evidence of effectiveness of treatments, information about support groups and other resource materials. Initially DiPEX will concentrate on cancer, beginning with prostate cancer.

Empowering patients to improve services

- 7.18** Users and their carers should have choice, voice and control over what happens to them at each step in their care. The Expert Patient Taskforce set up by the Chief Medical Officer seeks to empower patients in their relationships with health professionals enabling them to assert control over their lives, build confidence and be active partners in their care.

Cancerlink cancer VoiCe's project

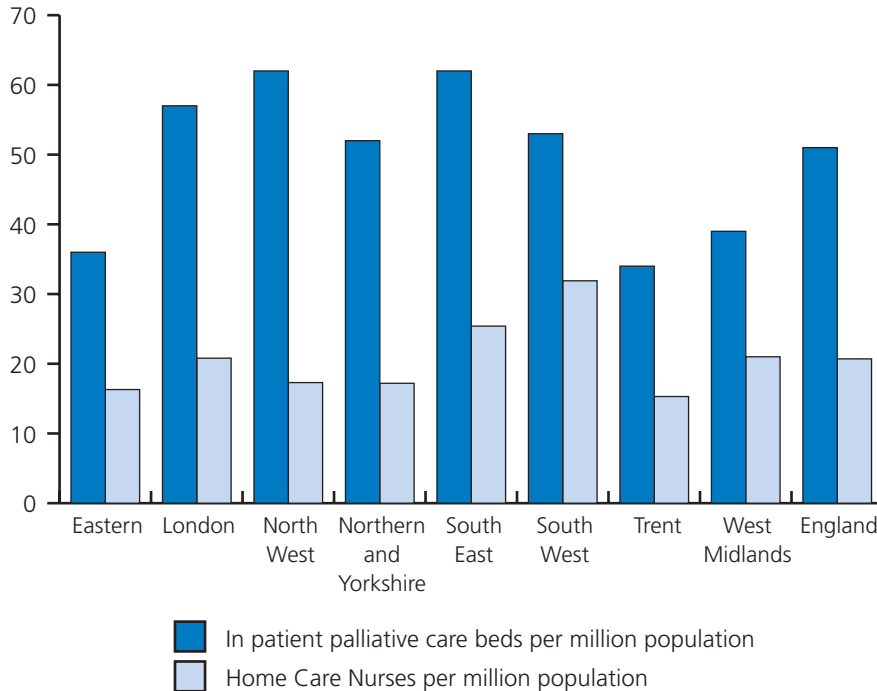
Cancerlink has a national network of cancer service users to link with existing regionally based cancer self-help and support groups. This provides cancer users with information, support and training to be more effective in helping the NHS to shape cancer services. It enables the views of a wider range of cancer service users to be heard. Evidence from cancer service users shows that training and support are essential if they are to reflect wider users' views effectively.

- 7.19** The development of the supportive care strategy has already benefited from work with cancer service users undertaken by Cancerlink on behalf of the Department of Health. At a local level cancer networks will be expected to take account of the views of patients and carers when planning services.

Palliative care

- 7.20** In the past, patients tended to be referred for palliative care only when they were in the terminal phase of their illness. But increasingly palliative care is being seen as an integral part of care; often being delivered alongside cancer treatment services. The principles of palliative care – holistic, patient-centred care – apply across all conditions and in all settings.
- 7.21** But providing the best possible care for dying patients remains of paramount importance. Many people receive excellent care from the NHS or from the voluntary sector in hospitals, hospices or at home at the end of their life, but some do not. Too many patients still experience distressing symptoms, poor nursing care, poor psychological and social support and inadequate communication from healthcare professionals during the final stages of an illness. This can have a lasting effect on carers and those close to the patient, who often carry the burden of care. The care of all dying patients must improve to the level of the best.

Palliative Care Services



7.22 Only one third of health authorities have developed strategies for specialist palliative care provision and services are uneven. Some regions have twice as many specialist palliative care beds, whether in a voluntary hospice or in a specialist NHS unit, as others. The same is true for home care nurses.

7.23 All patients should have access to the specialist palliative care advice and services that they need. For most patients, these will be provided in their homes, in the community or in hospital. Some will require the specialist facilities of a hospice. Voluntary palliative care services need to be enabled to play their full role in the cancer network, with adequate funding from the NHS.

Warwickshire Health Authority – Managed Clinical Networks Project: palliative care beacon

The Integrated Service Directorate (ISD) brings all the providers together in one forum. All the NHS specialist staff are now in a single team. Other members come from primary care (GP representatives) and from the charitably funded hospices. The ISD board decides how the funds for palliative care can best be spent for the benefit of patients wherever they live. The outcome of this is a unified service in which a patient known to one nurse, doctor or other health care worker can get the help and advice they need from any part of the service. Over time, equal access to care any time of the day or night will be available for all patients, relatives and their own family doctors.

- 7.24** For too long the NHS has regarded specialist palliative care as an optional extra. The NHS has relied upon the good will, and funding, of charities. The National Council for Hospice and Specialist Palliative Care Services estimates that the voluntary sector has been investing around £170 million a year in hospices and palliative care. Hospices have rightly argued that the NHS should invest more in palliative care services.
- 7.25** So by 2004 the NHS will invest an extra £50 million to end inequalities in access to specialist palliative care and to enable the NHS to make a realistic contribution to the cost hospices incur in providing agreed levels of service. This will mean that, for the first time ever, NHS investment in specialist palliative care services will match that of the voluntary sector. This unprecedented increase in funding will be used to ensure greater cohesion between the efforts of the voluntary sector and the NHS.
- 7.26** The Department of Health will agree with the voluntary sector the core elements of specialist palliative care which should be available for all patients. This additional investment will be targeted to support those services for patients that are agreed to be appropriate and meet national standards.

New Opportunities Fund initiatives for palliative care

- 7.27** There is evidence that black and ethnic minority communities and socially deprived groups have reduced access to palliative care services. Patients from these groups are unlikely to take up services, which are culturally unsuitable or are delivered in an insensitive way. A total of £23.25 million has been allocated by the New Opportunities Fund (NOF) for the Living with Cancer initiative. This is exclusively aimed at providing palliative care, home care support, support for carers and information about cancer and cancer services to black and minority ethnic communities and socially deprived groups. These projects will be running by the beginning of 2001.
- 7.28** In addition to the £50 million NHS funding for specialist palliative care, there will be a further NOF initiative for community palliative care services over the period 2001–2005. A consultation document on new NOF initiatives will be issued in autumn 2000.

