

Written evidence submitted by Radiotherapy UK to the Health Bill Committee

1. Summary and key recommendation

Radiotherapy is a clear test of whether the Health Bill's new NHS structures can turn national cancer ambitions into deliverable reality. Since approximately half of cancer patients need radiotherapy and it contributes to [40% of cancer cures](#), it is crucial that the NHS prioritises this treatment in its planning, investment, and accountability frameworks to rectify its historical neglect and underutilisation. Moving around the structure of the NHS can only be considered a success if it addresses the system problem within core cancer services that result in:

- Low levels of access to radiotherapy in comparison to international standards (- In 2021, only [35%](#) of cancer patients in England received radiotherapy as their primary treatment, with some places as low as 20% - compared to 52-53%,^{3,4} international estimates). Between 2019 and 2021, the regional variation in access to radiotherapy ranged from 29.8% to 50%. This means that in some parts of England, 1 in 2 cancer patients received radiotherapy, while in other areas, only 1 in 3 patients did
- Radiotherapy services having the longest 62-day waiting times of the three main cancer treatments (alongside surgery and anti-cancer regimen drugs), with only 4 in 10 patients receiving their treatment on time
- Commissioning structures that have left NHS Trusts operating an estimated 17 radiotherapy machines beyond their recommended lifespan, with a further 26 expected to exceed their recommended lifespan by 2027. This reflects a wider failure to ensure that budgets flow consistently towards radiotherapy technology, AI and software that are already proven to improve capacity and reduce waiting times.
- Access barriers that leave millions of people living too far from radiotherapy services. When travelling by car, [7.4 million people](#) in the UK live more than 45 minutes from their nearest radiotherapy centre, creating a significant practical barrier to timely treatment.

The Government and NHS have placed major emphasis on improving cancer waiting times, including the 62-day standard from urgent referral to first definitive treatment. However, that target cannot be met through referral management, diagnostics or short-term operational pressure alone. It will only be achievable if the NHS has sufficient treatment capacity at the end of the pathway. Radiotherapy is central to that capacity.

This matters directly to the Health Bill. If the Bill is intended to create clearer NHS structures, stronger accountability and better delivery, it must ensure that the services required to meet national cancer targets are properly planned, resourced and accountable. Radiotherapy is too important to cancer outcomes and the 62-day

standard to be left to fragmented responsibility, but too specialist, technical and cross-cutting to be planned effectively without clear national oversight.

The Committee should therefore ensure that the structures, duties and accountability mechanisms created by the Health Bill properly reflect radiotherapy's central role in cancer outcomes and in meeting the 62-day cancer waiting time standard. This should include clearer national leadership, transparent performance metrics, capacity planning, workforce planning, equipment replacement planning, data collection and accountability for regional variation in access.

2. Why radiotherapy matters to cancer outcomes

International evidence makes clear that countries that have better cancer outcomes treat cancer patients within at least 62-days and have access to modern radiotherapy treatments. Radiotherapy is a life-saving, technologically advanced and highly targeted cancer treatment. Modern radiotherapy is the second most curative cancer treatment, the most cost-effective; it reduces recurrence, preserves organs, relieves symptoms and some of the most promising innovations in immunotherapy should be delivered in combination with radiotherapy. The NHS will only see the health and economic benefit from its efforts to diagnose more cancers earlier, if we provide access to timely treatments like radiotherapy. In terms of the magnitude of the effect, reducing the waiting time for radiotherapy from 12 weeks to 31 days from the decision to treat, achieved in the first decade of the century, will have saved approximately [2500 lives](#) per year in England. Scaled for the current population, today this would amount to 3000 lives saved per year in England simply by reducing delay to start treatment

Radiotherapy is also essential to the Government's ambitions on cancer waiting times. The 62-day standard depends not only on referral, diagnostics and outpatient appointments, but on the availability of definitive treatment capacity. Where radiotherapy capacity is insufficient, patients wait longer, cancers may progress, outcomes worsen and the NHS becomes less able to meet the cancer standards it has set for itself. Without a more strategic approach to treatment capacity, the NHS will be attempting to improve cancer outcomes while relying on services that are already under-planned and under pressure.

3. The structural problem: why radiotherapy has been overlooked

Radiotherapy has characteristics that make it especially vulnerable to unclear accountability.

- **It is highly technical:** Modern radiotherapy depends on specialist equipment, software, imaging, digital infrastructure, planning systems, treatment machines and a multidisciplinary workforce including clinical oncologists, therapeutic radiographers, medical physicists, dosimetrists and engineers.

