Launch Version 13 July 2015

AN ASSOCIATION OF CANCER PHYSICIANS' STRATEGY

FOR IMPROVING SERVICES AND OUTCOMES FOR CANCER PATIENTS

The Association of Cancer Physicians Executive Committee*

***Drafting group**

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SUMMARY

In the Association of Cancer Physicians' new strategy for medical oncology in the UK, we are taking a broad view of developments which will bring benefits to cancer patients and identifying the contributions which we can make to achieving these goals. Our consultants and their teams have contributed substantially to improvements in cancer outcomes over the past 25 years. We are greatly encouraged that over 50% of UK cancer patients now survive their disease for 10 years or more. We are at a time not only of unprecedented acceleration of knowledge with regard to all aspects of cancer, but also of rapid change in terms of patient management and new therapies. To deliver better outcomes for patients, we must overcome challenges over the next decade such as increased demand for cancer services and financial constraint in the NHS.

We believe that our new strategy will further improve outcomes for our patients by guiding continued improvement in the quality of our own professional practice and help support collaborations with the many other disciplines and professions involved in cancer care. We are committed to working with our patients and colleagues to improve the outcomes for cancer patients so that 75% survive for 10 years or more, with improved patient experience and quality of life, within the next couple of decades. To contribute to this vision, over the next 3-5 years the Association of Cancer Physicians (ACP) will work to achieve three broad goals:

- **the delivery of excellent and safe medical oncology for all patients.** We will continue the development and strengthening of multidisciplinary, specialised and patient centred care. Improved patient care will be delivered by adequate numbers of highly trained medical oncologists, through engaging closely with patients to understand their needs, and informed by high quality research and innovation. Increasing incidence of cancer means that patient demand for medical oncology services may outstrip our ability to provide enough clinicians to care for patients at the highest standards. This must be addressed by training, recruiting and retaining more medical oncologists and by developing innovative ways of working. Additionally we will aim to support the ongoing education of our medical colleagues, allied health professionals and patients about cancer and its management. We will ensure that training standards remain high and that the discipline grows to a consultant number that can ensure safe and excellent cancer care for patients across the UK. We will grow the number of medical oncology consultants until there is more than one full time equivalent (FTE) consultant for every 100,000 people in the UK, aiming to do so by 2020 and then approaching 1.5 FTE consultants per 100,000 people as soon as that is possible. This will require the right numbers of trainees so that the workforce is sustainable in the long term.

- **a substantial contribution to the overall development of NHS services** and help to cope with the challenge the NHS faces dealing with acute cases and the medical problems of the aging population. We will do this by developing cancer services to cope effectively with these pressures and hence relieve pressure on other parts of the NHS. We particularly identify two areas of growth in the demand for cancer care, acute oncology and the care of older cancer patients. Most medical oncologists will increasingly engage in these areas. Although consultant medical oncologists will not undertake unselected general medical acute duties, these two activities will be a substantial contribution to the challenges faced by the NHS.

- **a substantial contribution to the development of innovative approaches to cancer care**. We will collaborate closely with primary care and all of the other relevant specialties and groups of health professionals, to develop new ways to provide access to high quality diagnosis, prevention and treatment. We will better exploit modern health informatics, and better support the rapidly growing number of cancer survivors. We will develop and support the rapid adoption of evidence-based innovations arising from biomedical sciences to create a more precise approach to oncology, providing patients with a higher probability of success and a lower probability of toxicity.

This strategy will be delivered over the next 3 – 5 years, but we will manage the strategy with annual review of progress - updating and resetting the objectives for each year. These goals will be delivered through 12 specific commitments. This **work must be specific, measurable, achievable, realistic and timely** and we are identifying a series of **specific actions and measures** for success, and leadership roles, for each of our commitments.

We will **share and converge our goals and commitments** with the other clinical and non-clinical bodies that are engaged in improving outcomes for cancer patients. We work as part of the Royal College of Physicians (RCP) and work closely with all of the other relevant Royal Colleges. There is a special need to ensure that we work with colleagues in Clinical Oncology in the Royal College of Radiologists (RCR) and converge our strategies and share workforce plans[2]. We have shared our strategic planning with the RCR early and will agree joint working where appropriate. We will collaborate and consult with cancer charities, including those that focus on individual tumour types, and with Macmillan Cancer Support[3] and Cancer Research UK[4].