Action and Milestones

2000

- Cancer Information Advisory Group set up by Department of Health
- National electronic Library for Health – Cancer library to be launched

2001

- All cancer networks to draw up training and development plans to ensure all health professionals working in cancer units and centres are to be trained and supported in communication skills, including a policy on breaking bad news
- Cancer networks should take account of the views of patients and carers when planning services
- All health authorities should identify current investment in specialist palliative care services and in the voluntary sector and work with cancer networks to agree investment strategies for palliative care
- Cancer Information Advisory Group to review information available for patients, identify gaps and to develop guidance on production of cancer information.
- Publication of NICE guidance on supportive care
- Publication of supportive care strategy.

8

Investing in staff

- nearly 1,000 extra cancer consultants
- increases in the number of specialist trainees
- more cancer nurses, radiographers and other health professionals
- new skills and new roles for cancer staff
- targeted training initiatives
- better planning for the future

8.1 The problems that face cancer services in this country are not due to the poor quality of the staff providing the service. The NHS has some of the best trained, most committed staff in the world. But years of underfunding and underinvestment in the NHS mean that there are not enough of them. Staff are over-worked, run off their feet and exhausted.

8.2 The NHS Plan provides for an unparalleled expansion of the NHS workforce: more doctors, nurses, therapists, scientists and technicians that make up the NHS healthcare team by 2004. There will be more money for training and development and a better, fairer deal for staff. This unprecedented investment in the staff of the NHS and their well-being underpins the measures to expand, equip and develop the cancer workforce. This is not just about increasing numbers. Outdated demarcations between staff and inadequate investment in training and development have also hampered staff's ability to deliver top quality care.

Getting the workforce we need

8.3 Past investment in the cancer workforce has been inadequate to meet the growing demand for cancer services and the requirements of new treatments. There have been difficulties establishing specialist training posts in some cancer specialties and there are marked regional variations in staffing levels.

8.4 Many hospitals can not recruit the staff they need. For example, therapeutic radiographers are essential to the delivery of radiotherapy to patients. As at March 2000, across the country, 103 therapeutic radiography posts had been vacant for more than three months – 7% of all therapeutic radiography posts. In Northern and Yorkshire region the vacancy rate was as high as 12%.

- 8.5** Inflexible demarcations between different groups of staff prevent the most effective use being made of the skill and potential of our most valuable resource. There is not enough time for adequate professional and personal development. And the NHS does not have adequate processes to capture accurate information about staff numbers, recruitment and employment trends.
- 8.6** Cutting waiting times for cancer patients and improving the quality of treatment depend upon the ability of the NHS to employ, develop and support the staff it needs. For example, at normal staffing rates, the additional linear accelerators to be installed will require around 160 extra therapeutic radiographers. And extending the breast screening programme to screen older women up to the age of 70 will require a 40% increase in its capacity.
- 8.7** The experience of the Cancer Services Collaborative shows that substantial improvements in the efficiency of services can be achieved through re-organising and streamlining care (see Chapter 5). But it has also confirmed that this approach is not sufficient in itself. A step change in the size of the cancer workforce is needed.
- 8.8** This will take time. It is the main rate-limiting factor in the improvements to cancer services set out in this plan. It takes a total of 15 years to train a consultant, including five or six years specialist training. Other professions involved in cancer treatment – such as nurses and radiographers – also take several years to train. In the meantime other action is necessary. This will include extending the careers of staff currently working in the NHS, recruiting staff from overseas, extending the roles of staff, introducing new assistant practitioner grades and action to retain existing staff by improving their career prospects and opportunities. Cancer will form part of strategies at national and local level to tackle recruitment and retention across the board.
- 8.9** The cancer workforce is diverse. Some staff, such as oncologists and therapeutic radiographers, work exclusively with cancer patients. For other staff, such as pathologists, diagnostic radiographers and surgeons, cancer care forms a greater or lesser part of their overall workload. And for some cancer patients dieticians, physiotherapists, occupational therapists and social workers provide important support.

Medical workforce

Radiologists are experts in the diagnosis and staging of cancer and in the assessment of response to treatment. Demands on clinical radiologists' time continues to grow with the increased sophistication of diagnostic and interventional techniques. Their involvement in multi-disciplinary meetings is essential if appropriate treatment regimes are to be decided.

Pathologists diagnose and stage disease, through microscopic examination of tumour specimens. Increasing numbers of pathologists are needed to meet the workload. Their involvement in multi-disciplinary team meetings and the need to review tumour specimens are adding to the pressures.

Surgeons. Surgery is the primary treatment for many cancer patients and surgeons are increasingly specialising in specific types of cancer. The consultant-based service in operating theatres both for elective work and for emergency work means surgeons' time is at a premium and insufficient theatre availability sometimes prevents optimal use of surgeons' time.

Medical and clinical oncologists specialise in the treatment of cancer using chemotherapy, radiotherapy and other non-surgical treatments. Historically this country has had fewer oncologists than other comparable countries. Demands on oncologists are rising as a result of increasing incidence of cancer, the larger number of patients being treated and the expectation that all patients have their care reviewed by oncologists working in multi-disciplinary teams.

Haematologists specialise in the treatment of leukaemia and other cancers of the blood and lymph system. They also provide support for solid tumour patients treated in local hospitals, particularly out of hours. Pressures include the increase in follow-up workload as patients live longer, the need to improve blood transfusion services and continuing support to the solid tumour service.

Palliative care specialists Many palliative care specialists work in both the voluntary and NHS sectors. There is increasing demand for specialist palliative care for cancer and for other conditions.

Other health professions

Diagnostic radiographers undertake diagnostic imaging procedures and work with radiologists and other doctors carrying out interventional procedures. There are difficulties in recruiting and retaining both trainees and qualified staff.

Scientific staff. Medical physicists, biochemists and other scientific staff provide essential input to diagnostic and therapeutic services. There are considerable difficulties in both recruiting and retaining scientific staff.

Therapeutic radiographers play a major role in the planning and delivery of radiotherapy treatment to patients with cancer. They are also involved in the care and support of patients undergoing treatment. There are difficulties in recruiting new trainees and high attrition rates from training. The proposed introduction of assistant practitioners in radiotherapy will enable the potential of therapy radiographers to be explored.

Nursing Nurses are the largest single group within the cancer workforce. There is increasing specialisation of cancer nurses as site-specific cancer teams are established. There are increasing opportunities for nurses to undertake a wider range of clinical tasks. Increasing chemotherapy workloads and the growing need for palliative care nurse specialists add to the pressures.

