The Royal College of Radiologists and the Cancer Strategy

Achieving world-class cancer outcomes: a strategy for England 2015–2020 was published in July 2015.¹ The Royal College of Radiologists (RCR) and its specialties of clinical radiology and clinical oncology have a central role to play in achieving its ambitions.

Diagnosis of cancer nearly always requires a medical imaging test. Clinical radiologists ensure the correct test is used, provide an expert medical interpretation of the test and minimise patient exposure to ionising radiation. They are also key to the staging of cancers, determining the best form of treatment and assessing the effectiveness of that treatment.

Clinical radiologists are at the forefront of using minimally invasive treatments for some cancers, known as ‘interventional oncology’. These treatments can reduce the length of hospital stays, deliver fewer side-effects for the patient, lower costs to the NHS and deliver better outcomes overall than traditional treatments.

Clinical oncologists are the only medical specialists who can prescribe radiotherapy treatment and who also prescribe the majority of chemotherapy treatment for cancer patients. They provide integrated, non-surgical cancer care and are often the only doctor who sees the patient throughout their cancer treatment. They have long-term relationships with cancer patients and are responsible for the planning and delivery of treatment.

The Royal College of Radiologists

The RCR is a charity registered with the Charity Commission (Charity registration number 211540) and is the body in the UK responsible for the standards of entry to and practice in the medical specialties of clinical oncology and clinical radiology. With over 9,800 members worldwide, the College is a body independent of Government and any regulator, and receives no Government funding for its core activities. It is reliant on membership subscriptions for the majority of its income. It supports not only training and education across the span of a career, but also research, academic practice, the production of guidance for professionals and the development of information for the public and patients. The College is a recognised and authoritative adviser to the NHS and other bodies and works with the media, cancer charities and many other stakeholders.

¹ www.rcr.ac.uk
Turning the ambition into action
How the Cancer Strategy 2015–2020 can be implemented

On publication of *Achieving world-class cancer outcomes: a strategy for England 2015–2020*, the RCR applauded the ambition it described and the urgency with which it was expressed.¹² Many studies have shown that outcomes for patients with cancer in the UK are worse than for comparable patients in other developed countries.³ Improving outcomes for our patients with cancer is an imperative for our health service.

The prospect of real progress in cancer care is within our grasp but rapid action must now follow the ambition. While we agree that the vision set out for 2020 is achievable, it will only be realised if there is concerted and sustained resolve by all involved over the entire five-year period, starting now.

In this document we outline the action which we think is required. We have focused on five themes which particularly relate to the work of the RCR and where we, working with others, can make a difference.

1. Building diagnostic capacity to support early diagnosis
2. World-class radiotherapy services
3. Integration of care
4. Data as a driver for improvement
5. Innovation and research.

For each theme, we briefly synthesise and comment on the relevant recommendations in the Strategy, state what we will do and state what we think others should do to achieve the ambition.

We strongly support the approach in the Strategy towards integration, with the creation of national lead bodies such as a National Cancer Team for cancer service planning and delivery, whole-pathway commissioning and financial incentives based on the patient’s journey.

If implemented, these developments would reinstate overarching and strategic drivers and programmes that were lost when structural changes were made to the NHS in England in April 2013.

We conclude this document with a commitment to collaborative working, leading our specialties and setting the pace of change required. We also commit to reviewing progress one year on from the publication of the Strategy.

Dr Giles Maskell
President,
The Royal College of Radiologists

Professor Roger Taylor
Vice-President, Clinical Oncology,
The Royal College of Radiologists

Dr Richard FitzGerald
Vice-President, Clinical Radiology,
The Royal College of Radiologists
Building diagnostic capacity to support early diagnosis

1. What the Strategy says

Outcomes for patients with cancer will only start to improve when more cancers are identified at an earlier stage. Earlier diagnosis means more patients having more scans.

The Strategy includes a welcome recognition that the capacity of radiology services is inadequate and must be addressed if we are to realise the ambitions for earlier diagnosis. The recommendation that Health Education England should work with the RCR on radiologist numbers generally, and specifically in regard to the screening workforce, is also welcome.

Improving access to scans, as proposed by the Strategy, requires a step change in diagnostic capacity which can only be achieved through a rapid increase in the number of radiologists. It is no coincidence that countries with two or three times as many radiologists per head of population have better cancer outcomes. Radiology services are unable to cope with current demand; according to our survey earlier this year, 330,000 patients are waiting more than a month for the results of their X-rays and scans.