[1] **https://www.rcplondon.ac.uk**
[2] **http://www.rcr.ac.uk** Clinical oncology – the future shape of the specialty. Royal College of Radiologists, 2014.
Clinical oncology workforce: the case for expansion. Royal College of Radiologists, 2014.
[3] **www.macmillan.org.uk**
[4] **http://www.cancerresearchuk.org**

SUMMARY FOR PATIENTS

The Association of Cancer Physicians (ACP) is the professional organisation of medical oncologists. We are a major group of doctors providing care for cancer patients. Our main area of expertise is in systemic anti-cancer treatments including chemotherapy, biological and immune therapy, and new medicines that target specific changes in a patients' cancer (targeted treatments). In recent years medical oncologists have contributed to the rapid improvements in cancer survival, with more than 50% of cancer patients now surviving for 10 years or longer. Medical oncologists work in teams made up of people from different cancer care disciplines and professions. These teams ensure patients get the best treatment for their cancer to give them the best chances of survival and a good quality of life. We also have a strong tradition of research and innovation, and are among the most research oriented of all medical disciplines.

In our new strategy we set out our vision for the development of medical oncology. But we also indicate how we can make contributions to the overall improvement in cancer care for patients in the UK. In particular, we show how we can help increase survival so that 75% of cancer patients live 10 years or more within the next couple of decades, and improve patients' quality of life and experience.

To ensure medical oncology continues to provide excellent care for increasing numbers of cancer patients, and improves cancer care, the ACP will take three broad approaches.

1. Improve the traditional strengths of medical oncology in providing excellent care by further engaging with patients to understand their needs, and having a strong emphasis on research and innovation. We will grow the number of medical oncology consultants until there is more than one full time equivalent (FTE) consultant for every 100,000 people in the UK, aiming to do so by 2020 and then approaching 1.5 FTE consultants per 100,000 people as soon as that is possible. This will require the right numbers of trainees so that the workforce is sustainable in the long term.

2. Respond to the increasing pressures faced by the NHS caused by increasing number of people getting cancer, the complexity of treating older cancer patients and the pressures on all emergency services. We will work to strengthen cancer services – particularly acute oncology services which are there to immediately respond to the needs of patients - to ensure all patients get the treatment they need quickly. The ageing population means that there will be more cancer patients and older patients tend to have other conditions as well as cancer. We must ensure the care older patients get is of the highest quality, appropriate for their level of fitness and their choices. Treatment should not be determined simply on the basis of age. To achieve this, all medical oncologists will contribute to service development, and we will support more oncologists in the future to develop special interests in the problems faced by older cancer patients.

3. Develop and promote new ways of working and exploit new evidence-based innovations arising from research to improve cancer services. For example, we will:

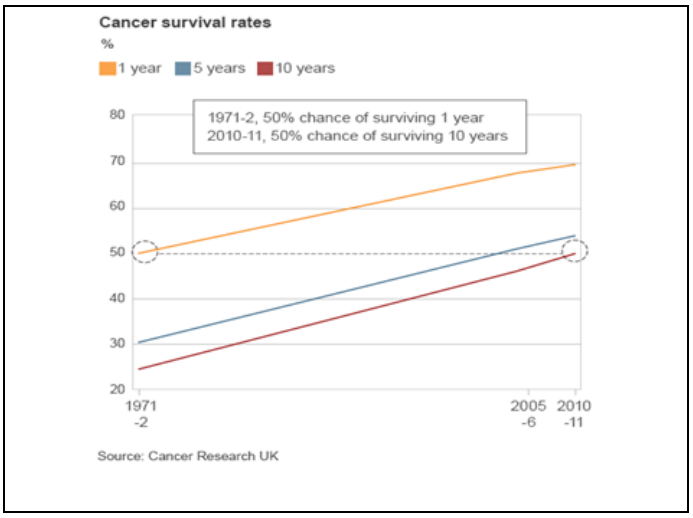
- work to better integrate primary care (for example GP services) and hospital cancer services to ensure quicker access for patients;
- improve the use of computer technologies for better communication between doctors and with their patients and better record keeping;
- analyse large sets of data, under careful conditions of confidentiality and regulation, to identify where improvements in care can be made;
- better support the increasing numbers of cancer survivors who will require long term support;
- use findings from medical research to develop a more precise kind of oncology, providing treatments that are more likely to benefit patients and less likely to produce side effects.

