



The APPG for Radiotherapy (APPGRT)

Transforming Radiotherapy:
A six-point Covid-19 recovery
plan to save lives and save
money within the NHS

6 July 2020

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Executive Summary

It is widely accepted that one of the consequences of the Covid-19 pandemic is a backlog of cancer cases, which, if not addressed, may cost more lives than those lost to the virus itself¹. There is an urgent need to tackle the backlog and save those cancer patients. We need smart solutions that are viable against the background of a still unpredictable and live pandemic. Radiotherapy is that smart solution. Unlike surgery, it does not need intensive care capacity, and it does not have the impact on immunity often associated with chemotherapy. It is also relatively inexpensive compared to other cancer treatments. Typically, patients can be cured for around £6,000, in contrast to some chemotherapy drugs that run into the hundreds of thousands of pounds.

However, for a variety of reasons radiotherapy has been viewed by policy makers as something of a 'Cinderella' service; suffering from chronic underinvestment and suboptimal central commissioning that has felt to many in the sector like the dead hand of bureaucracy. Despite this, even before the pandemic, radiotherapy was already Britain's secret lifesaver. Many of those unfamiliar with radiotherapy are shocked to learn that 1 in 4 of us will need it at some point in our lives. Even in the more normal pre-pandemic times radiotherapy was needed by 50% of cancer patients and in 40% of cancer cures. It is a high-tech outpatient treatment, with often minimal acute side effects, which can be delivered throughout the pandemic.

If ever there is going to be a time when radiotherapy is re-prioritised and given its proper place in the eyes and minds of policy makers it must be now, as the post Covid-19 cancer backlog looms. But time is of the essence. It has taken the NHS nearly a decade to roll out the advanced radiotherapy technique known as stereotactic ablative radiotherapy or SABR. The NHS recommended SABR in 2011, but campaigners have only just ensured all centres will be commissioned to provide it by April 2021. SABR can treat more patients, more quickly and in fewer visits to hospital than was previously possible, providing an important tool in times of a pandemic. Welcome as the acceleration of the roll out is, it should never have taken this long and it has taken the intense campaigning effort from so many dedicated professionals to achieve this most sensible step.

But SABR is just one part of the story. The radiotherapy community is brimming with other ideas and initiatives that can unleash the power of radiotherapy to save more lives. These ideas are achievable, relatively cheap, and in many cases off the shelf solutions are available which could have an immediate impact. With modest investment they will provide enormous benefits; saving lives and saving the NHS money.

This report builds on the APPGRT Manifesto of September 2018 and is informed by the 2019 APPG radiotherapy inquiry and 2020 APPG mini-inquiry and it presents a coherent six-point plan to transform radiotherapy now, and long into the post Covid-19 future. Specifically, it calls for:

1. **Drive radiotherapy forwards:** appoint a radiotherapy minister and Tsar to form a national task force of medical and industry professionals to ensure all available solutions already used in other countries are rapidly introduced in the UK. Sweep away the bureaucracy that has led to a 10-year delay in the roll out of precision radiotherapy with SABR, and sweep in

¹ Lee LYW, Cazier JB, Starkey T, Turnbull CD, Kerr R, Middleton G. COVID-19 mortality in patients with cancer on chemotherapy or other anticancer treatments: a prospective cohort study. *The Lancet*. 2020;395(10241):1919-26.

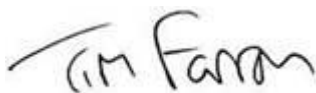
appropriate leadership power and accountability to facilitate and implement all the other ground breaking IT and radiotherapy technology advances over that 10 years, which will improve cancer survival even more, and which are now standard in many countries.

2. **Invest in IT and technology solutions:** work with industry and modernise radiotherapy. Create a ring-fenced innovation fund for cutting edge IT technology software solutions, AI and Machine learning products to help improve quality, access, and alleviate workforce issues. It is the only way to rapidly increase work capacity, streamline services, and share expertise.
3. **Replace aging radiotherapy machines:** create a ring-fenced central funding pot to replace machines over 10 years old to secure fast and uninterrupted patient treatment. This will address the £140 million backlog in machine replacement costs and secure the future; replacing a machine only works out at around £400 per patient.
4. **Increase the workforce;** fund the 10-20% increase in the professionals needed to run the service.
5. **Improve access to radiotherapy:** invest the £250 million needed for new networked treatment delivery centres to bring treatment closer to home and avoid long travel for the 3.5 million of the population who live further away than 45 minutes recommended travel time.
6. **Raise the profile of radiotherapy:** fund an awareness program for the general public and the medical profession on the curative and palliative potential of radiotherapy and ensure this cost-effective treatment can be used to its full potential.

