The Royal College of Radiologists
The English Cancer Strategy two years on

The Royal College of Radiologists (RCR) welcomed the publication of the Cancer Strategy 2015–2020. It was clear at the time that rapid progress was needed and that the Strategy should be backed by robust investment from the Government. Over the last two years there have been some promising steps, but all progress is at risk due to the workforce crisis in the NHS and the need for an increase in funding across the health service. With one-in-two people receiving a cancer diagnosis, the need for action has never been more pressing, especially when by 2020 2.4 million people in England will have had a cancer diagnosis in their lifetime.2–3

The RCR has a unique perspective on cancer diagnosis and care as the doctors who work in our specialties of clinical radiology and clinical oncology are at the centre of the cancer pathway. They deliver and manage the diagnosis and all modalities of non-surgical treatment of cancer and so can offer an in depth, holistic view. In our initial response to the Strategy and our one year on review, we outlined in detail what we wanted to see happen and our role in delivering some of this.4,5 However, it has become increasingly clear over the last 12 months that three key areas are crucial to the delivery of the Strategy.
1. Workforce

The workforce crisis represents the single biggest threat to delivery of the Strategy. Health Education England’s (HEE) long-promised strategic review of the cancer workforce is overdue. The RCR recognises that many of the issues affecting the workforce are out of the control of the Cancer Transformation Board, but it is essential that the review by HEE is published and implemented.

Clinical radiology workforce

Outcomes for patients will only improve when more cancers are diagnosed at an earlier stage, which means an increase in scans. There has been a 3% increase in the number of clinical radiology consultants over the last six years. Between 2013 and 2016 there has been a 33% increase in the number of computed tomography (CT) scans and 31% increase in magnetic resonance imaging (MRI) scans; 97% of radiology departments are not meeting reporting requirements. There needs to be urgent action to increase the clinical radiology workforce. This means co-ordinated international recruitment of radiology consultants to address immediate shortages and a significant increase in training places in HEE’s commissioning plans for 2018–2019 and beyond.

For the ambitions of the Strategy to be realised, an additional 1,838 consultant radiologists are needed in England. This would mean there would be 12.17 radiologists per 100,000 people, up from the current UK rate of 7.51 per 100,000, currently the third lowest in Europe.

Clinical oncology workforce

The UK’s clinical oncology consultant workforce remains under serious strain, with increasingly overworked doctors, difficulty filling vacancies and not enough trainees. At least 78 extra clinical oncologists would be needed right now, just to make up for the contracted activities greater than ten programmed activities (PAs) currently delivered by clinicians. There are not enough trainees coming through to grow the workforce, with 33 consultant clinical oncology posts unfilled in 2016.

There must be urgent action to increase the clinical oncology workforce; the Government has to commit to making clinical oncology a sustainable and attractive area in which to work. This should include more funding for trainee doctors as well as the wider multiprofessional team including nurses, pharmacists, medical physicists and therapy radiographers.

Impact of Brexit

Any progress made on workforce risks being derailed by the UK’s decision to leave the EU. Six percent of clinical oncology consultants qualified in the EU. At least a quarter of consultant radiologists are international medical graduates, of which 40% qualified in EU countries. If the Strategy is to be delivered we cannot lose any of the existing workforce. The Government must take steps to ensure that this does not happen.

2. Funding

The RCR welcomes the transformation funding made available to support the implementation of the Strategy in December 2016. It is vital that this additional investment is used to support improvements, particularly in the crucial areas of early diagnosis and advanced radiotherapy technologies to increase cure rates and follow-up, and not to address deficits. There needs to be a sustainable investment in the cancer pathway – not just one-off cash injections.
While we support the first £200 million of the £607 million fund being used by the Cancer Alliances for diagnostic services as well as recovery packages and joined-up care, this is not sufficient to make a real impact.

The NHS’s ability to deliver a world-class radiotherapy service is vital to the aims of the Strategy; radiotherapy contributes to the cure of 40% of cancers, yet only 5–6% of cancer spend is on radiotherapy.\textsuperscript{10,11} NHS England’s investment of £130 million in radiotherapy services over two years represents a first step.\textsuperscript{12} At least £260 million is needed to put England in parity with the investment announced by the Scottish Government.\textsuperscript{13} This would enable England to deliver the world-class radiotherapy services that patients need, as the update of equipment will not be enough without enhanced information technology (IT) connectivity. Similar investment is also needed in diagnostic equipment.

