



Clinical radiology UK workforce census 2020 executive summary



April 2021

Executive summary

Produced yearly, The Royal College of Radiologists' (RCR) census provides robust data on the state of the clinical radiology consultant workforce in the UK. The findings are essential reading for local and national workforce planners and are the cornerstone of RCR policy.

Our most recent findings were returned at the end of 2020, following the most challenging year in NHS history. The health service remains under considerable pressure and 2021 and beyond will see profound change in response to the impact of the COVID-19 pandemic.

The pandemic has underlined the undisputed value and resilience of the healthcare workforce and highlighted its adaptability and ability to innovate.

Despite ongoing constraints, the importance of and opportunities for NHS radiology have been amplified in the past year, with:

- The clear impetus for community diagnostic hubs that act as a one-stop shop for patients in a COVID-19-secure environment
- A greater appreciation of interventional radiology (IR) as a non-invasive alternative to open surgery
- Rapid facilitation of home reporting of imaging examinations.

While these positive developments provide much to celebrate and build on, the 2020 census findings highlight that key, long-term issues must be addressed to truly safeguard and improve patient care.

The increasing demand for vital imaging services



We have a backlog of 10,000 examinations.

Long waits for patients to get results.

Chronically understaffed department.

Medical imaging is central to the diagnosis and treatment of many medical conditions, including cancer, stroke and major trauma. Clinical radiology (CR) consultants are the expert doctors who interpret and report complex scans, perform image-guided surgery and provide expert guidance to other clinicians to support patient care.

The radiology workforce is not growing fast enough to meet demand and pressure on imaging teams has been compounded by backlogs of patients awaiting imaging due to the COVID-19 pandemic. The workload for complex imaging (computed tomography [CT] and magnetic resonance imaging [MRI] scans) is increasing at 7% every year while the CR consultant workforce is only growing at 4%.¹

Before the pandemic, more than 120,000 scans were carried out every day across England alone.⁵ In September 2020, more than 200,000 patients in England were waiting six weeks or more for a CT or MRI scan, ten times as many as in September 2019.² Waiting lists are at a record high and millions of patients waiting for treatment will need some form of imaging diagnosis and/or interventional radiology treatment.³

Prior to the pandemic, radiology leads increasingly reported that under-staffing was having a direct impact on patient safety and access to medical imaging and interventional treatment as well as escalating NHS outsourcing costs and workforce stress.⁴

The 2020 census confirms that the situation remains dire and investment is now essential to support early diagnosis targets and to improve patient care. Without increased funding and support for NHS radiology, patients will suffer, diagnoses will be further delayed and fewer patients will benefit from life-saving, minimally invasive interventional radiology.

The impetus to deliver care differently



We cannot deliver adequate services to our patients.

Not only is there a shortage of radiologists, but radiographers and nurses too.

Risk of delayed diagnosis.

Last year's NHS England-commissioned report by Sir Mike Richards called for a major expansion and reform of diagnostic services over the next five years to facilitate the NHS' recovery from the COVID-19 pandemic and meet rising demand across multiple aspects of diagnostics.¹ It stated that new facilities and equipment will be needed, together with a significant increase in the diagnostic workforce and skillmix initiatives.⁵

Focusing on supporting the workforce as part of the response to the COVID-19 pandemic is also outlined as a priority in the *Cancer services recovery plan for England* and the Scottish Government's *Recovery and redesign: an action plan for cancer services*.^{6,7}

While there is now more political recognition of the need to expand imaging services to improve care, the 2020 census data reveal the true extent of the workforce crisis and the urgency of the action that's required.

A workforce at two-thirds of adequate capacity



Permanently overworked and under-supported radiologists set themselves up to fail patients.

We can no longer provide cancer care and acute care safely.

Risk of delayed diagnosis.

There are 433 CR consultant vacancies across UK hospitals, equating to one-in-ten radiologist jobs unfilled. Many posts are sitting empty for years despite numerous recruitment attempts. In 2020, nearly two-thirds of consultant vacancies remained unfilled after a year, double the proportion reported in 2015.

When hospital vacancies are combined with workloads to illustrate real-time demand, the census reveals a current estimated shortage of 1,939 radiology consultants which equates to a third (33%) of the workforce needed to keep up with the demand for scans and IR work.

There is acute regional variation with estimated workforce shortfalls above 40% across North and West Wales, the North of Scotland, North East England and the East Midlands. Without more local prioritisation to plug these staff shortages, patient care will suffer.

If nothing is done to improve staff recruitment and retention, forecasts indicate that the NHS will be facing an actual shortage of 3,600 CR consultants, equivalent to a 44% shortfall, by 2025.

Increased investment is urgently needed to boost radiologist training numbers and bridge these shortfalls.

The urgent need to boost interventional services to provide acute life-saving care



When there is a rota gap, we have to hope one of the IRs is about. If not, it is approximately 50 miles to the next IR unit.

