

The state of the diagnostic imaging and cancer workforce in Scotland

The Royal College of Radiologists' (RCR) annual workforce census provides the most comprehensive picture of the diagnostic imaging and cancer care workforce across the UK. With a 100% response rate, this year's census finds that Scotland still has too few clinical radiologists and clinical oncologists to meet growing patient need – and the problem is getting worse.

Clinical radiologists (CRs) are specialist doctors who use medical imaging to diagnose and monitor diseases and injuries, as well as perform minimally-invasive image-guided procedures. They are the eyes of the NHS, playing a role in the diagnosis and

care of nearly every patient who passes through a hospital's doors. Clinical oncologists (COs) meanwhile sit at the very heart of cancer care, often planning a patient's treatment journey from start to end. They are the only doctors able to prescribe and oversee the full range of non-surgical cancer treatments, including radiotherapy and chemotherapy.

Only with both specialties can NHS Scotland and the Scottish government hope to deliver the timely care that patients expect and deserve. The RCR is calling on policymakers to grow the radiology and clinical oncology workforce to progressively eliminate the workforce shortfalls over time. Without action, patients will continue to face long, anxious waits for diagnosis and delays to life-saving care.

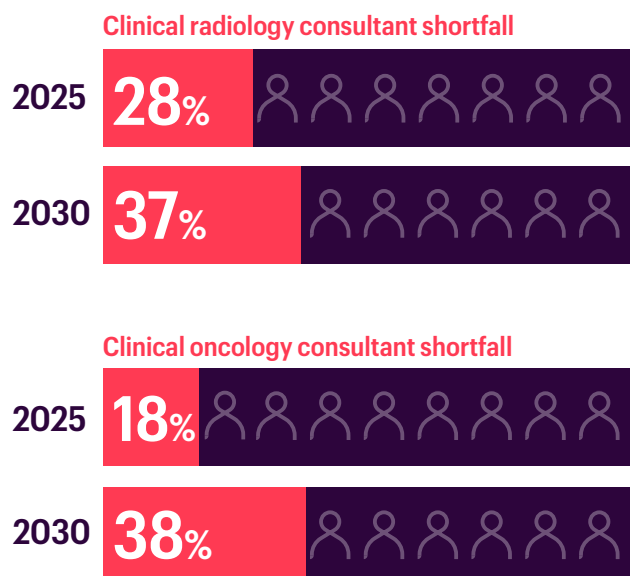
Workforce Shortfalls

Scotland has too few clinical radiologists and clinical oncologists to provide patients with the timely diagnosis and care they need.

Demand for diagnostic imaging and cancer care is rising rapidly as the population ages, people live in ill health for longer, and incidence of major diseases grows. This is piling pressure onto already over-stretched staff, with existing workforce shortfalls set to grow considerably over the next five years. Demand for complex imaging (CT and MRI scans) grew at twice the rate of the consultant workforce in 2025 (6.5% vs 3.3%), meanwhile demand for cancer services is rising as more patients live with the disease for longer. It is estimated that 54% more people (158,000 patients) in Scotland will be living with cancer in 2045.

In 2025, NHS Scotland had 149 (28%) fewer consultant clinical radiologists and 22 (18%) fewer consultant clinical oncologists than it needed to deliver safe and effective care.

Scotland's imaging and cancer workforce shortfalls are growing



Every Scottish region is facing workforce shortfalls in imaging and cancer care

Underneath the headline figures, some regions are faring much worse than others – contributing to a postcode lottery in access to diagnostic services and cancer care. The North of Scotland’s regional workforce shortfall of clinical radiologists is the largest in the UK.

Clinical Radiology

	2025	2030
 North of Scotland	50% (39 Doctors)	47% (51 Doctors)

 East of Scotland	39% (28 Doctors)	45% (46 Doctors)
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 West of Scotland	24% (67 Doctors)	36% (139 Doctors)
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 South East Scotland	16% (15 Doctors)	28% (39 Doctors)
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Clinical Oncology

 North of Scotland	21% (8 Doctors)	52% (24 Doctors)
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 South West Scotland	19% (10 Doctors)	34% (23 Doctors)
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 South East Scotland	13% (4 Doctors)	28% (11 Doctors)
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Patient safety

Clinical leaders are worried staff shortages are compromising patient care.