We plan a series of actions to address these needs. We will also work closely with other organisations including Royal Colleges, charities and the NHS, to bring about the benefits envisaged in its new strategy.

INTRODUCTION

We have seen great improvement in the survival of cancer patients in the UK in recent decades. More than 50% of all cancer patients are alive 10 years after their diagnosis, a doubling in survival since the 1970s (Figure 1). Nevertheless, the care of cancer patients remains a huge challenge to healthcare systems in the UK and globally, which face twin issues of increasing cancer incidence and improving survival. The ageing population in the developed world and the increasing exposure of populations in the developing world to environmental carcinogens mean that cancer incidence will rise. The exciting opportunities presented by advances in biomedical science and applied health research are a huge opportunity to improve further cancer treatment, earlier diagnosis, screening and prevention. However, such improvements present a massive challenge in terms of the quality, quantity and cost of care that can be provided.

Figure 1



Medical Oncology arose as a discipline in response to changing needs of cancer patients for systemic anti-cancer therapy. As a discipline it has a long and strong tradition of responding to patients' needs by changing its shape and patterns of practice, training programmes and continuing professional development. Medical oncologists are committed to improving outcomes for cancer patients and survivors. As a specialty we principally deal with patients who already have a cancer diagnosis, although we have substantial input into public awareness, investigation and early diagnosis, and issues around access to care, throughout the patient's journey.

Among the many important outcomes, cancer survival is probably the one that most clearly reflects the activities of medical oncologists. We are committed to continuing improvements in survival in coming decades that will improve 10-year cancer survival for the overall cancer population from its current level at 51% towards 75% in 2035. We will work towards this ambition but as a discipline we are mindful that survival to and beyond 10 years does not tell the whole story for our patients. We are committed to ensuring the patient has the best experience of diagnosis and treatment that is possible with a strong focus on maintaining quality of life throughout their journey. A patient-centred approach includes excellence in communication and close integration with many other disciplines that also play important roles throughout their care.

Multidisciplinary and multi-professional team-working with clinical and surgical oncologists, cancer nurses, clinical researchers, pathologists, radiologists, managers and many others has been a key part of the progress made for cancer patients and must be sustained and improved. Specialisation of all oncologists into a small number of cancer sites is part of the success of multidisciplinary teams (MDTs).

Appropriate liaison with palliative care teams represents a continuing fundamental role of the Medical Oncologist. The orchestration and implementation of carefully planned, integrated, holistic care, coordinated at an appropriate point following diagnosis, is recognised to be key. Additionally our commitment to continued improvements in joint working with palliative care colleagues in end of life planning and management, will support better patient care and experience and help prevent avoidable hospital admissions.

The NHS strategy for cancer has been the subject of a series of valuable reports (1). In 2015, the report of a new Taskforce on Cancer Care is awaited which will certainly inform and influence the work of medical oncologists and will be incorporated into an updated strategy in 2016.

Medical Oncologists are actively involved in developing new, updated approaches to systemic anti-cancer therapy (SACT) (2, 3). From April 2013, chemotherapy services have been directly commissioned by NHS England. The Chemotherapy service specifications for NHS England were implemented on 1 October 2013. A key requirement of these specifications is that all providers of chemotherapy services have in place an electronic prescribing system. Our strategy is UK wide in its scope and we anticipate considerable changes in the NHS in the UK provisions of systemic therapy for cancer patients in coming years and we will work to advise on, develop, optimise and deliver these.

We will work closely with the Royal Colleges to contribute to the development of the "Future Hospital" model. We agree with the Royal College of Physicians (RCP) that:

> *"Patients should have access to the care they need, when they need it. Many patients can be managed well in primary care, but most will need specialist help at some point. Some people's needs may be met by delivering specialist care in new ways into the community. However, being admitted to hospital will be essential for others. Barriers to accessing early expert care must be removed. Specialist medical care should reach from wards into the community. Swift access to expert diagnosis and treatment improves outcomes for patients and can result in long-term savings. Supporting patients to recover and manage their conditions must be a priority in all policies".*

The new ACP strategy draws on our involvement and support for these ongoing national initiatives. We have characterised the objectives which are most relevant to the ACP and developed a series of commitments which relate to the core activities of medical oncologists and our contribution to increasingly important developments in cancer care.