Oncology pharmacists Pharmacists are essential for the preparation of chemotherapy treatments and for the provision of advice on cancer medication. As chemotherapy treatments are used more widely and become more complex, the role of pharmacists who specialise in oncology becomes increasingly important.

Medical secretaries The role of medical secretaries in the cancer workforce is often neglected. They are frequently the first point of contact for patients and GPs when they phone the hospital. They have an essential role in ensuring that information about patients is communicated between clinicians and increasingly they co-ordinate multi-disciplinary team meetings.

Tackling the shortages:

More consultants, more trainees, new training arrangements

- 8.10** As a result of the new funding for the NHS announced in the NHS Plan, and the introduction of three year allocations, NHS trusts will be able to plan for consultant expansion with confidence.
- 8.11** Special priority has been given to increasing the number of training places for cancer consultants. By 2006 there will be nearly 1,000 extra cancer specialists, (based on the numbers currently in training and the expected retirement rate). This will mean an increase in the numbers of cancer doctors since 1999 of nearly a third. Extra surgeons, many of whom treat cancer are on top of this number.

Anticipated Consultant numbers

Medical (England only)	1999	2003/4	2005/6	Increase 1999–2006	% increase 1999–2006
Histopathologists	836	913	968	+132	16%
Radiologists	1,507	1,840	1,767	+260	17%
Clinical Oncologists	305	420	453	+148	49%
Medical Oncologists	110	192	265	+155	141%
Haematologists	510	639	659	+149	29%
Palliative Care Physicians	94	164	221	+127	135%
Total	3,362	4,169	4,333	+971	29%

Source: 1999 consultant numbers – DoH Workforce Census, September 1999.

Footnotes

1. These figures differ from those used by the Specialist Workforce Advisory Group (SWAG) as they relate to England only and SWAG figures include some additional groups (eg Armed Forces and locum consultants).
2. Palliative care physicians working in hospices who do not hold NHS contracts are not included in these figures.

8.12 Other specialities which are also crucial to the treatment of cancer will also be increasing. For example, over the same period the number of urologists, (who are needed to achieve reductions in waiting times for prostate and bladder cancer treatment), will increase by an extra 123 – an increase of 32%. The number of gastroenterologists, who investigate and care for patients with gastro-intestinal cancers, will increase by 208 – an increase of over 50%. And the number of general surgeons will increase by an extra 257 – an increase of 20%.

Employing new consultants

8.13 The cancer workforce strategies to be agreed by cancer networks, including NHS trusts (see Chapter 11), should set out plans to recruit the additional staff needed to implement cancer service developments. Regional Offices and the National Cancer Director will assess the viability of network plans, taking into account the total number of consultants in each specialty that will be available nationally and the need to tackle inequalities in the distribution of cancer staff.

Training more consultants

8.14 These increases in consultant numbers by 2006 will help. But the NHS will still need more cancer doctors to meet all the future demand.

8.15 The National Cancer Director is currently working with postgraduate lead deans towards setting long-term targets for cancer specialists in this country, in discussion with the professional bodies. They will take account of the targets set

in this Plan, the contribution of radiographers, nurses and other members of the cancer team and the scope for new ways of working across professions.

- 8.16** Based on these targets, the Government will increase the number of specialist training places year on year over at least the next three years to increase cancer consultant numbers by 2008 in those specialties where the NHS will not have enough.

Better distribution of training places

- 8.17** Newly trained consultants tend to remain in the area where they undertake their training. So sufficient training places and consultant posts must be made available outside London to tackle the regional inequalities in the cancer workforce.
- 8.18** Cancer networks and Regional Offices will need to identify where training capacity is currently inadequate because of the absence of suitably qualified consultants to undertake the training. Priority should be given to filling these consultant posts so that the training capacity is increased.

More capacity for consultant training

- 8.19** To increase cancer specialist numbers to meet future demands, the NHS needs to increase the number of specialist registrar posts. In the past, it has been difficult to establish additional trainee specialist posts in some specialties because NHS Trusts had to contribute 50% of the costs of basic salary for the posts even though the trainees were able to provide only limited service in the early years of their training.
- 8.20** The NHS Plan announced that from 2002 specialist registrar posts would be centrally funded, subject to reaching agreement with the medical Royal Colleges and other bodies on curricula and criteria for training recognition. The Department of Health is to consult urgently on this, linked to proposals for the new Medical Education Standards Board.
- 8.21** This new arrangement will remove the disincentives on trusts and health authorities and will ensure that the NHS can play its full role in partnership with the colleges in setting curricula and criteria for training recognition.

Histopathology

- 8.22** Special action is needed to increase the number of histopathology trainees. It has proved very difficult in the past to establish training posts for histopathology, despite the serious shortage of consultants, partly because of the intensive support trainees require in the early years. An additional 40 trainees are entering training this year but more action is needed.

- 8.23** The specialty will benefit from central funding of specialist registrar posts from 2002. A new scheme to increase the number of specialist registrars in histopathology is to be introduced. £1.3 million is being made available to fund three pilot training centres in histopathology. These will offer a three year pilot programme to deliver a new model of training to a cohort of trainees, using specially selected trainers to deliver the pathology curriculum and to develop innovative teaching methods. The centres will be up and running from 2001. As a result an extra 18 specialist registrars will be trained over the three years.
- 8.24** This scheme offers the potential to develop, evaluate and roll out new teaching methods and materials to other training centres, using information technology. The additional histopathology trainees will reduce the shortfall in consultant numbers and strengthen the diagnostic capacity of the NHS – critical to reducing waiting times – without increasing the burden on overstretched training centres.

Tackling the shortages:

More cancer nurses, more radiographers

- 8.25** While it can take six years to achieve increases in the number of cancer consultants, the numbers of other health professionals can be increased more quickly. And given appropriate training and supervision, staff can expand their roles.
- 8.26** By 2004 there will be an extra 20,000 nurses in the NHS. Cancer services need additional ward nurses, cancer site-specific nurse specialists, chemotherapy nurses and palliative care nurse specialists. These will require advanced training.
- 8.27** Local cancer service delivery plans will need to identify additional nursing requirements. Cancer network workforce strategies should reflect the additional training places needed to meet these demands. Cancer networks will need to work closely with workforce development confederations to ensure an adequate number of training places are available and that nurses are enabled to take up training opportunities.
- 8.28** The numbers of training places for radiographers is being substantially increased. In the each of the last two years there has been an increase of around 12% in the number of training places for diagnostic radiographers. In 2000/01 a 39% increase in training places for therapeutic radiographers is planned. If all the places are taken up this will mean an extra 200 therapeutic radiographers in training.

