The Royal College of Radiologists' submission to the All-Party Parliamentary Groups for Radiotherapy, Cancer, and Health - consultation on solutions to the COVID induced cancer backlog

About us

1. The Royal College of Radiologists (RCR) is the professional membership body for doctors specialising in the fields of radiology and oncology. We work with our membership to improve the standard of medical practice and training across both disciplines covering the spectrum of diagnosis and treatment.

2. We engage with our Fellows and members and clinical partners, refining the latest research and develop guidelines into relevant applications for radiologists and oncologists. This enables us to educate and support doctors effectively throughout their career, providing practical guidance, training and assessment.

Our submission

3. We welcome the opportunity to submit a response to this consultation on solutions to the COVID induced cancer backlog. We are happy to expand on any of the points raised in the submission if beneficial to the All-Party Parliamentary Groups (APPG) for Radiotherapy, Cancer, and Health, and to participate in the planned roundtable.

Impact of COVID-19 on cancer and diagnostic services

4. Modernising and improving diagnostic services have been a long-standing objective for NHS England and NHS Improvement (NHSE/I) and the Department of Health and Social Care (DHSC). In 2019 the NHS Long Term Plan identified that one of the most significant actions the NHS can take to improve cancer survival is to diagnose cancer earlier.[i]

5. The COVID-19 pandemic significantly impacted patients' abilities in accessing diagnostic and cancer services. To reverse these impacts the NHS published its NHS Cancer Programme: Cancer services recovery plan in December 2020. These challenges were also highlighted in the Sir Mike Richards review; Diagnostics: Recovery and Renewal, which found that the Covid-19 pandemic had exacerbated the long-standing challenges in diagnostic and cancer care, and the total number of people waiting more than six weeks for diagnostic services. As services resume, this will drive increased demands, including in breast imaging, colonoscopy and colposcopy as well as other services.[ii]

6. It is essential to consider the patient pathway rather than services in isolation. For example, once a patient is referred, early diagnosis is dependent on efficient interplay between primary care then endoscopy, imaging and histopathology services. That the system as a whole is well-functioning is essential and recent research highlights that substantial increases in the number of avoidable cancer deaths in England are to be expected as a result of diagnostic delays due to the COVID-19 pandemic.[iii] A core component of this is that diagnostics and early presentation directly relates to survival rates.[iv] This is also true of surgery for cancer and to mitigate a future health crisis, diagnostics and screening services and all cancer pathways must be restored to full capacity or maintained as far as possible.[v]

7. The importance of designing services around patients' need was further highlighted in The Getting It Right the First Time (GIRFT) national programme report on radiology in November

2020. A key GIRFT recommendation is that imaging should be arranged at a time and place to suit patients' needs.[vi]

8. To mitigate the ongoing impact of COVID-19 and to support patients accessing diagnostic and cancer services we have identified three main areas where improvements are required. These are:

   8.1. Supporting and investing in the workforce to continue to deliver the highest quality cancer and diagnostic care;
   8.2. Investing in modern technology to support early detection and treatment; and
   8.3. Supporting new models of delivering services to improve patient care and access to care.

9. In addition to this we believe it would be paramount for the APPGs to consider the wider implications around access to diagnostic services and cancer care, including inequalities in access to care, and outcomes, and to consider how COVID-19 has impacted on different groups across the UK. We also welcome that this is mentioned in the NHSE/I Cancer services recovery plan and the commitment to monitor referral and treatment metrics and the focus on a public awareness campaign.

Supporting and investing in the workforce to continue to deliver the highest quality cancer and diagnostic care

10. Having a well-trained, supported and adequately staffed healthcare workforce, including clinical radiologists and clinical oncologists, is the key building block in the NHS delivering safe and effective diagnostic and cancer care. This includes in combating the cancer backlog.