The required development of radiology services must start immediately; a major increase in the number of clinical radiologist training places, investment in new equipment and a vigorous overseas recruitment campaign to fill over 400 consultant radiologist posts currently vacant are all imperative.

To allow the necessary expansion of training numbers, we need the concept of radiology training academies to be revisited and re-launched, ten years on from the opening of the first three academies in England.
The capacity, efficiency and safety of radiology services can only be sustained if they can use the most modern imaging equipment – something not fully highlighted in the Strategy. Not only would this avoid service interruptions caused by failures of aging equipment, but patients would also benefit from equipment that offers the latest radiation dose-reduction technologies.

We also need to pilot and evaluate new models of service provision, such as radiology networks, as proposed by the RCR in September 2014.\textsuperscript{5}

Lastly, the necessity of overseas recruitment has been highlighted; this needs to be addressed immediately to help grow capacity until the workforce can be increased on a sustainable basis.

What the RCR will do

We commit to:
- Working constructively with Health Education England on all activities required to increase capacity in the clinical radiologist workforce
- Continuing to conduct a regular census of the clinical radiology workforce, providing accurate data to workforce planners and others
- Re-launching the concept of radiology training academies
- Working with others to release as much training capacity as possible currently in the system
- Promoting and supporting the concept of radiology networks
- Running a second Working in the UK session at the European Congress of Radiology in March 2016 following on from the first successful event in 2015.

What we ask others to do

We ask Health Education England and those who mandate its activities to adopt the realistic assessment that the Strategy sets out on diagnostic capacity and to recognise, by rapid action, that the step change envisaged by 2020 can only be achieved if capacity is increased immediately, through a substantial increase in the number of clinical radiologist training places from 2015–16 onwards.

We ask Health Education England to:
- Lead a vigorous overseas recruitment campaign to attract clinical radiologists to work in the UK
- Support, fund and lead the establishment of additional radiology training academies.

We ask NHS England:
- To encourage and enable the rapid creation of sustainable radiology networks through its new models of care programme, with support from the regulators
- To introduce and maintain a regular renewal programme for radiology equipment through a dedicated capital investment fund. This should include central oversight of procurement to make best use of the bulk purchasing power of the NHS, as well as a mechanism for central evaluation of new items of high-cost capital equipment, specifically computed tomography (CT) and magnetic resonance imaging (MRI) scanners, reducing the time spent by local clinical teams on this activity.
What the Strategy says

The recommendations in the Strategy, if implemented, will go some way to providing patients with the high-quality and accessible radiotherapy services that they need. Diagnosing early cancers in an increasingly elderly patient population will increase the requirements for radiotherapy as a curative treatment. The focus on the cancer workforce and acknowledgement that numbers in training for clinical oncology need to grow is welcome. The recommendation of a funded programme to replace linear accelerators is also positive.

However, we feel that greater emphasis is also required on:

- The need to develop new treatment regimens for radiotherapy treatment for the different mix of patients that will be presented once the impact of earlier diagnosis is felt
- The up-skilling of the clinical oncologist workforce to define and deliver those treatment regimens
- The need to ensure that intensity-modulated radiotherapy (IMRT) and other forms of advanced radiotherapy become the norm for the curative radical treatment of cancer and are no longer regarded as innovative treatments
- The need to ensure that the proton beam therapy service, to be delivered through two centres in England, remains on course and the service is prepared to make best use of those centres and, over time, extend services to a wider range of indications for proton beam therapy
- Preparing to deliver molecular radiotherapy treatment
- Making sure that clinical oncology is restored and maintained as an attractive specialty in which to train and work, given the difficulty experienced in 2015 in filling all training places through the national recruitment process.
What the RCR will do

We will:
- Work with our membership to develop the required treatment regimens and protocols
- Develop and deliver courses to ensure the clinical oncologist workforce is up-skilled much in the way that was successfully achieved in 2013 for IMRT, including enhancing the academic component of the clinical oncology career structure
- Encourage the wider take-up and equitable provision of IMRT and other forms of advanced radiotherapy across the country
- Prepare the workforce for the referral for, and delivery of, proton beam therapy when it comes on stream in England
- Develop the way forward for the delivery of molecular radiotherapy
- Work with Health Education England and others to encourage core medical trainees to opt for a career as a clinical oncologist
- Continue to conduct our regular workforce census to provide high-quality data on the clinical oncology workforce
- Work with the Institute of Physics and Engineering in Medicine and the Society and College of Radiographers to continue to evolve the optimum skills mix for the delivery of high-quality radiotherapy
- Work with partners, including the Royal College of Physicians of London, to develop a model of care which provides the optimum configuration of cancer specialists to provide a patient-centred and cost-effective systemic anti-cancer therapy (SACT) service.
- To continue to commit to the implementation of other forms of advanced radiotherapy, such as stereotactic ablative body radiotherapy (SABR) for suitable patients.