Delays to treatment can be ruinous for patient outcomes, and even in best case scenarios can result in unnecessary distress. Clinical leaders share this concern. Almost all CR clinical directors and cancer centre leaders report that staffing shortages are driving backlogs and delaying treatment. Crucially, many clinical leaders are aware of cases where patients' conditions worsened as a direct result of these delays.

Due to a shortage of doctors, 40% of cancer centre leaders fear they may need to reduce opening hours, underscoring the growing risk that workforce constraints pose to both patient access and outcomes.

99,124



patients waited more than 6 weeks for a diagnostic test in 2025

3 in 10



patients waited more than 62 days to begin urgent treatment for cancer in 2025

62%

of radiology department leaders, and

are aware of patients whose conditions worsened as a result of delays due to workforce shortages

60%

of cancer centre leaders



92%

of radiology department leaders, and

are concerned about backlogs and delayed treatment as a result of workforce shortages

100%

of cancer centre leaders



Workforce attrition

NHS Scotland is also struggling to retain its workforce

Consultants leave the NHS for a range of reasons: some are retirees, some leave to practise medicine abroad, some enter private practice, and some pursue work in other sectors. Each year, 'early' leavers mean hundreds of years of potential NHS service are lost.

As service pressures grow, many doctors report feeling overwhelmed, stressed and at risk of burnout. This undermines efforts to ensure the NHS is an attractive place to build and sustain a long-term career.



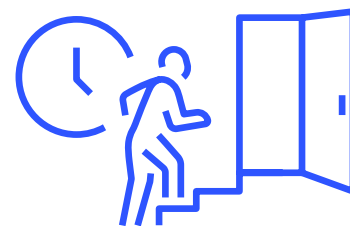
Stress and burnout as a result of staff shortages are a concern for:

92%

of radiology department clinical directors, and

100%

of cancer centre leaders



Average age of leavers (last five years)

49 years

Clinical Radiologists

52 years

Clinical Oncologists

Access to specialist care

Across Scotland, timely access to life-saving specialist care is often determined by a patient's postcode. This is exemplified by access to interventional radiology (IR) and site specialty expertise for certain types of cancer. The NHS must invest in IR to improve access to image-guided pinhole treatment for cancer and vascular diseases like stroke, and make sure health boards have sufficient cancer cover for all tumour sites they treat so patients can get the care they need close to home.

Interventional radiology (IR)

By combining modern imaging with minimally-invasive surgical techniques, interventional radiology (IR) has transformed outcomes for many conditions – able to prevent permanent brain damage from stroke or save limbs from amputation. Mechanical thrombectomy (MT) for example – an image-guided pinhole procedure performed by an interventional neuroradiologist (INR) – is able to rapidly remove a clot during a stroke and prevent a lifetime of disability if delivered in time. 77% of Scottish health boards have an IR service, though only half are available 24/7. Although the IR workforce has grown by 8% per year, Scotland has the fewest IR consultants per million population of any UK nation – with provision particularly weak in the North.

27%

shortfall of interventional radiologists in 2025



90%

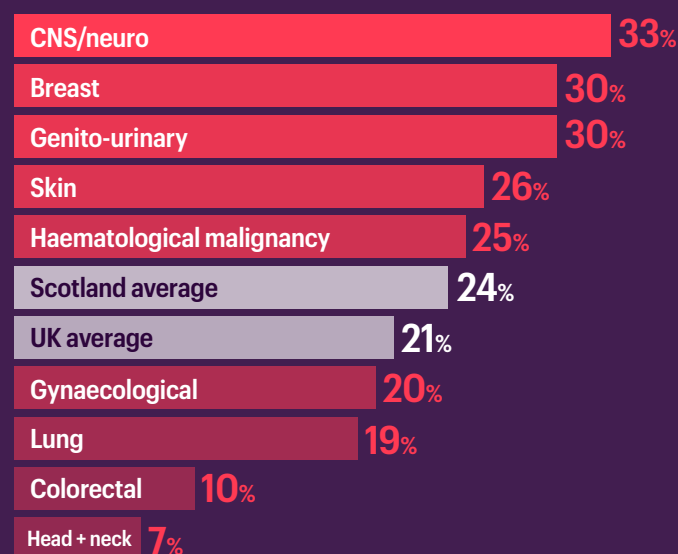
of clinical directors have seen IR procedures delayed or cancelled due to workforce shortfalls

Cancer site specialty expertise

Clinical oncologists specialise their practice to specific cancer types, owing to the huge complexity and increasing treatment options available for each type. The RCR recommends that there should be at least two consultants per cancer type per cancer centre, to accommodate unplanned absences.