The fact that SABR is being rolled out more quickly is a hopeful sign that policy makers are in 'listening mode'. But it's not enough just to listen. We need action, and we need it urgently. Global comparisons show just how much more needs to be done. All the recommendations in this report would have been obvious steps if someone had national oversight before the Covid-19 crisis, and therefore the appointment of a radiotherapy Tsar is essential to undertaking this plan.

There has been much adverse comment about how many lives may have been saved from Covid-19 if action had been taken earlier to face up to the speed and scale of the pandemic. If future inquiries show that comment to be well founded it will add a bitter twist to what is already a national tragedy.

A failure to face up the scale of the consequential Covid-19 cancer backlog, combined with a failure to grasp the opportunity to tackle it with a revitalised and transformed radiotherapy sector will be no less of a national tragedy, and in a very real sense, even more unforgivable as the crisis has been well flagged and a great part of the solution is at hand as set out in this report.



Tim Farron MP, Chair of the All-Party Parliamentary Group for Radiotherapy



Grahame Morris MP, Vice-chair of the All-Party Parliamentary Group for Radiotherapy

Background

About the APPGRT

The aim of the All-Party Parliamentary Group for Radiotherapy (APPGRT) is to provide an effective voice for radiotherapy in the UK and to improve access to modern radiotherapy for cancer patients.

About radiotherapy

Radiotherapy (RT) is a highly effective, safe cancer treatment and extremely economical. It is also one of the most high-tech medical disciplines, benefitting from recent advances in IT, cloud supported software, AI, engineering and imaging. It is delivered by a highly specialised, multidisciplinary workforce of around 5,000 in the UK. Unlike the large pharmaceutical industries with their marketing budgets to promote new therapies, RT does not benefit from publicity and political pressure and very few of the general public are aware of the recent developments and potential of the treatment, despite the fact that 1 in 4 of the population will need it at some time in their lives. A Cancer Research UK (CRUK) study found that RT improved survival rates by 16% compared to 2% with chemotherapy², and RT is a necessary modality in 40% of cancer cures. There has been a silent revolution in technology developments in the last 10 years, allowing radiotherapy treatments to be given faster, more cheaply, more effectively, and with fewer side effects, and to cure many more patients.

Pre Covid-19 problems

When NHS England (NHSE) was formed and took over central commissioning of radiotherapy in 2013, along with CRUK, NHSE published a vision for modernising radiotherapy in 2014. By 2020, little had been progressed. In 2019 the Government produced a 10-year plan, and while radiotherapy got a name check, there was no real substance to the radiotherapy aspects of the plan. While the long-term plan provided a welcome investment in diagnostic services, there was no increased funding to treat patients with advanced radiotherapy, so the anticipated increased survival benefit associated with early diagnosis of cancer, could not have been delivered. The APPG for RT was formed in response to this lack of progress, and the 2019 and 2020 APPGRT inquiries showed just how bad the situation had got.

A few months before the Covid-19 outbreak, the World Health Organisation (WHO) published an international benchmarking study on cancer survival showing that the UK is still at the bottom of the league of seven high income countries.³ In the UK this is partly because of the lack of access to modern radiotherapy services; up to 24,000 patients do not have access to the radiotherapy they would benefit from, by even conservative international standards⁴. Scandalously, in the UK 24% of early stage lung cancer patients were receiving no treatment⁵, mainly because of age and lack of access to radiotherapy, and 32% of men with locally advanced prostate cancer were not even offered radical radiotherapy.⁶

² Cullen et al 2014 [CRUK: recommendations for achieving a world class radiotherapy service in the UK](#).

³ Arnold M, Rutherford MJ, Bardot A, Ferlay J, Andersson TML, Myklebust TA, et al. Progress in cancer survival, mortality, and incidence in seven high-income countries 1995-2014 (ICBP SURVMARK-2): a population-based study. *Lancet Oncol.* 2019;20(11):1493-505.

⁴ [Action Radiotherapy Analysis April 2019](#)

⁵ Phillips I, Sandhu S, Luchtenborg M, Harden S. Stereotactic Ablative Body Radiotherapy Versus Radical Radiotherapy: Comparing Real-World Outcomes in Stage I Lung Cancer. *Clin Oncol.* 2019;31(10):681-7.