11. However there is a current shortfall of 207 consultant clinical oncologists (19% of minimum numbers of consultants required to meet demand). This is projected to increase to 444 (32%) by 2024. **Unless sustained investment for additional training places and overseas recruitment is released, national cancer ambitions are unachievable and shortages pose a real threat to the effective delivery of radiotherapy and systemic anti-cancer treatments (SACT) and service recovery following COVID-19**.[vii]

12. **The current lack of radiologists has also resulted in failures to meet NICE guidance in several pathways**, such as whole-body myeloma MR Imaging[viii] and cardiac imaging.[ix] This trend is likely to be exacerbated as the current shortfall of 1,939 radiologists is anticipated to rise to 3,613 (44% forecast shortfall) by 2025.[x] In contrast, the Richards review estimates that demand for CT is set to increase by 100% over the next five years.[xi]

13. Evidence-based developments in imaging pathways are often not put into practice because the radiologist workforce needed to support improvements is not available, as seen with multiparametric MRI for prostate cancer.[xii] If diagnosed early, men have the best chance of curative treatment and long-term survival.[xiii] But in the UK, we currently only diagnose just over half of patients at an early stage.[xiv] The importance of this challenge is recognised by the UK Government through their NHS Long term Plan commitment to detect 75% of cancers at an early stage by 2028.[xv] Appropriate diagnostic capacity is integral to achieving this goal.

14. The excessive workload and inadequate staffing causes stress in radiologists, which has contributed to increasing numbers of consultant radiologists leaving the profession in recent years. An example of this is that between 2017 and 2018 approximately 200 consultant radiologists left the profession, equivalent to 6% of the UK workforce. **Meanwhile, a recent RCR snap poll to gauge radiologists' morale found half intend to cut their hours and three**

times as many consultants than normal plan to leave the NHS in the next year. Working conditions where more is expected from fewer people have shown a trend for high levels of burnout and absence due to stress.[xvi] The average age at which radiologists retire is falling year on year.

Investing in modern technology to support early detection and treatment

15. In addition to the workforce considerations, a significant barrier to reducing the cancer backlog is, in parts, outdated and insufficient equipment required to deliver world-class diagnostic and cancer care. **These challenges can only be overcome by an investment in modern technology to support early detection and treatment.**

16. An illustration of the challenge at hand is that the UK has fewer scanners than the majority of comparative OECD countries with the UK having 9.4 CT scanners per million population while France has 18.2 and Germany has 35.3. For MR scanners per million population, the UK has 7.2 MR scanners, France has 15.4, and Germany has 34.7.[xvii] **Previous industry surveys have shown one in ten CT scanners[xviii] and nearly a third of MR scanners in UK hospitals are technically obsolete – being 10 years old or more**[xix].

17. To bridge these challenges and to ensure that the healthcare system can meet demand on cancer services we need capital investment in a UK-wide rolling radiotherapy equipment replacement programme, including linear accelerators (LINACs), brachytherapy machines, computed tomography (CT) and magnetic resonance imaging (MRI) planning machines. **This would cost approximately £87.3m per annum[xx] with coordinated deployment to meet population also requiring an initial investment of £300m to replace all LINACs over 10 years old**. In addition to these investments we need to ensure an adequate IT infrastructure, including incorporating AI functions, is in place to support connectivity for better patient outcomes and to facilitate new models of care.

Supporting new models of delivering services to improve patient care and access to care

18. Following the COVID-19 pandemic, recent development in diagnostic and cancer care could be maximised to improve patient access to services outside of an acute hospital. Examples of this are Imaging networks[xxi] which could better enable shared expertise, flexible job planning and remote reporting, all serving to offer universal access to crucial radiology services for patients. NHS England has outlined a strategy for establishing 18 networks by 2023[xxii].

19. In addition to this Community Diagnostic Hubs (CDHs) and Rapid Diagnostic Centres (RDCs) models are designed to expedite diagnoses and improve early access to testing across a range of services, including imaging, endoscopy and cardiology. If fully functional, they will relieve pressure on acute hospital departments, and provide a platform for streamlined patient pathways. **However, the successful development depends on having the right workforce and technology in place to deliver services.**

20. These developments can be further supported to improve patient care by embracing the recommendations from the Getting It Right First Time (GIRFT) programme in collaboration with NICE and devolved nation equivalents would ensure the most appropriate imaging investigations are used in all clinical scenarios, across all relevant healthcare settings. **These could be underpinned by a national roll out of referral guidelines delivered in clinical decision support software such as iRefer[xxiii] and wider implementation of the Quality Standard for Imaging**[xxiv].