We cannot provide an IR on-call service any time soon; not only is there a shortage of radiologists, but radiographers and nurses.

IR consultants are specialist radiologists who perform minimally invasive image-guided procedures.

Life-saving IR procedures that improve quality of life for patients include removing the blood clots that cause stroke, draining infected organs and stopping traumatic bleeding, as well as destroying cancer tumours and clearing urinary and biliary tract obstructions. Benefits typically include faster recovery times, shorter hospital stays and reduced morbidity and mortality compared with conventional surgery.⁸ IR is increasingly used to replace or enhance more invasive surgical procedures.

RCR guidelines recommend that timely access to IR is available to ensure patient safety, regardless of geography and hospital size.⁸ Services consisting of a minimum of six IR consultants will usually be able to provide an effective and sustainable 24-hour IR service.⁸

However, the 2020 census found almost half of UK trusts and health boards (47%) cannot provide adequate 24/7 IR services.

The principal reason for the UK's inadequate 24/7 IR service is the lack of trained IR consultants. To meet safe staffing guidelines, the UK needs at least another 364 full-time IR consultants in practice.

Recent developments impacting on clinical radiology

Radiology departments are key to an efficient and safe NHS. They are the backbone to diagnosis, early cancer detection, screening services and life-saving interventional procedures. However, there is still much to do so that departments are properly staffed to ensure patient care.

The RCR will continue to make the case for increased trainee numbers and the capacity to train them, work with our membership to identify and implement new ways of working and campaign for streamlined patient pathways through hub and networking models.

The RCR welcomes the opportunity to engage with the Department of Health and Social Care, the devolved administrations and the NHS across the UK to ensure radiology services can continue to be delivered safely and effectively and designed around patients' needs.

To support these ambitions, RCR policy priorities are to:

1. **Secure investment of £750 million to boost training places to meet forecast demand.** This should comprise 60 additional clinical radiology specialty training places per year for the next two years, rising to 100 per year for the following three years. In addition, 50 additional final-year IR training places are required each year for the next five years.⁹
2. **Achieve sustained and targeted investment in the wider diagnostic team.** This includes staff grade, associate specialist and specialty (SAS)-grade radiologists, radiographers, healthcare scientists, nurses and administrative support.
3. **Enable better use of the skills and experience of the workforce,** which can be achieved by fostering skillsmix and providing a comfortable, inclusive working environment.
4. **Secure dedicated beds for IR day-case services and control of their own beds.** This would support the workforce while maximising the use of existing equipment to bolster increased capacity. It would likely lead to significant savings compared to theatre and inpatient stay costs and improve access for patients.

References

1. NHS England and NHS Improvement. Diagnostic imaging dataset annual statistical release 2019/20. London: NHE England, 2020.
 2. www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/monthly-diagnostics-data-2020-21/ (last accessed 31/3/21)
 3. www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/ (last accessed 31/3/21)
 4. The Royal College of Radiologists. Clinical radiology UK workforce census 2019 report. London: The Royal College of Radiologists, 2020.
 5. Professor Sir Mike Richards. Independent review of diagnostic services for NHS England: Diagnostics: recovery and renewal. 2020.
 6. NHS Cancer Programme. Cancer services recovery plan. London: NHS England, 2020.
 7. Scottish Government. Recovery and redesign: an action plan for cancer services. Edinburgh: The Scottish Government: 2020.
 8. The Royal College of Radiologists. Provision of interventional radiology services, second edition. London: The Royal College of Radiologists, 2019.
 9. www.rcr.ac.uk/sites/default/files/final_csr_submission_for_upload.pdf (last accessed 25/3/21)
-



The Royal College of Radiologists
63 Lincoln's Inn Fields
London WC2A 3JW

+44 (0)20 7405 1282

enquiries@rcr.ac.uk

www.rcr.ac.uk

[@RCRadiologists](https://twitter.com/RCRadiologists)

The Royal College of Radiologists. *Clinical radiology UK workforce census 2020 executive summary*. London: The Royal College of Radiologists, 2021.

Ref No. BFCR(21)3.1

© The Royal College of Radiologists, April 2021.

The RCR is a Charity registered with the Charity Commission No. 211540

For permission to reproduce any of the content contained herein, please email: permissions@rcr.ac.uk

This material has been produced by The Royal College of Radiologists (RCR) for use internally within the specialties of clinical oncology and clinical radiology in the United Kingdom. It is provided for use by appropriately qualified professionals, and the making of any decision regarding the applicability and suitability of the material in any particular circumstance is subject to the user's professional judgement.

While every reasonable care has been taken to ensure the accuracy of the material, RCR cannot accept any responsibility for any action taken, or not taken, on the basis of it. As publisher, RCR shall not be liable to any person for any loss or damage, which may arise from the use of any of the material. The RCR does not exclude or limit liability for death or personal injury to the extent only that the same arises as a result of the negligence of RCR, its employees, Officers, members and Fellows, or any other person contributing to the formulation of the material.