3. Cancer Alliances

We welcomed the establishment of the Cancer Alliances across the country but progress by the Alliances has been slower than we would have liked. The RCR would like to see Alliances engage effectively with patients and clinicians to ensure their planning and delivery is robust. At the moment it is difficult to access many of the Alliances’ delivery plans publicly – something that must be remedied to ensure full transparency.

Much of what is to be delivered in the Strategy requires significant action in early diagnosis. A substantial proportion of the workforce and infrastructure to deliver this is under the control of Sustainability and Transformation Partnerships (STPs). Therefore the working relationships between STPs and Alliances need to be functional. The establishment of Alliances and the first wave of STP planning, both taking place in October 2016, meant that the Alliances’ role of providing a framework for STPs has been unclear. We would like to see more evidence of how the relationship between Alliances and STPs is working.

Detailed assessment of progress to date

In our initial assessment of the Strategy, we identified five key themes where we believed the RCR could have the most impact, but it was evident that we could only achieve real change if we worked together with other organisations.\textsuperscript{4} One year on from the Strategy’s launch we assessed progress against these themes.\textsuperscript{5} Now two years on there has been little further progress, but we have outlined what the RCR has achieved and what still needs to be taken forward by others. Our five themes were:

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

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 included a welcome recognition that the capacity of radiology services was inadequate. Screening programmes are also at risk due to the scarcity of the radiological workforce. We said that the development of radiology services must start immediately; this has not happened.

The RCR has:

• Held events and created a range of resources to attract international radiologists to the UK and support them when they get here.14
• Supported the development of radiology networks through our publication *Who shares wins: efficient, collaborative radiology solutions*, which offers practical guidance to STPs and NHS departments, detailing how they can work collaboratively and also share effectively.15
• Made the case for the expansion of radiology academies.16 The RCR has supported the East Midlands to establish a radiology academy and we are working with other areas looking to develop academy style training.

What others need to do

• HEE needs to provide a major increase in the number of radiology training places and NHS England should support an international recruitment drive for consultant radiologists.
• HEE needs to support radiology training academies.
• NHS England needs to invest in diagnostic equipment to ensure that patients are diagnosed as efficiently and safely as possible.

2. World-class radiotherapy services

More patients will need access to radiotherapy as cancer is diagnosed at an earlier stage in an increasingly elderly population. The Strategy acknowledged that numbers in training in clinical oncology, medical oncology, medical physics, therapy radiography and cancer nurse specialists (CNS) training need to grow and funding was urgently needed for the replacement of linear accelerators.1 Although some funding has been announced it does not go far enough.

The RCR has:

• Produced up-to-date radiotherapy dose fractionation guidance.17
• Produced guidance on radiotherapy target volume definition and peer review.18
• Developed a UK consensus document on state-of-the-art techniques for breast radiotherapy treatment.19
• Ensured that its membership is up to date with the latest developments in proton beam therapy. The RCR will be producing a multidisciplinary e-learning package for proton beam therapy with the Society and College of Radiographers (SCoR) and the Institute for Physics and Engineering in Medicine (IPEM).
• Worked with Public Health England to ensure that the process for molecular radiotherapy is as streamlined as possible.
Continued to encourage medical students and junior doctors to opt for clinical oncology as a career.20

What others need to do

- HEE needs to increase the numbers of clinical oncology trainees and work with the RCR to ensure that clinical oncology is an attractive specialty.
- NHS England needs to ensure that there is sustained investment in radiotherapy equipment, both hardware and software. The current investment of £130 million over two years represents half of what is needed.
- NHS England needs to address the variation in provision of advanced radiotherapy technologies through commissioning changes including stereotactic radiotherapy. An RCR audit found that patients are declining travel for treatment to the limited number of centres commissioned, reducing access and negatively impacting on patient outcomes.21
- Public Health England needs to develop the quality and ensure publication of national activity data from both national datasets: the National Radiotherapy Dataset (RTDS) and the Systemic Anti-Cancer Therapy Dataset (SACT).22–23 This would allow benchmarking of access to therapies nation wide.

3. Integration of care

The Strategy paid much attention to the integration of services and planning of a patient-centred pathway for cancer diagnosis, treatment, follow-up and survivorship. The Strategy recommended a system-wide approach that we wholeheartedly supported. It is not yet clear whether the Alliances will be able to fulfil their role in creating system-wide change.