The ACP is updating its constitution and ways of working to strengthen the capacity of the Executive, add stronger patient and public representation, and form stronger regional links. We will establish leadership roles and working groups to take forward all of our commitments. This will strengthen the implementation of our strategy in the coming years.

OUR GOALS, COMMITMENTS AND ACTIONS

Goal 1. The delivery of excellent and safe medical oncology for all patients through the continued development and strengthening of multidisciplinary specialised and patient centred care, informed by high quality research and innovation, engaging closely with patients and delivered by adequate numbers of highly trained medical oncologists.

This goal will be delivered through six commitments.

Commitment 1. Deliver **excellent, evidence-based, multidisciplinary care** to ensure the best possible quality of life and survival and promote equal access across the UK.

In the United Kingdom, medical oncologists and our colleagues have made substantial progress in the development and delivery of expert multi-professional specialised care for cancer patients. This has contributed to improved outcomes. Once diagnosed, cancer patients are usually now receiving care in the UK of comparable quality to that received in the best among other European countries. Sustaining and strengthening multi-professional specialised care is vital if we are to achieve our shared commitment to increase survival for cancer patients to 75% by 2035, uphold patient centred and high quality care, and continue to improve the patient experience. The increasing complexity of cancer care as it develops greater precision, means that treatments are deployed in a stratified and personalised way and will increase demands for specialisation. Continuing professional development to sustain that specialisation throughout the career of a medical oncologist is needed. Sustaining existing multi-professional working and appropriate levels of specialisation in a small number of tumour sites is key to continued success. However, the number of cancer sites on which oncologist specialise may have to be reduced. We believe that in future, sustained cancer site specialisation will need to be strengthened by senior clinical advisor/mentor system for consultants taking up their first post at this level. This

will provide a supportive framework for consultants who have a comprehensive training in oncology but limited experience in a cancer site in which they will specialise in their consultant post.

There are unacceptable disparities in access to care across the UK. For example, Northern Ireland, Wales and Scotland al lack a cancer drugs fund (CDF), present in England, which reduces access of patients in these areas to some new drugs and also clinical trials. The ACP will use its expertise and influence in arguing strongly that such disparities must be addressed.

Actions:

- **A new early consultant senior clinical advisor/mentor system for site specialised cancer care**
- **ACP workshop on Precision Oncology in October 2015, publishing an ACP Problem Solving textbook in 2016**
- **Use our expertise and influence to address disparities in care across the UK**

Commitment 2. Sustain a **strong, patient-centred focus** which influences all aspects of practice throughout patients' lifetime with and after cancer, often using patient reported outcomes.

Medical oncologists have prioritised the development of patient-centred approaches and many have been at the forefront of developing the concepts and knowledge base which has underpinned successful patient centred care. The improvement of communication skills, the use of routine collection of quality of life data and Patient Reported Outcome Measures, and active patient and public involvement in cancer care, are all examples of areas that need to be sustained and improved. We believe that the development of innovative treatments and of accessible informatics approaches will allow us to strengthen our commitments to patient centred care.

Actions:

- Continue to incorporate **substantial training and CPD in advanced communication skills**
- **Promote the strengthening of psychosocial support for cancer patients in cancer services across the UK**
- **ACP workshop on Psychosocial Aspects of Oncology in 2016 with an ACP Problem Solving textbook in 2017**
- **Review/workshop of existing electronic systems for patient toxicity reporting** to develop recommendations for best practice and wider implementation

Commitment 3. Continue our commitment to conduct **high quality research and innovation** to answer key questions that will determine optimal patient management. Our work will help to ensure the translation of new knowledge from the laboratory to the clinic and from clinical evidence into clinical practice.

We will commit to sustaining the role of UK medical oncology as a research-intensive discipline, at the forefront of biomedical and health research in the UK and internationally. There are exciting opportunities for research and innovation to improve health service delivery and treatment for cancer patients in fields including immunotherapy, personalised/precision medicine based on rapid advances in genomics and proteomics, chemoprevention, and the novel methodologies based on rapid advances in informatics and biostatistics.