Despite this, many cancer centres report having no consultant cover for certain cancer types they treat, while a high proportion of certain site specialists are forecast to retire over the next five years. This is a risk to timely, equitable and safe patient care.

% site specialists (WTE) in Scotland forecast to retire by 2030



The cost of shortfalls

The NHS is haemorrhaging money on quick fixes to fill workforce gaps while failing to address the root cause.

To manage workforce shortfalls, radiology departments in Scotland spent a record **£21 million** on outsourcing to private firms, ad hoc locums and to existing staff (insourcing) in 2024/25. This is equivalent to **179 CR consultants' annual salaries**, enough doctors to fill the entire radiology shortfall.

Not only is outsourcing costly, but it is inefficient too. 77% of clinical directors report additional workload (e.g. from double-checking outsourced reports), 69% report quality concerns, and 67% report costs going unexpectedly over-budget. By investing in the radiology workforce instead, the NHS can save millions of pounds.

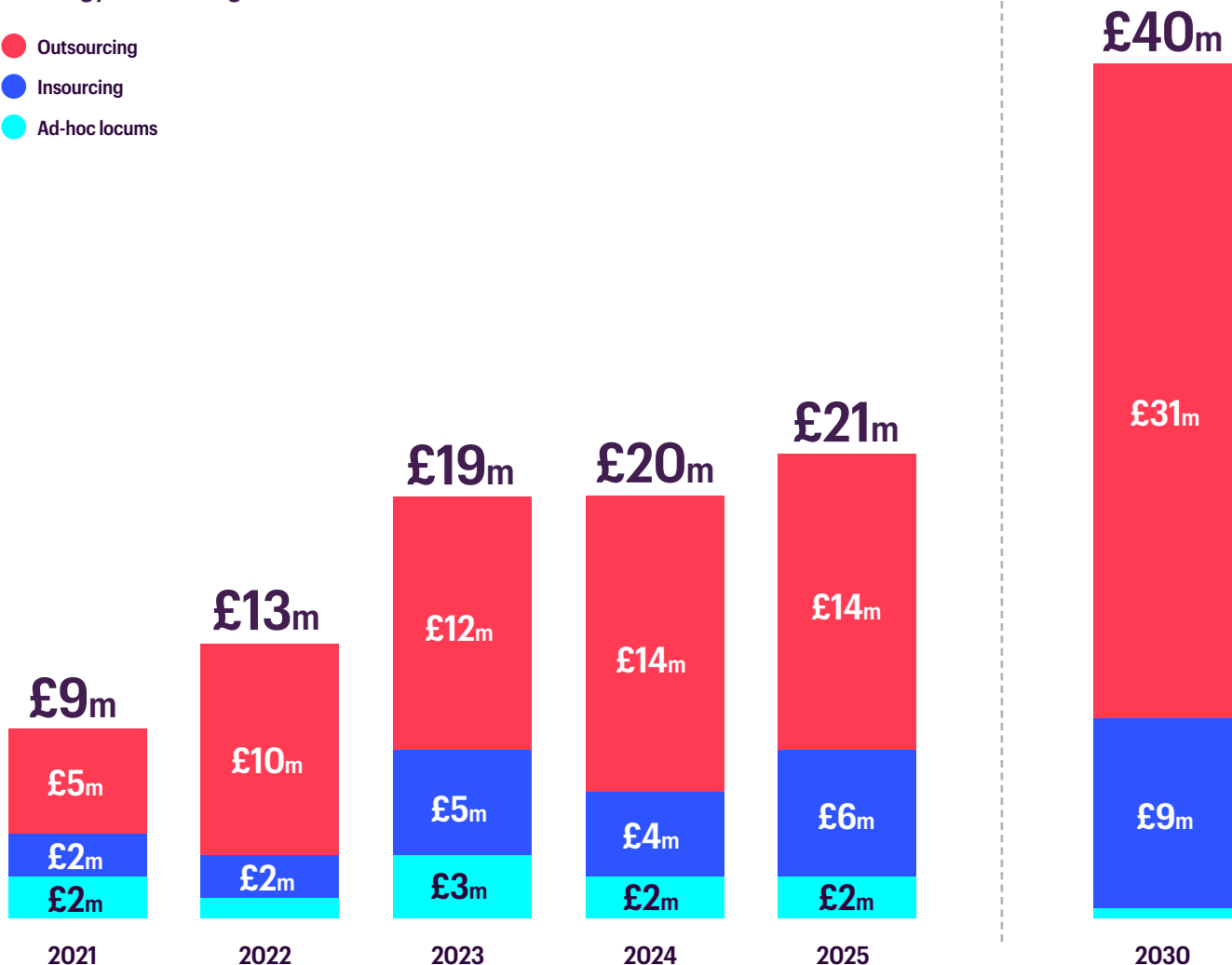
Over 10 years, 10% uplift in the baseline number of specialty training places in clinical radiology would:

↑ Deliver cost savings of **£10m**

↑ Reduce the shortfall by **54%**

Radiology outsourcing costs are set to double

- Outsourcing
- Insourcing
- Ad-hoc locums



Recommendations

Policymakers must take action to train, recruit and retain the diagnostic imaging and cancer workforce Scotland needs.

A Grow the consultant cancer and diagnostic imaging workforce

NHS Scotland should prioritise the creation of new consultant posts in clinical radiology, supported by a sustainable increase in specialty training places. NHS Scotland should increase both consultant posts and specialty training places in clinical oncology to meet rising demand.

B Target workforce investment in under-resourced areas

NHS Scotland should introduce measures to attract doctors to under-resourced areas, such as North of Scotland, and smaller cancer centres and hospitals.

C Maximise training capacity via funding flows

NHS Scotland should allocate funding for specialty training posts by whole time equivalence (WTE), rather than simple headcount, to maximise existing capacity in the system as more doctors opt to work less-than-full-time.

D Provide and protect doctors' leadership, training and governance time

Health boards should guarantee all doctors have a minimum of 1.5 supporting professional activities (SPAs) in their job plans, with additional SPA time for those taking on vitally important leadership, training or service improvement roles.

E Reduce the NHS's reliance on outsourcing in radiology

NHS Scotland should reduce its reliance on outsourcing, which does not represent value for money. NHS leaders should explore other measures to manage excess demand, as well as investing in additional radiology capacity via workforce growth.

F Tackle unequal access to specialist care

NHS Scotland should provide targeted investment to interventional radiology so that all regions are able to provide adequate, 24/7 patient access to vital IR services. NHS workforce planning must include measures to preserve tumour site expertise for all cancer types, so patients across Scotland have equitable access to quality care.

G Eliminate recruitment freezes

Ongoing recruitment freezes in radiology departments and cancer centres should be lifted. National NHS leadership must intervene where freezes are identified.

H Invest in artificial intelligence

Additional investment should be provided to complete the rollout of AI in auto-contouring and expand access to administrative AI tools to free doctors' time to spend directly caring for patients.

I Optimise demand for imaging and reporting

Updates to service specifications and clinical guidance should be accompanied by impact assessments so that the necessary workforce capacity can be quantified and planned for. NHS Scotland should roll out the iRefer clinical decision support to every health board to reduce unnecessary scans.

J Attract graduates and medical students to clinical oncology

Medical schools and NHS Education for Scotland, via the Scotland Deanery, should increase exposure to clinical oncology, to attract more trainees into the profession.



The Royal College of Radiologists

About the Royal College of Radiologists

The Royal College of Radiologists (RCR) is a charity and leading membership body for clinical radiologists and clinical oncologists across the UK.

Please get in touch with us at publicaffairs@rcr.ac.uk to organise a meeting, explore further action and/or receive further briefing.

References and further information are available in the [clinical radiology](#) and [clinical oncology](#) census reports and data tables.

63 Lincoln's Inn Fields
London WC2A 3JW
United Kingdom

rcr.ac.uk
+44 (0)20 7405 1282
publicaffairs@rcr.ac.uk