The RCR has:

- Published guidance on the sharing of vital X-rays and scans in which we recommend the creation of an NHS network teleradiology platform (NTP) which would allow for more collaborative working across clinical networks.15
- Entered into a collaboration with the Society and College of Radiographers (SCoR) to commission a review of and update our guidelines in team working on clinical imaging.24
- Worked with Cancer Research UK (CRUK) and other stakeholders on a research project to examine the current and future capacity of, and demand for, the non-surgical oncology treatment workforce. This is focused on high-level treatment pathways for six tumour sites: breast, prostate, lung, colorectal, head and neck and non-Hodgkin lymphoma
- Committed to working with the imaging and radiology lead for Getting It Right First Time (GIRFT) to improve the delivery of radiology services
- Updated its world-renowned radiology referral guidelines iRefer, which help primary and secondary care clinicians choose the most appropriate imaging tests for patients.26 The guidelines are being piloted in clinical decision support software to enable seamless integrated access in primary care and secondary care.

What others need to do

- Alliances must ensure that their plans are more accessible and make rapid change.
- Alliances must ensure that they work closely with patients and clinicians to develop their plans.
- Alliances should work closely with STPs to ensure that early diagnosis and prevention is prioritised.
NHS England needs to consider the creation of a wider non-surgical cancer treatment fund so there is equity of access for all patients.

NHS England and NHS Digital need to consider creating a network teleradiology platform.

NHS England needs to ensure that the IT connectivity envisioned by the radiotherapy service redesign and funded by the radiotherapy fund is fully realised.

NHS England, NHS Improvement and NHS Digital should support the roll out of the RCR’s iRefer guidelines in clinical decision and support.25

NHS England needs to commit to rolling out iRefer clinical decision support.

4. Data as a driver for improvement

The Strategy focused on the value and use of data to improve services and learn from change, recognising that there are extremely valuable datasets for cancer diagnosis and treatment.

The RCR has:

- Brought together stakeholders to explore ways of improving systemic anti-cancer treatment (SACT) data. This will help improve data submissions to SACT but there must be centrally supported data analysis and sharing to ensure that patients can make informed decisions about their treatment.
- Supported a National Medical Director’s Clinical Fellow to facilitate incorporating patient reported outcome measures (PROMs) into the cancer dashboard as a quality measure of radiotherapy services.
- The RCR will be supporting the development of the metrics for the GIRFT programme in radiology and imaging.

What others need to do

- NHS Improvement needs to move away from measuring referral to test for diagnostic imaging to a more meaningful referral to result.
- NHS England must centrally support and widely share SACT data analysis.
- Sustainability and reliability of the foundations of the SACT data set, the Radiotherapy Dataset (RTDS) and Diagnostic Imaging Data set (DID) are essential to the delivery of the Strategy. There has been no progress on this.

5. Innovation and research

The Strategy’s important focus on the UK maintaining its world-leading position in cancer studies was welcome. The RCR continues to view the recommendations in this area as difficult to achieve given the workforce pressures and with the Brexit vote with its challenges both to the research workforce and funding.

The RCR has:

- Continued to encourage its Fellows’ and members’ research activities by supporting academic research committees for each of its specialties and providing grant funding for research.
- Begun to develop a comprehensive policy approach to the use of artificial intelligence in both specialties.
What others need to do

- The Government should ensure that exiting the European Union does not impact the UK’s status as a leader in cancer research.
- The Government and HEE must ensure that there are adequate workforce numbers to allow an overstretched clinical workforce time to focus on research activities.
- The Government needs to ensure that there is sufficient infrastructure nationally to support the development and running of innovative trials.
- The Government and NHS England must ensure they support the development of artificial intelligence (AI) at a scale and pace appropriate for both the workforce and patients.

References


14. [www.rcr.ac.uk/clinical-radiology/being-consultant/working-uk](http://www.rcr.ac.uk/clinical-radiology/being-consultant/working-uk) (last accessed 16/10/2017)


20. [www.rcr.ac.uk/clinical-oncology-careers](http://www.rcr.ac.uk/clinical-oncology-careers) (last accessed 16/10/2017)


23. [www.chemodataset.nhs.uk/](http://www.chemodataset.nhs.uk/) (last accessed 16/10/2017)