8.29 But the retirement rate means that projected staff numbers do not show the same increase.

Projected staff numbers	1999	2003/4	2005/6	Increase 1999 to 2006	% increase 1999 to 2006
Diagnostic radiographers	8,434	8,572	8,748	+314	4%
Therapeutic radiographers	1,365	1,484	1,579	+214	16%
Medical physicists	802	862	897	+95	12%

8.30 Too many therapy radiography students fail to complete their training. In some places up to 30% of students drop out of their courses. This is a waste of money and of time and potential. The Department of Health will work with training providers and commissioners to improve the quality of training, with better linkage to cancer centres, and to reduce attrition rates.

8.31 The College of Radiographers is working to raise the profile of radiography as a career among school leavers and those considering a change of career. The Department of Health is working closely with radiographers and the college in planning a Radiography Awareness Week and a new recruitment campaign for autumn 2000. The Department will also look to overcome obstacles to the international recruitment of radiographers.

Increasing capacity through new ways of working

8.32 These initiatives to increase the number of staff in training will ease the pressures on the cancer workforce and improve the service to patients. But further action is needed to tackle problems in specific areas, notably diagnostic and therapeutic radiography.

8.33 Increasingly the NHS is moving to new arrangements to make best use of the skills and abilities of its staff. New opportunities will empower staff who have previously only had supporting roles. They will promote autonomy and increase job satisfaction.

8.34 These new approaches are being applied to diagnostic radiography, for example, to increase the capacity of the breast screening programme.

Skill mix in diagnostic radiography

The NHS Breast Screening Programme (NHSBSP) has recently undertaken a review of its demand for both radiologists and radiographers. This work highlighted a growing shortage of both professions and has resulted in the piloting of a new and innovative model of service delivery. This model is based on a tiered structure that will introduce assistant practitioners in mammography who will be educated and trained to take mammograms as well as developing the mammography radiographer to an advanced level which will include the reading of mammograms. This inclusive team based approach will be piloted in four sites: Bolton, Bury and Rochdale; South Derbyshire; Norfolk and Norwich; and Warwickshire, Solihull and Coventry and will commence in October 2000. National occupational standards are being developed to support the education and training required to deliver this.

- 8.35** The difficulties faced by the NHSBSP in recruiting sufficient radiologists and radiographers are by no means unique to them. Cancer therapy centres are also experiencing similar difficulties. A skill mix pilot in therapeutic radiography based on the tiered structure identified above will commence in November 2000. This will look at the service from an inclusive team-based approach that places patients' needs firmly at its centre.
- 8.36** Similar opportunities will be developed in other areas of care. Discussions are taking place with the Royal College of Pathologists and the Institute of Biomedical Scientists to develop an advanced practitioner grade in cervical cytopathology (see Chapter 3).

Increasing flexibility and capacity by developing new skills

- 8.37** Reducing waits for diagnosis and treatment and improving palliative care services are two key objectives of this Cancer Plan. New national workforce training initiatives will support their achievement.

Endoscopy

- 8.38** Endoscopy is a key diagnostic procedure for gastro-intestinal cancers. These services are provided by a range of clinicians including surgeons, physicians and nurse practitioners. Demand for endoscopy is increasing year on year and will increase further if and when colorectal screening is introduced. All staff undertaking these procedures require appropriate training.

8.39 New funding is being made available to train more GPs, nurses, surgeons and gastroenterologists to meet the rising demand for endoscopy. £2.5 million will be made available for this initiative.

Palliative care for community nurses

8.40 New funding is also being made available to support nurses responsible for providing community support to patients with cancer. Chapter 4 sets out details of a new £2 million initiative to provide additional training and support for community nurses in the general principles of palliative care.

Better deal for staff

8.41 The NHS Plan set out wide-ranging new initiatives to improve the working lives of NHS staff which will benefit cancer staff. Improving the working lives of staff contributes directly to enhanced cancer services through improved recruitment and retention. Offering new opportunities for development and extended roles will open up new career opportunities for staff who have previously faced restriction and dead ends.

8.42 For the first time the way NHS employers treat staff will be part of core NHS performance measures and linked to the resources trusts receive. The Improving Working Lives Standard has been published setting out a model of good HR practice against which NHS employers will be kite-marked. The Standard summarises the commitment expected from NHS employers to create well managed, flexible working environments that support staff, promote their welfare and development and respect their need to manage a healthy and productive balance between their work and their outside life.

8.43 *The Nursing Contribution to Cancer Care*, published in June 2000, sets out the contribution and impact that cancer nurse leaders can make to the national cancer programme through improvements to:

- organisation, management and quality of care and services
- workforce planning
- education, training and continuing professional development
- recruitment, retention and career pathways
- leadership

A new study of the development, delivery and evaluation of nursing services in England is underway and will report in spring 2001.

8.44 A Human Resources Strategy for the Professions Allied to Medicine will be launched later in the year and will highlight the important role that these professions play in implementing the NHS Plan and the government's plans for supporting and developing the workforce. The strategy will be supported by:

- Roll out of education reforms to provide more flexible courses and widening of entry gates
- Funding to support leadership development
- Funding for return to practice initiatives
- Development of the therapy consultant role

8.45 Later on a Human Resources Strategy for healthcare scientists will be published.

Recruiting and retaining staff

8.46 A recruitment campaign is underway in the NHS as part of a three year strategy to improve the image of the NHS as an employer and secure more recruits into the health care professions that contribute to the cancer health care team. Initially targeted at nursing, the 'Join the Team' campaign has been designed to have wider appeal across all healthcare professions, including radiography and physiotherapy.

Return to practice

8.47 The NHS needs to make the best use of experienced staff and encourage those who are no longer practising to come back to work in the NHS. National and local return to practice initiatives have been successful in bringing nurses back into the cancer workforce. Some qualified radiographers no longer work in the NHS. The return to practice campaign, originally targeted at nursing, is now being extended to radiographers and other professions.

8.48 This initiative includes setting up return to practice programmes, recruitment materials targeted at radiographers and national workshops to spread good practice and support trusts in their recruitment campaigns. The Department of Health will also write to potential returners to highlight the way the NHS is changing and to give them information about how they could come back to work in the NHS.