Actions:

- **A new ACP Executive lead for R&I**
- **Increased contributions to national cancer research meetings**
- **All ACP members will contribute to clinical trials which are appropriate to their institutions and the level of team support**

Commitment 4. Produce **an expert workforce through a well-planned, nationally coordinated training programme** to address knowledge, skills, and competency, with excellent Continuing Professional Development and a robust and supportive trainee and young consultant advisory/mentor system.

Medical oncologists and the Association of Cancer Physicians take considerable pride in the quality of the training provided to young doctors who are the medical oncologists of the future. This training is under considerable pressure, because of the increasing complexity and scale of oncological care, the increasing age of cancer patients with attendant comorbidities, and the complexities of regulation and oversight of practice and research. Demands are also being placed upon specialists to support currently inadequate acute general medical care provided in the NHS. (REF: Hospitals on the Edge? The time for Action. RCP 2012, Shape of Training Review. http://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf)

Our training programme must sustain its focus on producing cancer specialists of the highest quality with skills that include the ability to develop their services and conduct research and innovation. We see a growing requirement for strengthening and refining the training and continued professional development of specialists in each of their chosen areas of cancer care and their specific disease sites. We will strengthen this through our senior clinical advisory/mentor system. (see 1 above) The delivery of acute oncology - our major, rapidly-growing commitment to the provision of acute care for cancer patients - means that it is also important to sustain our skills in general oncology and general internal medicine. We must ensure the acute oncologists meeting patients are fully conversant with the needs of their patients who have complications of treatment or complications of cancer, which often result in common medical conditions such as infection, breathlessness, pain or metabolic imbalance.

Consultant medical oncologists will contribute to the future Hospitals acute workload through their contribution to Acute Oncology and not through acute unselected intakes of patients. We will enhance our training and CPD in the care of older cancer patients, cancer survivors and in precision oncology.

Actions:

- **A working party (2015 – 2016) on Workforce planning and training numbers jointly with clinical oncologists**
- **Acute oncology service developments, training and CPD (see 9)**
- **Training and CPD to address the problems of older cancer patients, precision oncology and cancer genetics (see 10 – 12)**

Commitment 5. Ensure that **the growth of medical oncology matches the needs of our patients** and future cancer services, with the flexibility to adapt to changing needs/demographics.

Demographic change, the aging population and the increasing number of cancer patients require a proportionate increase in the number of consultant medical oncologists matched by appropriate training numbers. This absolute requirement is an essential part of our strategy and without it the quality of care for our patients will inevitably suffer. There are many pressures which are increasing demands for medical oncologists including: the complexity of care; the complexity of healthcare regulation; economic austerity and its impact on healthcare; and the deployment of sophisticated tests alongside individualised treatment plans. Specific pressures include the development of acute oncology with its associated staffing requirements. We lag behind several European countries in our provision of medical oncology and the UK has fewer medical oncologists per cancer patient than any other European country providing data to the European Society for Medical Oncology (4).

We believe that **medical oncology consultant numbers need to grow to 1.0 FTE per 100,000 UK residents by 2020 and to 1.5 FTE per 100,000 UK residents as soon as possible after 2020, and be evenly distributed across the UK**, which means the number of consultants will grow to a total of over 900 full time equivalents. Where medical oncologists take on roles in oncology service developments in addition to delivering SACT, then specific additional funded protected time and support teams will be essential.

Actions:

- **At least 1.0 FTE consultant medical oncologists per 100,000 UK residents by 2020 to ensure safe and effective delivery of systemic therapy and to improve and deliver many other aspects of excellent cancer care. This should increase to 1.5 FTE consultants per 100,000 people as soon as that is possible.**

- **Ensure that medical oncologists who contribute to broader aspects of care (eg acute oncology, survivorship) have sufficient protected time for this work, in addition to work to deliver systemic anti-cancer treatment**

Commitment 6. **Increase patient engagement** in the work of the ACP and the delivery of cancer care.

Patient and public involvement in the development of cancer services and in the delivery of care to individuals has grown and become more effective in recent years. The ACP welcomes and supports these developments. We will formalise and increase patient involvement in our work. The ACP has involved patients in the drafting of this strategy and will do so in its future work. Two patients were appointed to contribute to the drafting of this strategy and will become full members of the ACP Executive.

Actions:

- **Develop a new ACP Patient and Public Engagement (PPE) group and establish support and training for PPE in the work of the ACP**

Goal 2. A substantial contribution to the overall development of NHS services and help to cope with the challenge the NHS faces dealing with acute cases and the medical problems of the aging population.

