

“ Investment in radiotherapy not only enables treatment of large numbers of cancer cases to save lives, but also brings positive economic benefits<sup>1</sup>. ” Lancet Oncology

# Manifesto for Radiotherapy

Driving towards a modern,  
world-class radiotherapy service

Cancer impacts all of us.

- **It's personal.** One in two people will develop cancer<sup>2</sup>.
- **People live longer with cancer.** Cancer survival in the UK has doubled in the last 40 years<sup>3</sup>.
- **It's growing.** Cancer is growing twice as fast as other diseases and is likely to become the leading cause of death globally in just a few decades.

**AXREM**

ASSOCIATION OF HEALTHCARE TECHNOLOGY  
PROVIDERS FOR IMAGING, RADIOTHERAPY & CARE

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“*Sadly, half of us will get cancer at some point in our lives and half of those with cancer will need radiotherapy – yet radiotherapy receives a mere 5% of the cancer budget. As we argue for a more ambitious approach to radiotherapy in the UK, I welcome the AXREM manifesto. The radiotherapy industry has a vital role to play in ensuring innovative radiotherapy solutions which reduce dosage, are more patient friendly and are made available freely through the NHS.*” Tim Farron, MP

## Radiotherapy – an essential component in cancer treatment

Radiotherapy plays a critical role **being of direct benefit to around 50% of all cancer patients**<sup>4</sup>.

Radiotherapy uses high energy rays to destroy cancer cells, the treatment is delivered from outside the patient (external beam radiotherapy) on different platforms which include linear accelerators (Linacs), CyberKnife, Gamma Knife, Tomotherapy or in combination with or, on its own by brachytherapy systems which deliver radiation from inside the patient (internal radiotherapy). External beam radiotherapy is delivered as an outpatient treatment over anything from one day to several weeks. Services are generally offered within larger NHS hospitals along with some linked satellite centres to help with geographical spread of populations.

Per patient, radiotherapy is the most cost-effective cancer treatment when compared with surgery and chemotherapy.

Although established for over 50 years as a treatment option, radiotherapy today remains underfunded and often underutilised when compared with its true clinical value in treating cancer.

## Current Status and Optimism

Technology is moving fast. The way we target and deliver radiotherapy treatment to tumours is changing, positively impacting the patient experience and overall outcomes. These advancements in delivery have increased cure rates with fewer side effects and enabled shorter treatment courses effectively delivered over just a few days. New software and hardware tools for planning, monitoring motion, adapting, and delivering patient treatment continue to raise the bar in what can be achieved.

Radiotherapy, as a primary treatment or when combined with surgery, chemotherapy or immunotherapy, has the potential to improve cancer outcomes.

**The UK currently lags behind the European average in survival for nine out of the ten most common cancers**<sup>5</sup>.

The importance of radiotherapy has been sharply evidenced during the COVID-19 crisis, where its focused, targeted non-invasive, outpatient-based approach offered patients greater treatment choice. Radiotherapy provides an alternative to other methods of treatment, minimising the risk of infection posed by surgery, whilst maintaining the body's immune system and avoiding the potential side effects of chemotherapy.

## Key Patient, Health, and Economic Benefits

### Patient Benefits

Radiotherapy can contribute to improving treatment outcomes for patients and supporting NHS targets to achieve **long term patient survival at the European average for common cancers – this is currently lower in the UK.**

- **One in four people in the UK will need radiotherapy at some point in their life**, with 40% of patients undergoing treatment with curative intent receiving radiotherapy solely or in combination with other treatments<sup>6</sup>.
- **Investment matters.** Shorter treatment courses made possible with newer technology can support faster and more precise treatments which are more tolerable and effective.
- **Radiotherapy continues to advance**, becoming more surgical and precise through improved imaging and AI. This increases its value and potential impact in the fight against many common cancers.
- **The goal of radiotherapy today** is to provide individualised patient treatment.

### Health and Economic Benefits

Chemotherapy generally has little effect on long-term survival. Just 2% of patients see long-term benefits, compared with 16% for radiotherapy<sup>7</sup> – yet chemotherapy has **four times as much funding in the cancer budget**<sup>8</sup>.