Improving pay

8.49 The Department of Health is working with trade unions and other professional representatives on new and fairer pay arrangements for NHS staff. The new system will reward staff for what they do rather than for their job title and will recognise flexible team working across traditional skill boundaries. There are a range of

problems affecting pathology staff and a working group of the National Advisory Group on Scientists and Technicians, made up of representatives of employers and staff side organisations, is considering how to address the problems of this key group of staff. The NHS will need to move quickly to increase incentives for staff to join or rejoin the NHS in those parts of the country where labour shortages are most serious. As part of the NHS plan, a new market forces supplement is proposed to top up the pay of staff in areas where there are labour market shortages.

Developing the cancer workforce

- 8.50** All NHS staff need to ensure they are up to date with professional and service developments and are fully able to deliver a quality service to patients. Continuing professional development must be grounded in service quality and clinical governance requirements and be firmly linked with individual appraisal and personal development planning. The NHS Plan announced that an extra £140 million will be made available for continuing professional development.
- 8.51** Education and training for cancer staff will need to underpin cancer network workforce strategies. All cancer service providers will be required to draw up a written training strategy for cancer clinicians, both medical and non-medical. Multi-disciplinary training will support and develop the effectiveness of the specialist multi-disciplinary teams providing cancer care.

Training for leadership

- 8.52** Implementing the changes for cancer care and putting the new network arrangements in place will place a substantial management burden on key staff in the cancer teams, for which they may not have been adequately trained. A survey of cancer consultants' perceptions of their own training needs found that only 20% felt they had had adequate management training.
- 8.53** This situation is common across the NHS. Improved leadership is vital to the modern NHS. The NHS Plan recognised that service modernisation relies upon staff – especially those in clinical posts – having the time and space to redesign and re-organise their services. The experience of the Cancer Services Collaborative has also demonstrated the necessity of this.
- 8.54** The new Leadership Centre for Health will be in place by 2001. The Centre will promote leadership development closely tied to the Modernisation Agency's work to deliver improved patient services, including the roll out of the Cancer Services Collaborative. It will provide tailored support for clinicians and managers, both those with potential and those already in leadership roles. Lead cancer clinicians will be included in the target groups of staff.

Planning for the future

- 8.55** Changing patterns of service provision and new expectations must be translated into programmes to train, develop and recruit the workforce to meet the demand in the short, medium and longer term.
- 8.56** A review has been conducted of workforce planning arrangements for all professional groups within the NHS. It considered the roles and responsibilities at all levels and the opportunities and barriers for effective workforce planning. Following consultation on the review's proposals, detailed implementation plans are now being drawn up. They will be published in autumn.
- 8.57** The National Cancer Director will work closely with the proposed National Workforce Development Board that will have responsibility for setting, in a multi-disciplinary context, the strategic direction for workforce development issues, and with the Royal Colleges to refine and develop calculations of the target number of consultants in each specialty.
- 8.58** But action also needs to be taken at a local level. Cancer networks and NHS Trusts will need to give early priority to developing workforce planning arrangements for cancer. All cancer networks will need to prepare and agree workforce plans to implement their cancer service strategies. These will be consolidated at national level to inform national workforce planning and training numbers.

Action and milestones

2000

- Pilot sites for new radiography skill mix start.

2001

- Cancer networks to develop workforce plans including education and training
- New pilot histopathology training centres set up
- National targets for consultant numbers
- Endoscopy training scheme introduced

9

Investing in facilities

- substantial investment from New Opportunities Fund
- additional funding in NHS Plan for 50 MRI scanners, 200 CT Scanners and 45 linear accelerators
- modernisation of pathology services
- first ever cancer facilities strategy
- national audit of major cancer diagnostic facilities
- new partnerships with the private sector

9.1 The decades of underfunding of the NHS have taken their toll on cancer equipment and facilities. Staff have to struggle with ageing, unreliable equipment; patients have to wait for diagnosis and treatment because of inadequate provision of essential equipment and facilities.

9.2 Cancer facilities are unevenly distributed across the country. And the further away a patient lives from a radiotherapy centre, or the lower the number of linear accelerators in the area, the less chance the patient has of being referred for treatment. The *Survey of Radiotherapy Provision*, commissioned by the Department of Health and published in June 2000 www.doh.gov.uk/cancer highlighted the inequalities across the country in access to radiotherapy. The same is true of equipment for diagnosis of cancer.

9.3 Addressing regional imbalances requires planning and cannot be achieved overnight. It takes some 18 months from the time of ordering an additional linear accelerator until it is able to start treating patients. New concrete bunkers are needed to house the equipment. Once installed in the bunker, up to six months of checks and calibrations are needed to ensure the machine will function safely.

9.4 Putting right these decades of under-investment will take time. There are limits to the number of new machines and new buildings that can be manufactured and installed each year. We have already made a start.

New Opportunities Fund

£93 million from the National Lottery New Opportunities Fund is being used to buy:

- 226 mammography machines,
- 46 ultrasound units and
- 60 trailers for the Breast Screening Programme,
- 33 MRI scanners to support the accurate diagnosis and staging of cancer patients
- 56 linear accelerators.

This means that all linear accelerators over 11 years old in 1999 are being replaced and an additional 14 new machines are being purchased to start to tackle inequalities in access to radiotherapy.

9.5 On top of the equipment being funded through the New Opportunities Fund (see above), as a result of the NHS Plan, over the next three years there will be a further 50 new MRI scanners, 200 new CT scanners and 45 linear accelerators. This will mean that the NHS meets the Royal College of Radiologists' current recommendation of 4 linear accelerators per million population. Funding has been made available for modern treatment planning computers and simulation equipment so that the full benefits of all the linear accelerators purchased can be realised. A further £15 million is being invested to support modernisation of 23 pathology services.

Putting the equipment to best use

9.6 It is essential that this huge investment is targeted in the right places. So for the first time in this country, a national cancer facilities strategy will be developed to ensure an adequate and equitable supply of up to date equipment.

9.7 The Department of Health has already published data on radiotherapy services across the country. Cancer networks will be asked to undertake an audit of major cancer diagnostic facilities including CT and MRI scanning, nuclear medicine and endoscopy facilities.

9.8 Regional Offices will then work with cancer networks to draw up regional cancer facilities strategies to keep the stock of equipment up to date and to work towards a fair distribution of equipment. These regional strategies will inform a national

cancer facilities strategy, to be drawn up in discussion with the professional bodies. This will enable the new funding to be used most appropriately to reduce inequalities across the country.