What we ask others to do

We ask NHS England and Health Education England for funding to support our work in the development of regimens and protocols for new and emerging treatments, and to develop and run courses, such as those rolled out for IMRT.

We ask NHS England:
- For a renewed commitment to deliver the two planned proton beam therapy centres on time and for all supporting requirements to be in place to roll out the service effectively, building in the capacity and potential to extend to a wider range of treatment indications in the future

We ask Health Education England to:
- Act on the recommendations in the Strategy without delay to increase the number of clinical oncology training places, drawing on the evidence in our 2014 workforce census and our submission to the current workforce planning round
- Support us in promoting clinical oncology as an attractive career specialty to ensure that the growing number of training places is filled on a continuing basis.
What the Strategy says
The Strategy pays much attention to integration of services and planning a patient-centred pathway for cancer diagnosis, treatment, follow-up and survivorship. This is testament to the deficiencies of the current arrangements. The Strategy recommends a system-wide approach that we wholeheartedly support.

The creation of national bodies in the form of a National Cancer Team and a National Cancer Advisory Board is urgently required; these should be established as soon as possible. The new Strategy sets out the ambitions and new structures should be designed to achieve those ambitions.

Other aspects of integration focused on in the Strategy are:
• Integrated palliative care/end-of-life care
• Commissioning of the entire cancer pathway
• Integrated cancer alliances
• Skills and training developed around the patient and future needs.

All of these are proposals which we support in principle; we need to see the detail to ensure that they would operate effectively.

There is also an opportunity for further integrated planning and delivery as regards the Cancer Drugs Fund (CDF). We have previously said that in reviewing the CDF, the opportunity must be taken not simply to focus any successor mechanisms on cancer drugs, but on all appropriate non-surgical cancer treatments, so that there is equity of access for patients.

This particularly applies to curative radiotherapy treatment where equitable investment and support has been lacking for a long time.

What the RCR will do
The RCR:
• We would expect to be invited to play a full role in the proposed National Cancer Team and would do so willingly and enthusiastically. Clear professional leadership and input to the new body is essential.
• We will contribute to other integration initiatives fully and collaboratively with other bodies.
• We will offer evidence and advice as regards the use of resources currently devoted wholly to cancer drugs funded by the CDF, to offer equitable access to other non-surgical treatments, notably radiotherapy and interventional oncology.

What we ask others to do
• We invite NHS England to ensure that there is clear professional involvement and leadership/ownership of new national bodies and other integration mechanisms.
• We urge the Department of Health/NHS England to seize the opportunity to look at all non-surgical cancer treatments in the review of the CDF and introduce arrangements which give patients fair and equitable access to the range of non-surgical cancer treatments they need, on a sustainable basis.
What the Strategy says
We welcome the Strategy’s focus on the use of data to improve services and learn from change. This is coupled with a recognition that there are key datasets for cancer diagnosis and treatment that are extremely valuable and a major resource on which to build.

The Strategy proposes a cancer metrics dashboard, improving the Diagnostic Imaging Dataset (DID), and looks to set a realistic review of targets by the end of the Strategy’s period in 2020. We particularly welcome the plan to move away from measuring ‘referral to test’ for diagnostic imaging and the move to monitor the more meaningful ‘referral to result’. The importance of electronic prescribing (e-prescribing) and ensuring that regulators focus on submissions to the SACT dataset, together with an audit of deaths within 30 days of active treatment, are all valuable recommendations.

The Strategy also highlights the need to ensure that consent, information governance and data flows are improved, with appropriate safeguards, and that patients are informed about the use of, and have access to, their data.