This goal will be delivered through two commitments.

Commitment 7. Complete the development of **a comprehensive Acute Oncology service** nationwide, including provision of timely and dedicated care for patients whose primary cancer site is unknown.

Cancer patients being cared for in the community or by general healthcare services frequently need prompt access to specialised oncology to ensure swift diagnosis of their disease, and of complications arising from the disease or its treatment. There is evidence that such access has been slow in the UK in the past and innovative service development is ongoing, with medical oncologists playing a leading role, to meet that essential challenge. Acute oncology services are multi-professional in their nature and collaborations with many oncology disciplines and with general services are essential. However, much of the consultant and trainee commitment to acute oncology will be provided by medical oncologists. The development of these services to a high standard and their implementation across all of the UK is an important strategic commitment for the Association of Cancer Physicians to make its contribution to acute medical care.

Actions:

- **Complete an acute oncology service specification in 2015 and work to deliver a nationwide Acute Oncology service**
- **Continuing the development of training and CPD in Acute Oncology**
- **Develop the national network of expertise in Acute Oncology**

Commitment 8. Almost all medical oncologists will continue to be involved in **the care of older cancer patients**. We will work to develop improved care for older cancer patients closely with geriatricians and all other healthcare disciplines and professions.

Some medical oncologists will take specific leading and organisational roles to address the important issues within cancer care for older people such as the evaluation of frailty and concomitant morbidity. These roles should have support and protected time to ensure service developments and drive Continuing Professional Development. As researchers, we would wish to provide leadership in the evaluation and development of therapies in older patients, supported by the National SACT database, currently unique in National cancer management.

Actions:

- **Publication of the ACP "Problem Solving for Older Cancer Patients" book in 2015/16**
- **Lobby for a national initiative to develop innovative services for older cancer patients and develop new roles for oncologists who will take a specific interest and support and advise their colleagues in these areas of work**
- **Support developments for older cancer patients in Research and Innovation, Education and Training and strengthen national and local collaborations**

Goal 3. A substantial contribution to the development of innovative approaches to cancer care.

This goal will be delivered through four commitments.

Commitment 9. **Support new ways of working** and the reconfiguration of services in order to provide **the best and most timely access** to investigations, prompt diagnosis and treatment by the appropriate specialised team for all patients.

The timeliness of diagnosis and access to high quality cancer care remains a challenge to UK health services and innovative approaches are needed. There is evidence that some of the shortfall in survival in the UK results from delays in access to diagnostic services leading to specialised cancer care for patients. This results in the presentation of patients with more advanced disease which in turn contributes to reduced one year survival. Medical oncologists are usually not "doctors of first contact" for patients with symptoms which may be due to a cancer, but they do have substantial influence over the configuration of services and access to their services. We are committed to work with colleagues in primary care and in other hospital based services to speed the timeliness of diagnosis and improve access.

There are many fresh approaches to be considered. Closer integrated working with primary care in Cancer Centres and Cancer Units has always been a stated goal of the Association of Cancer Physicians and of the strategic documents generated by Government and voluntary sectors. However, progress is incomplete and has been slow. New technologies, especially in health informatics, should improve opportunities to integrate care. Medical oncologists will be at the forefront of advocating and implementing these in their cancer care communities, to produce an integrated approach to prompt access and delivery of excellent care.

Actions:

- **ACP Workshop on Integrated Cancer Care 2016**
- **Support local initiatives for integrated service developments**

Commitment 10. Work to improve care through the development of appropriate **state-of-the-art health informatics.**

Medical oncologists recognise the importance of appropriate information in delivering both high quality clinical care and high-impact clinical/academic research in cancer patients. The ACP believe that through the increased use of information tools, we can enable change which leads to better patient safety and improve patient experience. Systems can improve patient engagement in their care and provide more cost effective resource utilisation. They can improve patient pathways and provide more responsive audit and performance management, newer avenues for clinical research and reduced administration time for clinical staff.