⁶ [UK prostate cancer audit 2019](#)

The Covid-19 problem and radiotherapy solution

The recent Covid-19 pandemic has shone a light on radiotherapy as it is one of the few cancer treatments which can be given relatively safely during the pandemic and is a curative alternative to surgery in many cases. However, the pandemic has also laid bare the lack of investment, priority and planning for radiotherapy. It is widely accepted that the Covid-19 cancer backlog caused by delayed diagnosis, and deferred and cancelled treatment, will result in a cumulative build-up of demand likely to hit after the summer. The backlog of cancer patients waiting for treatment will be huge. Many patients will be unable to have surgery and the additional referrals for radiotherapy will continue to increase. The radiotherapy service was very poorly resourced with a massive workforce deficit prior to Covid-19, and unless boosted and made fit for purpose now, will be overwhelmed in the coming months/years with the cancer treatment backlog. Bureaucratic inactivity and slowness to act decisively will make the situation far worse and like Covid-19 itself, will exponentially increase the risk to life. As with most/all solutions to Covid-19, strong leadership, organisation, practical solution finding from well informed individual workers, and IT/technology is the solution. Radiotherapy is preeminently placed to capitalise on these solutions.

Background to the six-point plan for a Covid-19 solution

The APPGRT conducted a rapid mini-inquiry in May 2020⁷, into the impact of Covid-19 on radiotherapy provision across the UK, while revisiting some of the findings of the APPG's August 2019 inquiry⁸. A flash survey was conducted of the radiotherapy community and findings were sent to the Health and Social Care Committee⁹. Following extensive work with the community and the multidisciplinary group that advises us, the APPGRT are publishing their recommendations in this report to deal with the existing medical landscape, as well as short- and long-term future challenges including the Covid-19 cancer backlog.

⁷ [APPG-RT rapid mini Inquiry May 2020](#)

⁸ [APPG-RT Inquiry August 2019](#)

⁹ [Action Radiotherapy Flash Survey April 24-27 2020](#)

Six Point Plan Summary

The six-point plan for transforming radiotherapy will help fight the cancer backlog, boost cancer survival rates now and long into the post Covid-19 future and aims to increase radiotherapy funding from 5% to 9% of the overall cancer budget in line with European averages.

1. Drive radiotherapy forwards

Appoint a radiotherapy minister and Tsar and establish a national taskforce of radiotherapy experts from clinical practice and industry.

When is this needed: immediately

2. Invest in advanced IT and technology solutions

A ring-fenced innovation fund for cutting edge technology and networked radiotherapy IT solutions to improve the roll-out of new technologies, streamline services and properly fund Operational Delivery Networks and devolved nation networks supported by a national network.

When is this needed: costed strategy and funding within three months

3. Replace aging radiotherapy machines

A separate ring-fenced central funding for radiotherapy machine replacement to establish a year-on-year modernisation and replacement programme and address the £140 million backlog in machine replacement costs due to one fifth of England's radiotherapy machines being over the 10-year recommended lifespan.

When is this needed: at the Autumn 2020 Spending Review

4. Increase the workforce

Address the 10–20% shortage of all three professional groups with funding and support.

When is this needed: start immediately

5. Improve access to radiotherapy

Invest £250 million in increasing the number of radiotherapy centres in underserved areas to improve access for the 3.5 million people live beyond the recommended 45- minute travel time.

When is this needed: within the next three years

6. Raise the profile of radiotherapy

Actively raise awareness among the general public, the medical profession, and public health on the curative and palliative potential of radiotherapy. And bring perceptions of the treatment in line with clinical need.

When is this needed: immediately

The Six Point Plan to Transform Radiotherapy

1. Drive radiotherapy forwards

Immediately appoint a radiotherapy minister and Tsar to establish a national taskforce of radiotherapy experts from clinical practice and industry.

The current oversight and management of radiotherapy in the UK is divided between at least three ministerial briefs, at least six separate NHS bodies and three professional bodies, and most of the main cancer charities have no specific radiotherapy brief. Nobody, therefore, has overall charge of radiotherapy in the UK, and this is concerning, particularly when clear and effective leadership is required in this Covid-19 crisis. The NHS revenue-based financial model struggles with the equipment- and multidisciplinary staff-based hi-tech patient service, meaning that anticancer drugs, which are five times the cost and five times less effective, are easier to fund. In this Covid-19 crisis the NHS cannot afford, in financial and patient survival terms, to continue to ignore the challenges and opportunities of radiotherapy. The appointment of a radiotherapy minister and Tsar to form a national taskforce with multidisciplinary backing from professionals and industry, and with patient representation, will aim to ensure clinical leadership with a focus on improving patient outcomes. Advanced radiotherapy technology use should no longer be limited by top down restrictions but be used in all clinical indications where all patients can benefit. With the authority to organise the service and lead a technological revolution, while sweeping away the bureaucracy that has held back the sector for years and has led to situations like SABR being restricted to just half of trusts and to only a few indications, the radiotherapy Tsar would be tasked with boosting services to catch up and overtake standards in many other countries. Backed by the professionals, the national taskforce would have the authority to rapidly increase the capacity of the sector by implementing technology like precision radiotherapy as the standard of care. Once in place, the task force will be expected to coordinate the implementation of the other recommendations in this report, working to increase cancer survival rates, while saving the NHS money, and providing cost-effective cancer treatment solutions to help with the cancer backlog.