The Royal College of Radiologists
May 2021

References

[i] NHS England (2019) The NHS Long Term Plan, p.56, https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

[ii] Ibid, p.20

[iii] Maringe, C *et al* The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: a national, population-based, modelling study Lancet Oncol 2020; 21: 1023–34

[iv] Sud A et al Effect of delays in the 2-week-wait cancer referral pathway during the COVID-19 pandemic on cancer survival in the UK: a modelling study Lancet Oncol 2020; 21: 1035–44

[v] Sud A *et al*. Collateral damage: the impact on outcomes from cancer surgery of the COVID-19 pandemic Annals of Oncology 2020:31(8)

[vi] NHS (2020) Radiology – GIRFT Programme national Speciality Report, https://www.gettingitrightfirsttime.co.uk/wp-content/uploads/2020/11/GIRFT-radiology-report.pdf

[vii] The Royal College of Radiologists. *Clinical oncology UK workforce census report*. London: The Royal College of Radiologists, 2020.

[viii] Westerland OA, Pratt G, Kazmi M *et al.* National survey of imaging practice for suspected or confirmed plasma cell malignancies The British Journal of Radiology 2018 91:1092

[ix] https://www.rcr.ac.uk/posts/fatal-heart-conditions-going-undetected-due-lack-scanning-services

[x] The Royal College of Radiologists. *Clinical radiology UK workforce census 2020 report*. London: The Royal College of Radiologists, 2021, https://www.rcr.ac.uk/press-and-policy/policy-priorities/workforce/radiology-workforce-census

[xi] https://www.england.nhs.uk/wp-content/uploads/2020/10/BM2025Pu-item-5-diagnostics-recovery-and-renewal.pdf

[xii] Prostate Cancer Timed Clinical Pathways NHS England Dec 2017 https://www.england.nhs.uk/wp-content/uploads/2018/04/implementing-timed-prostate-cancer-diagnostic-pathway.pdf

[xiii] https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/previousReleases

[xiv] http://www.ncin.org.uk/cancer_information_tools/

[xv] NHS Cancer Transformation Programme and NHS Long Term Plan. Available at: https://www.england.nhs.uk/wp-content/uploads/2017/10/national-cancer-transformation-programme-2016-17-progress.pdf and https://www.longtermplan.nhs.uk/

[xvi] Department of Health and Social Care. £40 million investment to reduce NHS staff login times. 2020. Available at: www.gov.uk/government/news/40-million-investment-to-reduce-nhs-staff-login-times

[xvii] OECD (2019), Health at a Glance 2019: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1787/4dd50c09-en.

[xviii] https://www.axrem.org.uk/wp-content/uploads/2017/08/AXREM-Aged-Asset-Article-CTMR280717.pdf

[xix] https://www.rcr.ac.uk/sites/default/files/cib_mri_equipment_report.pdf

[xx] RCR, ScOR, IPEM submission to the CSR call for evidence, Sept 2020

[xxi] The Royal College of Radiologists. *Clinical radiology Wales workforce 2019 summary report*. London: The Royal College of Radiologists, 2020.

The Royal College of Radiologists. *Clinical radiology Northern Ireland workforce 2019 summary report*. London: The Royal College of Radiologists, 2020.

[xxii] NHS England and NHS Improvement. Transforming imaging services in England: a national strategy for imaging networks. NHS England and Improvement, 2019

[xxiii]https://www.rcr.ac.uk/clinical-radiology/being-consultant/rcr-referral-guidelines/about-irefer

[xxiv] https://www.rcr.ac.uk/clinical-radiology/service-delivery/quality-standard-imaging-qsi