- 9.9** The early phases of central initiatives have been targeted at replacement of equipment. To build on the progress now being made it is essential that every Regional Office's capital investment strategy includes plans to maintain and replace its cancer equipment at appropriate intervals.

Partnership with the private sector

- 9.10** In implementing this expansion we will explore fully the scope for public private partnerships with service providers and the industry, particularly in relation to pathology and imaging. Where new ways of working offer advantages to patients they need to be implemented.
- 9.11** The government expects to see longer-term arrangements emerge between the public and private sectors that will produce benefits not just in the supply of equipment but also in making best use of facilities throughout the lifetime of a contract. These arrangements might include, for example, management of facilities, support and maintenance of services and upgrades and replacement of equipment.
- 9.12** These new partnerships will extend over a number of NHS organisations rather than being restricted to a single NHS trust. Public private partnerships offer new ways to organise services in a way which improves services for patients and provides them with access to the latest expertise and technology where and when they are required.

Action and Milestones

2001

All cancer networks to audit diagnostic facilities

All Regional Offices to develop regional cancer facilities strategies

National cancer facilities strategy to be prepared

10

Investing in the future: research and genetics

- new National Cancer Research Institute
- additional investment in research infrastructure
- additional investment in prostate cancer research
- partnership with cancer charities for new genetics research
- partnership with Macmillan Cancer Relief on genetic counselling

Research

- 10.1** Research into all aspects of cancer is essential if the burden of the disease is to be reduced as quickly as possible, and for the benefit of future generations. Laboratory research is needed to understand the genetic and cellular changes which lead to cancer. The genetic revolution provides major opportunities for identifying people at risk of cancer and for developing better treatments. Epidemiological research is needed to understand the causes of cancer. Research is also needed to develop better ways of detecting and treating cancer and to improve cancer care.
- 10.2** Cancer research is a worldwide endeavour to which the UK is a major contributor. This country has some of the best laboratory and clinical scientists and epidemiologists anywhere in the world. We have centres of excellence funded by a combination of government, cancer research charities and industry.
- 10.3** The government is committed to increasing its funding for cancer research so as to play a full part alongside its funding partners. The NHS Plan demonstrated this commitment. By 2003 we will be investing an additional £20 million each year in the infrastructure for cancer research and an extra £4 million on prostate cancer research. This new funding will mean that for the first time government (through the Department of Health, the Higher Education Funding Council and the Research Councils) will match the current investment of the voluntary sector.
- 10.4** But there are weaknesses in the cancer research endeavours in this country. There has been insufficient high-level strategic planning and co-ordination between the

different funding partners. The infrastructure for clinical research has been inadequate and there has been insufficient support for specific areas of research which could lead to important improvements in service delivery.

National Cancer Research Institute

- 10.5** In response to concerns about the co-ordination of cancer research a Cancer Research Funders Forum (CRFF) was established in 1999. This forum comprises the major research funders in the UK including the Department of Health, Medical Research Council, the Imperial Cancer Research Fund, the Cancer Research Campaign, The Leukaemia Research Fund, the Ludwig Institute and Marie Curie Cancer Care.
- 10.6** The CRFF has been a great success and has played a key role in developing the NHS Cancer Research Network announced in the NHS Plan. At the government's request it has commissioned a review into prostate cancer outlining opportunities for new research initiatives which the government will take forward with its funding partners. This will be published shortly.
- 10.7** But we need to go further in planning and co-ordinating the drive on cancer research. So the Director of NHS Research and Development and the National Cancer Director have been asked to work with all those involved in the funding and delivery of cancer research to come forward with definitive proposals for a National Cancer Research Institute (NCRI). The NCRI will be a partnership between government, the voluntary sector and the private sector. The Institute will have strategic oversight of the cancer research conducted in this country. It will take the lead in identifying areas where further research initiatives are needed and most likely to lead to progress.
- 10.8** The government shares the view of the cancer research charities and the large majority of cancer researchers that a decentralised model for cancer research will achieve the best results and that a single large "bricks and mortar" institution would not be desirable. The National Cancer Research Institute will provide the focus for cancer research conducted across the country.
- 10.9** One of the key tasks for the NCRI will be to co-ordinate research into cancer genetics funded by government, charities and industry. This country should be at the forefront of this rapidly evolving area.

NHS Cancer Research Network

- 10.10** Support for the infrastructure for clinical research into cancer was identified as the highest priority in a review of cancer research priorities undertaken by the Department of Health in 1999. The government responded to this need in the NHS Plan by committing funds for development of a NHS Cancer Research Network (NCRN) across England. The NCRN will be an integral part of the new NCRI.
- 10.11** The NCRN will provide a world class base for the conduct of clinical trials and other well designed research within three years. The NCRN will be a managed research network mapping onto the cancer service networks across the country. The NCRN will provide dedicated research nurses, data managers, medical staff sessions and information systems needed for high quality clinical research, together with research support for radiology, pathology, pharmacy and radiotherapy. The quality, speed and co-ordination of clinical research will be enhanced and research will be better integrated with cancer care.

Support for high priority areas of cancer research

- 10.12** In addition to the establishment of the NCRI and the NCRN, the Department of Health will continue to support research and development undertaken within the NHS through its 'Support for Science' funding. The government will also support specific programmes of cancer research in areas of high priority. These will include epidemiology, prevention, screening, genetics, primary care and supportive and palliative care.

Learning from research

- 10.13** As well as undertaking new research, it is vital that we make the best use of existing research to plan for the future. The Department of Health is a founding and major funder of the Cochrane Collaboration. With support from the MRC the Cochrane database now contains over 50 systematic reviews related to cancer from around the world. Evidence-based reviews funded by the Department of Health have underpinned the development of the *Improving Outcomes* guidance on cancer services.
- 10.14** The Department of Health will commission further reviews to ensure that future cancer guidance from NICE is informed by the most up to date evidence. The Health Development Agency will undertake reviews related to the prevention of cancer. The National Horizon Scanning Centre will keep abreast of emerging technologies and treatments for cancer.