Ultimately the ACP wishes to see the development of development of electronic health records for all cancer patients. With appropriate security, data governance and consent, we will work to ensure the effective sharing of this data with other members of the integrated care team across different healthcare organisations and between different software platforms. We wish to see the patient become an active user and ultimately contributor to the electronic health record through patient portals and the use of web-based software accessible through any enabled device. We will encourage clinic teams to exploit the opportunities offered by patients to communicate with the clinical team using video-conferencing, the completion of relevant electronic questionnaires and the use of devices to monitor patients in their home. We believe this will allow the development of new models of care for cancer patients on treatment, during follow-up and for the long-term monitoring of outcomes and toxicity.

The data model which underpins these activities must be agreed nationally to ensure that data can be collected once and used across multiple applications. New technology including natural language processing and self-learning analytic software will also be exploited to maximise the potential of the data collected through the delivery of routine health care.

Actions:

- **ACP workshop on Health Informatics in Cancer Care 2016**
- **Strengthen research, governance and leadership in Informatics in medical oncology**

Commitment 11. All medical oncologists will make contributions to **the planning and delivery of services for cancer survivors** and some will develop special interests in this area.

We will promote the development of roles for individuals who take special responsibilities in this area to promote service developments, work with the many other disciplines and professions who will also contribute, and work together nationally to plan appropriate developments in this area. Such posts will require appropriate support and protected time. Oncology has led the way in transitional care and is already providing a number of late effects clinics in younger patients that can be a model for practice across age groups.

Actions:

- **Develop new oncology roles with special interest to develop services for cancer survivors**
- **Contribute to the Medical Oncology-led RCP conference on survivorship and late effects in 2016**

Commitment 12. We will develop **Precision oncology** which will allow the development of cancer treatments with a greater probability of success and a lower probability of toxicity.

Rapidly growing **knowledge of the genetics and biology of cancer, and environmental factors** which influence the incidence and outcomes of cancer, must be incorporated into research and into new strategies to prevent and manage cancer more precisely. This includes families at high risk of cancer.

Rapid strides in sequencing technologies now are providing insights into the somatic genetics of many cancers. We are moving towards the using these technologies to individualise and stratify cancer diagnostics and therapeutics resulting in a much more precise oncology practice. The use of somatic genetic studies to determine the choice of the therapy for cancers is now a well-established clinical practice in haematology and solid tumour oncology including paediatric oncology. Many of the exciting new targeted therapies for cancer are applicable only to patient populations who have a defined somatic genetic abnormality in their tumours.

The genetic basis of most familial cancer syndromes is now substantially understood and studies of their germline genetics, of individuals and families, are a vital part of the management of these relatively uncommon but vitally important disorders. Genetic Epidemiology is now informing our understanding of factors in the causation of many cancers. This explosion of knowledge and its immediate clinical application must be built into service provision and into the training and continuing professional development of all oncologists. We propose to work with colleagues in clinical genetics and other related disciplines to strengthen these themes within medical oncology in the UK.

Actions:

- **ACP workshop on Precision Oncology and Genetic Factors in October 2015 with an ACP textbook on the subject in 2016/17**
- **Development of the medical oncology training programme in genetics**
- **Evaluation and development of online support systems for precision practice for all oncologists**

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HOW WILL THIS STRATEGY BE IMPLEMENTED?

The Association of Cancer Physicians is a professional organisation and can only bring about the developments and changes envisaged in this strategy through the actions of its members and the influence it can exert over other bodies, especially the National Health Service. We envisage a series of implementation approaches:

- ACP members can use the strategy, and its continuing year-by-year development, as a resource at all stages of their careers, in the development of their practices, in the influence they bring to bear upon their local organisations and in their national and international roles.

- Cancer patients are key to the implementation of this strategy. The patient voice will be heeded not only by healthcare professionals and NHS managers but also by the wider community and political leaders. The partnership between patients and the Association of Cancer Physicians will greatly strengthen our ability to see this strategy implemented.

- The Association has formal responsibilities for the development and oversight of training, continuing professional development and the support of the careers of our members. Many of the specific actions which are envisaged as a consequence of this strategy can be delivered by the Association in this role. Recent examples include the development of workshops and Problem Solving books to strengthen the professional base and awareness of issues in acute oncology, and cancer in older people. This implementation mechanism has already been agreed for 2015/16 to be applied to Precision Oncology, drawing on advances in biomedical sciences to improve the effectiveness and reduce the toxicity of treatments. There will be a rolling programme of these exercises and workshops focused on aspects of implementing the strategy.