For the most part, we welcome these recommendations; there is no rationale for denying patients access to their data, including test results, but work will need to be done to ensure that patients understand the context in which the information was gathered and what it means. In the aftermath of the care.data debacle, all healthcare service users need to be carefully informed about the advantages of allowing sharing of their data, while also being assured that the most robust data security and data protection measures will be in place to avoid misuse and loss of data.9

What the RCR will do
We will:
• Strongly encourage our Fellows and members to make the best use of datasets that particularly relate to our specialities including DID, SACT and the Radiotherapy Dataset (RTDS); this extends to ensuring the data is entered fully and correctly and the resultant data outputs are actively used to review and improve services.
• Continue to encourage our members to work with their respective organisations towards all cancer units to adopting e-prescribing.
• Commit to working with those developing national audits of critical cancer care alongside the clinical audits that we carry out, to support the implementation of the Strategy.

What we ask others to do
We call upon Public Health England to:
• Work collaboratively with the proposed National Cancer Team, NHS England and other agencies to ensure that the datasets (notably DID, SACT and RTDS) are sustainably supported and developed
• Ensure the datasets can be developed and can be accessed appropriately
• Ensure that there is very close collaboration across the agencies so that data is collected carefully and used wisely and actively to improve services for patients.

We urge the Department of Health and NHS England to ensure that healthcare service users are fully and properly informed about the advantages of allowing their healthcare data to be used within a robust and clear information governance framework and with all necessary assurances about security and misuse of data.
What the Strategy says
The Strategy’s work as regards research and innovation is appropriately focused on the way in which the population that experiences cancer will change, as well as supporting innovation, new therapies and new treatment regimens. This includes understanding the experience of those suffering from secondary cancers and elderly cancer patients, as well as encouraging children and young people suffering from cancer to enter into clinical trials.

The important focus on the UK maintaining its world-leading position in cancer studies is welcome and is underpinned by the recommendations on ensuring that as many patients as possible enter into clinical trials, making sure practice-changing findings are implemented and defining a set of research priorities for the future. These recommendations are welcome but we feel that they will be challenging to implement given the workforce issues and the focus on productivity at the expense of academic practice and innovation that place huge pressure on the NHS today. Furthermore, while the research base in clinical oncology is reasonably well developed, we recognise that clinical radiology lags some way behind in this respect.

What the RCR will do
We will:
• Work collaboratively and vigorously with the research charities, Cancer Research UK, the National Cancer Intelligence Network and others, to ensure that the innovation and research recommendations in the Strategy are fulfilled
• Embrace opportunities fully to ensure that academic and research practice remain attractive and will promote such opportunities to Fellows and members in both our specialties
• Continue to support a Clinical Radiology Academic Committee and will also use the findings of a scoping exercise currently underway in clinical oncology to structure the way in which the RCR can best support academic and research practice for innovation in that specialty.
What we ask others to do

- We invite Health Education England and NHS England to work collaboratively to ensure that innovation supported by research has sufficient priority, support and encouragement alongside the necessity of ensuring that high-quality services are delivered.
- We ask research funding bodies to support fully the development of radiotherapy-related clinical trials.
- We ask Health Education England, NHS England and the Department of Health to provide funding, encouragement and an attractive structure for the development of clinical radiology academic innovation and research practice alongside the development of the specialty for service needs.
- We urge the cancer charities and other funding bodies to recognise the potential for development of targeted cancer treatments in the field of interventional oncology.

References

4. The Royal College of Radiologists. Unreported X-rays, computed tomography (CT) and magnetic resonance imaging (MRI) scans: Results of a snapshot survey of English National Health Service (NHS) trusts. London: The Royal College of Radiologists, 2015.
7. www.rcr.ac.uk/sites/default/files/he_evidence_2015-16_clinicaloncology.pdf (last accessed 09/01/2015)
It is wholly evident from the Strategy that its ambitions cannot be achieved through the efforts of any single individual or body working alone and that collaborative, close and productive working is the only way to make progress. Reinstating national direction, planning and delivery mechanisms that were a successful feature of cancer service development between the years 2000 and 2013 is a key step.

The RCR can play a major role in making this happen with its two specialties, but we can only do so in collaboration with others. These are mainly publicly funded bodies or agencies but it is important also to involve industry and innovation from outside the UK.

We commit to using all the opportunities that we can create or are presented with to make such collaborative working a reality to deliver the changes that patients need.

We also commit to reviewing one year on from publication of the Strategy – in July 2016 – the progress that we have been able to make with others and what there is still to do. If we have not made significant progress, particularly in building the workforce capacity in clinical radiology and clinical oncology that is so key to making the Strategy happen, then what at the moment is seen as achievable by 2020, may well no longer be so.

We invite others to make a parallel positive commitment to turn the ambition into action and then into achievement.