Genetics

- 10.15** Genetic science is progressing rapidly. Over coming years our expanding knowledge of cancer genetics will have a major impact on our ability to predict an individual's level of risk of developing cancer; our ability to detect and diagnose cancer early and our ability to select treatments which are most likely to be effective. Ultimately the genetic revolution may lead to ways of preventing cancer.
- 10.16** But there are major uncertainties. We do not know the exact timing or the overall impact of these advances. By no means everyone will wish to know whether they are at increased risk of developing cancer. It is not yet clear to what extent specific prophylactic treatments or changes in lifestyle will reduce the risk to those who have inherited a susceptibility to cancer. More research is urgently needed.
- 10.17** Advances in genetics will lead to a greater understanding of inherited susceptibility to cancer. The relative influence of genes on cancer development is variable and ranges from situations where genetic factors predominate and are highly predictive of disease development, to others where they play only a minor role in modifying the effect of environmental exposure to toxic substances.
- 10.18** There are three distinct situations where genetic testing may be used.

- Relatively rare cancer syndromes (for example retinoblastoma, Peutz-Jeghers, Li-Fraumeni, von Hippel-Lindau and multiple endocrine neoplasia) which are caused by single gene defects and which have clear patterns of inheritance. In these cases genetic testing is used to confirm diagnosis or to predict disease development in asymptomatic individuals.
- Subsets of common cancers which are due to, and follow the inheritance pattern of, single gene defects but where environmental or other factors influence the development of disease. In these cases, presence of the gene defect (for example BRCA1 and BRCA2 for breast or ovarian cancer or MLH1 and MSH2 for colorectal cancer) significantly increases the risk of getting the cancer and indicates that better surveillance and/or the deployment of early prophylactic measures may be appropriate.
- The majority of common cancers where disease development is dependent on complex interactions between several gene variants and environmental factors. Genetic testing in this area will determine the probability of an individual developing cancer and will facilitate the introduction of life style modification programmes aimed at lowering the risk to reduce the incidence or prevent the disease.

10.19 Further research is needed in each of these areas and an evidence base will be needed to determine what services will be required. The types of tests developed and the ways in which genetic services are developed will vary. For example, some tests for rare conditions will necessitate detailed analyses of gene structure in specialist laboratories linked to expert clinical genetics services. Tests for the common cancers may require high throughput, low cost screening techniques which may be undertaken in large centralised laboratories or close to the patient depending which technologies are developed. It is difficult to predict accurately how genetic services to detect the inherited cancers or for predisposition testing will be delivered in the future.

Cancer genetic services

10.20 Despite the gaps in knowledge, patients are already seeking advice on whether they are at increased risk of developing cancer because of a history of cancer amongst their relatives. They need access to the best advice currently available, to genetic testing where this is appropriate and to surveillance and treatment programmes if these can reduce their subsequent risk. NICE is currently developing guidance on the management of women with increased familial risk of breast cancer.

10.21 At present services are poorly developed. Primary care teams do not always have ready access to the information they require to assess whether a patient is at low, moderate or high risk. In the hospital sector the NHS has few expert geneticists working in the field of cancer. NHS laboratory services are not fully geared up to be ready for the genetic revolution.

10.22 Cancer genetic services need a strategic framework to develop further. The report of an expert working group on genetics and cancer forms the basis of such a framework. The Harper report recommended that cancer genetic services should reflect the Calman/Hine service framework and that primary care should be the principal focus for cancer clinical genetics. The report recognised that educational initiatives, information technology developments and referral guidelines would be needed to help primary care in this new and developing field.

New initiatives for cancer genetics services

10.23 Building on Macmillan Cancer Relief's experience over recent years in this field, the Department of Health will work in partnership with Macmillan to develop new services to improve cancer genetic risk assessment and counselling. This will involve working with primary care teams to assist them to identify the level of risk for individual patients based on their family history. The wider use of computer software developed by cancer research charities will be explored. For patients who are found to have a moderate or high risk of developing cancer, the partnership with Macmillan Cancer Relief will lead to the development and evaluation of counselling services, through the appointment of genetic counsellors working within cancer networks with links to regional genetic services.

10.24 The National Screening Committee will keep under review the evidence for and against population genetic screening for different cancers, in particular for colorectal and breast/ovarian cancers.

10.25 Common datasets will be developed for the collection of information by cancer genetics services.

Looking to the future

10.26 The genetic makeup of an individual may determine how effective a particular medicine is and the risk of adverse side-effects. Research in this area, known as pharmacogenetics, is accelerating as a result of the human genome project. Genes affecting the metabolism of more than twenty drugs, including anti-cancer agents, have been identified.

10.27 In the future, successful chemotherapy is likely to become increasingly dependent on understanding an individual's genetic background. In partnership with other cancer research funders, we will promote the development of pharmacogenetic studies in the area of cancer chemotherapy.

10.28 All cancer cells contain genetic changes (somatic mutations) which develop during tumour evolution. These changes are not inherited but genetic technologies can potentially be used to improve the detection of cancer cells and to determine which treatments are most likely to be effective. We will keep research in this area under careful review and the likely impact on pathology provision.

Action and milestones

2000

- Consultation on National Cancer Research Institute with funding partners commences

2001

- NHS Cancer Research Network commences
- Development of cancer genetics services (in partnership with Macmillan) commences
- National Screening Committee keeps evidence for and against population genetic screening under review

2003

- NHS Cancer Research Network fully established

11

Implementing the NHS Cancer Plan

- additional £570 million by 2003/04 for cancer services
- implementation of cancer service improvements by cancer networks
- cancer networks develop strategic service delivery plans
- network workforce, education and training and facilities strategies to underpin service delivery plans
- cancer network commissioning pilots to be established

11.1 This Cancer Plan sets out action to improve the speed, quality and equality of cancer services. It builds on the far-reaching changes for health services set out in the NHS Plan. Services will be shaped around the needs of patients, standards of care and treatment will improve, staff will be better supported and valued.

11.2 Implementing the changes in this plan will require resources, leadership and better systems for planning cancer services. The government is putting all three in place.

Funding for cancer services

11.3 In the past clinicians and managers have been unable to deliver the changes to services that were needed because services were underfunded. The NHS Plan put an end to that obstacle when it announced substantial increased funding for the NHS. Cancer services will receive an additional £280 million in 2001/02, £407 million in 2002/03 and £570 million by 2003/04.

11.4 This money will mean that local clinicians and managers will be able to invest for change. They will be able to put in place more efficient, more equitable services, to implement the strategy and milestones set out in this Cancer Plan and to deliver the following objectives:

- Stronger support for action on smoking
- Increased access to diagnostic investigations
- Cancer waiting times targets for diagnosis and treatment

- Full implementation of NICE service delivery guidance (*Improving Outcomes* guidance)
- Full implementation of NICE appraisals of cancer drugs
- Increased investment in specialist palliative care services

Reducing inequalities will be a theme in each of these.