- The Association will form strategic alliances for specific pieces of work. Our colleagues in clinical oncology in the Royal College of Radiologists are our natural collaborators and allies in implementing improvements in the non-surgical aspects of multidisciplinary management of cancer patients. We work closely and contribute substantially to the work of the major cancer charities and are grateful for their support already in the development of implementation strategies, workshops and books through the ACP. Our members have local, regional and national influence over the NHS from the commissioning and the provision of cancer services.

- The ACP will increase its international alliances and draw on the strengths of medical oncology in Europe and North America where, for example, advances in the care of older patients have achieved greater clarity and standing among oncologists. Knowledge management in oncology is not a national activity; it must be international, drawing on the results of clinical research and biomedical and healthcare research across the globe. We have recently formally formed a link with the European Society of Medical Oncology with a specific shared membership scheme.

We will review the Strategy, commitments and actions annually and devise a delivery plan for each year. In the first year (2015/2016), we will:

- disseminate the Strategy to oncologists, cancer care professionals, patients and cancer organisations
- convene a working group and report on a workforce development plan (jointly with the RCR) to identify essential growth in consultant and trainee numbers
- establish a PPE group and deliver and update the ACP PPE plan
- convene a new Executive Committee with PPE representation and new leadership roles
- produce a plan for a senior clinical advisory/mentorship plan for new consultants
- publication of Problem Solving for Older Cancer Patients, a review of electronic toxicity reporting, the acute oncology service specification from the Chemotherapy CRG and conduct workshops on Precision Oncology, Integrated Care, and in Health Informatics

SUPPORTING CHAPTERS

The twelve Supporting Chapters relate to each of our commitments and have been prepared by ACP members who specialise in these topics jointly with experts from outside the ACP who have generously given us their expertise and time.

SUPPORTING CHAPTERS	**Page**	**Chapter Authors**
Delivering Excellent and Safe Medical Oncology		
1) Multidisciplinary Specialised Care	X	Professor Johnathan Joffe (Huddersfield), Dr Adam Januszewski (London), Professor Peter Selby (Leeds)
2) Patient Centred Care	X	Professor Galina Velikova (Leeds), Dr Alex Mitchell (Leicester)
3) Research and Innovation	X	Dr Richard Baird (Cambridge), Professor John Chester (Cardiff), Professor Peter Johnson (Southampton)
4) Workforce and Training	X	Dr Helena Earl (Cambridge), Professor David Cunningham (London), Dr Hannah Taylor (Bristol), Dr Sarah Payne (London), Dr Graham Dark (Newcastle), Alison Norton (London)
5) Development and Growth of the Discipline	X	Professor Johnathan Joffe (Huddersfield), Alison Norton (London), Dr Sarah Payne (London), Dr Adam Januszewski (London), Professor Peter Selby (Leeds)
6) Patient and Public Engagement	X	Mr Mark Flannagan (Beating Bowel Cancer), Professor Ian Banks (Belfast), Professor Johnathan Joffe (Huddersfield), Professor Peter Selby (Leeds)
Addressing Challenges in the NHS		
7) Acute Oncology	X	Dr Ernie Marshall (Wirral), Dr Alison Young (Leeds), Dr Richard Griffiths (Wirral), Dr Tom Newsom-Davis (London), Dr Richard Osborne (Poole)
8) Older People	X	Dr Alistair Ring (London), Dr Janine Mansi (London), Dr Danielle Harari (London), Dr Tania Kalsi (London), Professor Peter Selby (Leeds)
Innovation in Cancer Care		
9) New Ways	X	Professor Richard Neal (Bangor), Professor Peter Selby (Leeds), Professor Johnathan Joffe (Huddersfield)
10) Informatics	X	Dr Geoff Hall (Leeds), Dr Richard Griffiths (Wirral), Dr Adam Dangoor (Bristol)
11) Cancer Survivors	X	Dr Jeff White (Glasgow), Professor Michael Hawkins (Birmingham), Dr Rod Skinner (Newcastle), Professor John Radford (Manchester), Dr Adam Glaser (Leeds), Dr Dan Stark (Leeds)
12) Precision Oncology and Genetics	X	Dr Ellen Copson (Southampton), Dr Zoe Kemp (London), Professor D Eccles (Southampton), Professor Peter Johnson (Southampton), Dr E Shaw (Southampton)