- **It is regionally delivered:** Radiotherapy services do not sit neatly within routine local commissioning. Patients often travel across local NHS boundaries to reach a centre, and service planning needs to take account of regional networks, machine capacity, workforce flows and population need.
- **It is capital-intensive but highly cost-effective:** Radiotherapy machines require planned replacement and upgrading, yet funding has too often been intermittent rather than based on a rolling national assessment of need. Outdated equipment can mean slower treatment, interruptions due to breakdowns, reduced access to modern techniques and increased pressure on staff.
- **It is data-dependent:** Radiotherapy is well suited to high-quality data collection and rapid service improvement, but current data systems are not yet sufficient to provide a single, transparent picture of access, quality, equipment capability, patient outcomes and regional variation.
- **It is workforce-dependent:** The radiotherapy workforce is small relative to the scale of treatment it delivers. Evidence from the radiotherapy community identifies a current shortfall of around 582 whole-time equivalent staff, with significantly more staff needed as cancer incidence rises. Workforce shortages directly affect treatment capacity, waiting times and the ability to adopt modern technology.

The result is a persistent accountability gap. Radiotherapy is too important to cancer outcomes to be left to fragmented responsibility, but too specialist and cross-cutting to be planned effectively without clear national oversight.

4. Evidence of the consequences for patients and services

The consequences of this structural gap are visible in access, capacity and variation.

International estimates suggest that approximately [52–53%](#) of cancer patients should receive radiotherapy. NHSE Cancer data indicates that only around [35%](#) of cancer patients in England currently do so. This suggests a significant gap between clinical need and actual access.

There is also marked geographical variation. The proportion of cancer patients receiving radiotherapy varies widely between areas, with some regions treating far fewer patients than others. Such variation cannot be explained away as a matter of patient choice alone. It indicates that access is shaped by local capacity, workforce, referral pathways, equipment, travel times and service configuration.

Reinforcing the postcode lottery in radiotherapy is patient travel times. Previous national guidance referred to a recommended travel time of no more than 45 minutes to or from a radiotherapy centre. Radiotherapy UK analysis found that millions of people live further than 45 minutes from their nearest radiotherapy centre by car, and far more are outside that threshold when public transport is considered. This disproportionately

affects patients on lower incomes, disabled patients, older people and those without access to a car.

Equipment capacity is also a concern. The UK is estimated to have around 5.1 linear accelerators per million people, below comparable European countries, where estimates are around 7–10 per million. Radiotherapy UK analysis has also identified that a significant proportion of machines in England are approaching or beyond the recommended replacement age.

Finally, accountability within existing NHS structures is unclear. Radiotherapy UK's Freedom of Information from 2024 work found that around 70% of ICBs in England had no named person responsible for ensuring access to sufficient radiotherapy treatment capacity. That is not simply an administrative detail. It is evidence of the wider problem the Health Bill is intended to address: where responsibility is unclear, patients lose out.

5. Why this matters for the Health Bill

The Health Bill is intended to reshape NHS structures and accountability. It should therefore address the parts of the NHS where unclear responsibility has had the clearest impact on delivery. The structural organisation and commissioning of our national radiotherapy service is one of the most important examples of how failing to make the most of a high-tech cancer service can result in waste, health inequalities, and patients being unable to access modern care.

If the Bill strengthens the responsibilities of ICBs, national bodies and the Secretary of State, it must ensure that cancer treatment capacity is not treated as an afterthought. Waiting time accountability must not be limited to short-term operational pressure on individual providers. Where cancer standards are being missed, the system should be required to consider whether there is sufficient treatment capacity, workforce, equipment and regional access to meet demand.

Radiotherapy is especially relevant because it sits across the boundaries of local commissioning, regional delivery and national planning. It requires strategic oversight that individual providers or ICBs cannot deliver alone. A new NHS accountability framework will only improve cancer outcomes if it makes clear who is responsible for ensuring that patients can access the treatment they need, when they need it, and with modern equipment and sufficient specialist staff.

6. Conclusion

Radiotherapy is a powerful example of why NHS structures matter. It is a core cancer treatment, needed by a large proportion of patients, central to cure and highly relevant to the 62-day cancer waiting time standard. Yet it has been repeatedly overlooked because responsibility for its planning, funding, workforce, equipment and delivery is too fragmented.

The Health Bill is an opportunity to close that accountability gap. As new NHS structures are created, radiotherapy must not be allowed to fall through the cracks again. The Committee should ensure that the Bill supports clear national leadership, transparent accountability and strategic planning for radiotherapy, so that every patient who needs this life-saving treatment can access it at the right time, in the right place and with the right technology.

Radiotherapy is not peripheral to cancer care. It is central to whether the NHS can deliver better cancer outcomes, reduce regional inequalities and meet the standards patients have been promised.

8. About Radiotherapy UK

Radiotherapy UK is the UK charity dedicated to improving access to world-class radiotherapy for all patients who need it. We work with patients, clinicians, therapeutic radiographers, medical physicists, engineers, researchers, service leaders and parliamentarians to improve access, quality, innovation and outcomes in radiotherapy services.