Patients undergoing radiotherapy, especially shorter courses, can maintain life as normally as possible, often with less impact on family life or returning to work. This not only improves patient experience but **brings associated societal benefit and cost saving** when compared with alternative treatments<sup>9</sup>.

An ageing population means that the cost burden in health and social care continues to grow in the UK. An increasing number of cancer patients require intervention following initial diagnosis or re-treatment for management of chronic disease. It is crucial to recognise radiotherapy's **unique value in both saving lives and long-term cost benefit.**

## Overview of Current Challenges

Access to radiotherapy services varies regionally and consequently, this impacts the potential for saving lives.

In England, services are currently organised in geographical networks to promote knowledge sharing and to coordinate patient referrals, especially for more specialised treatments. Research consistently shows that travel times of more than 45 minutes impact a patient's decision-making process, with many declining treatments due to distance<sup>10</sup>. This in turn leads to reductions in survival rates in under-serviced areas.

Analysis suggests that up to 24,000 people are not receiving the radiotherapy they need as part of their treatment for cancer<sup>11</sup>.

1. **Outdated machines.** Not everyone can be guaranteed the best treatment option for cancer because advanced radiotherapy techniques are sometimes restricted. This can be due to policies, limited regional access, or lack of sustainable funding for newer technology<sup>12</sup>.
2. The number of **linacs per million population is 25% lower than in comparative European countries**<sup>13</sup>. The UK has been consistently behind in this measure.
3. **Barriers to new technology exist** with adoption suffering from complicated national payment tariffs becoming outdated – stifling support for investment in treatment innovation.
4. **Funding.** Challenges are ongoing, with NHS hospitals forced to replace outdated radiotherapy equipment with squeezed capital equipment budgets as central funding is sporadic and unpredictable. **Sustainable, ringfenced, central funding for radiotherapy is key** to ensuring national investment in up-to-date equipment.

# Manifesto for Radiotherapy

As a trade body our members see the challenges radiotherapy departments face daily, from capacity, staffing and funding issues and how this impacts patient care and outcomes. Our manifesto is focused on addressing these and will have a positive impact on the radiotherapy community.

## 1. Radiotherapy strategy

- Appointment of a national cancer Tsar for radiotherapy.
- A national radiotherapy cancer plan to be published containing short, medium, and long-term objectives including models to establish how to adopt new IT and software and new treatment methods.
- Current cancer pathways reviewed, linking up screening and diagnostic programmes to cancer treatment plan to detect cancer earlier and improve outcomes through more targeted radiotherapy.

## 2. Funding

- Increase in the national budget from the current 5% to 6.5% annually.
- Clear models for replacement cycles through central funding and a strategy within the NHS for technology appraisal.
- Comprehensive review of radiotherapy tariffs considering the whole treatment and reflecting new methods.
- Funding and plan to increase the workforce needed across all disciplines by 10%.

## 3. Improved access

- Ensure radiotherapy can always be a patient's treatment choice, where clinically appropriate by expanding treatment provision for patients in rural and urban areas. This will open up treatment to the 20 000 patients a year who are not getting access to the radiotherapy they require<sup>14</sup>.
- Selectively expand radiotherapy machines and services across the country including the provision of satellite centres to the 3.5 million people in England who live more than the recommended 45min from a radiotherapy centre<sup>15</sup>.

1 Expanding Global access to radiotherapy. Atun et al Lancet Oncology 2015;16:1153- 86.

2 Radiotherapy Key facts • Radiotherapy UK

3 Cancer Research UK, Cancer survival statistics for all cancers combined | Cancer Research UK, Accessed Jul 2023

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12 Radiotherapy Position Statement from The Institute of Cancer Research, London April 2021 <https://www.icr.ac.uk/about-us/policy-and-engagement/position-statements/radiotherapy>

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14 Radiotherapy4Life • Radiotherapy UK

15 National Radiotherapy Advisory Group recommendations. [http://www.axrem.org.uk/wp-content/uploads/2016/07/RESOURCE-DH\\_Radiotherapy\\_developing\\_first\\_class\\_service\\_NRAG.pdf](http://www.axrem.org.uk/wp-content/uploads/2016/07/RESOURCE-DH_Radiotherapy_developing_first_class_service_NRAG.pdf) and referred to in [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213151/Radiotherapy-Services-in-England2012](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/213151/Radiotherapy-Services-in-England2012).