Leadership for change

- 11.5** Money on its own is not enough. National and local leadership is needed to support and drive change in NHS cancer services.
- 11.6** The National Cancer Director will lead the action to implement this Cancer Plan. He will work with cancer networks, Regional Directors and professional bodies to drive up standards across the country, to take forward further work to tackle problems and to ensure that resources are used to best effect.
- 11.7** A new Cancer Taskforce will be established to drive forward the implementation of the plan. It will be chaired by the National Cancer Director and will include patient representatives, clinicians and managers.
- 11.8** By being clear about national priorities and setting national standards, local services are empowered to deliver the quality service that patients expect.
- 11.9** It will be for local organisations, working together in a cancer network, to develop strategic plans and put them in place, to agree how best to use resources for cancer and to implement processes to monitor the quality of care through clinical governance. Regional Offices will oversee and co-ordinate the work of cancer networks.

Cancer networks

- 11.10** The Calman/Hine Report broke new ground when it recommended networks of cancer care, reaching from primary care to cancer units, treating the more common cancers and assessing and diagnosing rarer cancers, to cancer centres, treating the rarest cancers and providing highly specialised treatment such as radiotherapy and bone marrow transplantation.
- 11.11** Cancer networks will be the organisational model for cancer services to implement this Cancer Plan. They will bring together health service commissioners (health authorities, primary care groups and trusts) and providers (primary and community care and hospitals), the voluntary sector, and local authorities. Each network will typically serve a population of around one to two million people.

- 11.12** Cancer networks will need effective management. Close involvement of the chief executives of provider NHS trusts and health authorities and PCTs will be essential as will that of lead clinicians. Through cancer networks, services can be planned across the care pathway for cancer patients with resources targeted where they are most needed to serve the cancer needs of their local population – which may not be in the local hospital. Seamless care is promoted and alliances can develop to help reduce the risk of cancer, through action on smoking and diet.
- 11.13** Cancer networks have already proved very effective in many areas – notably the nine networks involved in the Cancer Services Collaborative. Resources have already been made available to support the infrastructure of cancer networks. Support and organisational development facilities will be available to regions and networks. And the NHS Modernisation Agency will work with cancer networks over the next two years to roll out the Cancer Services Collaborative initiative to all cancer networks.

Planning and commissioning cancer services

- 11.14** Cancer networks will work together to develop strategic service delivery plans to develop all aspects of cancer services – prevention, screening, diagnosis, treatment, supportive care and specialist palliative care. They will agree common protocols and service patterns to tackle variations and to make best use of resources. Workforce, education and training and cancer facilities strategies will be needed to underpin these delivery plans.
- 11.15** Health authorities, PCTs and service providers in a network will need to look together at the investment in cancer services needed to implement the network strategy, recognising that patients will be treated in different settings across a cancer network. So they will need to work together on the development of the strategy and then to follow it through in planning their own contributions to implementing it.
- 11.16** So cancer service delivery plans will be fully integrated within the wider planning process. Local health bodies will deliver their agreed contribution to network plans through the HImP and SaFFs process, in line with developments from the NHS Plan. Guidance on the timing and requirements of the planning process will be issued shortly.
- 11.17** The NHS Plan set out the government's intention to pilot radical new forms of clinically-led care. Pilots will be set up in a small number of cancer networks to assess the feasibility of commissioning the totality of cancer services at network level.

Commissioning services for rare cancers

- 11.18** Some aspects of cancer care will not be provided in every cancer network. This will particularly apply to low-volume, high-cost procedures that require highly specialised expertise or facilities.
- 11.19** Regional Specialised Commissioning Groups (RSCG) are responsible for commissioning these aspects of cancer care. For very rare conditions or treatments, the National Specialised Commissioning Advisory Group (NSCAG) has responsibility for commissioning. Somewhat different approaches to regional commissioning have been taken across the country.
- 11.20** We will build on the experience from RSCGs and NSCAG to develop a more consistent approach to the commissioning of those cancer services which will not be provided within every cancer network.

The reform programme

- 11.21** This Plan sets out an ambitious programme of action to modernise NHS cancer services. Like the NHS Plan, it depends upon investment and reform. The changes necessary will be phased in over five years to allow rapid but manageable progress towards targets and service improvements.

Action and milestones

2000

- Configuration of cancer networks agreed
- HImPs and SaFFs reflect immediate action necessary to deliver the Cancer Plan, in line with emerging network plans.

2001

- All cancer networks to draw up three-year service delivery plans in line with this Cancer Plan and other cancer guidance
- All cancer networks to draw up workforce, education and training and facilities strategies to underpin the cancer network service delivery plan

The NHS Cancer Plan: next steps

1. The National Cancer Director will:

- chair National Cancer Taskforce to drive forward implementation of the NHS Cancer Plan (para 11.7)

2. Regional Offices will:

- agree configuration of cancer networks by November 2000 (para 11.9)
- oversee peer review visits from 2001 (para 6.15)
- review cancer network service delivery plans (para 11.9)
- develop regional cancer facilities strategies by 2001 (para 9.8)

3. Cancer Networks and their members will:

- by 2001 develop strategic service delivery plans to cover all aspects of cancer services (para 11.14)
 - prevention
 - screening
 - diagnosis
 - treatment
 - supportive care
 - specialist palliative care

- by 2001 develop underpinning strategies (para 11.14) on
 - workforce
 - education and training
 - cancer facilities

Health authorities, PCTs and NHS trusts reflect emerging network plans in Health Improvement Programmes and Service and Financial Frameworks (para 11.16).

- plan targeted action to reduce inequalities in smoking in line with new national and local targets (para 2.8–2.9)
- enter Cancer Services Collaborative second wave (para 5.11)
 - set local improvement targets (para 5.14)
 - begin booking arrangements (para 5.13)
 - implement national waiting times targets (Chapter 5)
- review current palliative care service provision with voluntary sector partners and prepare to implement Supportive Care Strategy (Chapter 7)
- from 2001 implement emerging NICE guidance on
 - organisation of cancer services (para 6.5)
 - cancer drugs (para 6.6)
- from 2001 put in place cancer site specific multidisciplinary teams and ensure all patients are reviewed by them (paras 6.10–6.11)
- assess local services against national standards as basis for peer review visits (para 6.14)



This document can be found on the internet at www.doh.gov.uk/cancer

The NHS Plan itself can be found on the internet at www.nhs.uk/nhsplan

Further copies of this document and copies of a Summary of the NHS Plan are available free of charge from:

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Produced by Department of Health

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