Recommendations

- **Radiotherapy should be organised through a national taskforce, led by a minister and a radiotherapy Tsar tasked with modernising the radiotherapy sector, planning to mitigate the cancer backlog and raising standards to bring in line with those in other countries**
- **It is recommended that this appointment happen immediately to maximise impact and ensure patients receive the best care, and in order to save more lives and save the NHS money**

2. Invest in advanced IT and technology solutions

Establish a ring-fenced innovation fund for networked advanced radiotherapy, IT and technical solutions, within the next three months, to streamline working practices, improve the roll-out of new patient focused technologies, maximise the efficiency of the depleted work force and allow the Operational Delivery Networks to properly function.

Radiotherapy is one of the most high-tech medical specialities and the approximate 5,000 strong highly trained multidisciplinary workforce spanning 62 radiotherapy centres, are the best placed to rapidly introduce advanced IT, AI learning, digital networking solutions and patient focused technologies. By investing in the available bespoke radiotherapy commercial technology solutions, the capacity and potential of the workforce for delivering efficient, fast and remote patient care and follow up could be maximised. The current workforce crisis could be mitigated by modernising IT remote working and delivery solutions, expanding the UK wide national radiotherapy network, and properly funding operational radiotherapy delivery networks. This would be best achieved by working with industry and the multidisciplinary group who have provided evidence to the APPG. This would also allow the introduction of already available bespoke IT, AI and machine learning and technology solutions, and the technical capabilities of the workforce could be more greatly spread across the country. The fund would lead the transformation of working practices to help resolve existing workforce pressures immediately and to modernise UK wide networking to share resources and expertise. There are 'off the shelf' solutions available from the radiotherapy commercial industry, who stand ready to help ensure the most innovative IT and technological solutions are implemented during the Covid-19 pandemic.

We are aware that currently, operational delivery networks are not provided with adequate funding to meet the responsibilities delegated to them, with many yet to begin their work, and they lack a coordinated national plan, at a time when more is expected of them during the Covid-19 pandemic. Such an IT revolution is available and has been shown to work in other countries; let radiotherapy lead the way and let this be a model for the digital transformation of the NHS.

Recommendations

- **The government should make ring-fenced innovation funding available within the next three months to improve the pace and rollout of new IT and technology solutions and promote sharing of resources and expertise to streamline working practices**
- **Operational Delivery Networks need to be properly funded so they can carry out their intended function**

3. Replace aging radiotherapy machines

At the Autumn 2020 Spending Review establish a separate ring-fenced central fund for radiotherapy machine replacement with the goal of replacing the current outdated stock of radiotherapy machines and to create a centrally funded rolling machine replacement programme. A year-on-year modernisation and replacement programme would ensure that the current situation, which has seen excessive machine down time and machines much older than the 10-

year recommended lifespan still in commission. The fund should address the current £140 million backlog in machine replacement costs and rectify the current situation where up to one fifth of England's radiotherapy machines are over the 10-year recommended lifespan.

Out of date equipment is expensive to run, breaks down, is unreliable, slows the overall treatment and throughput of patients, and results in unnecessary cancellation of appointments. Old equipment is unable to deliver modern radiotherapy technologies and frontline staff waste weeks of their working life making endless business cases for their renewal. All machines treating patients in the Covid-19 crisis should be fast, efficient, not prone to break down, be able to deliver modern technology and be within the 10-year NHS recommended life span. Freedom of information requests carried out in 2019 show that half of all radiotherapy centres in England were still having to use equipment over the 10-year recommended lifespan. While evidence gathered by Action Radiotherapy reveals that there are machines as old as 17 years still in commission. In 2020 the situation appears to have deteriorated, the stock of machines in commission is falling quickly out of date at a time when we need them the most. Economic modelling within our evidence puts the renewal cost of replacing a machine at less than £400 per patient; the cost of a single night stay in hospital. At the next Spending Review we call on the government to ring-fence a central funding pot to replace machines over 10 years old to secure fast and uninterrupted patient treatment. This will solve the £140 million backlog in machine replacement costs and secure the future of services. The APPGRT recommend that a protected annual fund for innovation in radiotherapy be established, and a year to year equipment replacement protocol similar to the current system in Scotland be implemented.

Recommendations

- **At the next Spending Review: establish a year-on-year machine modernisation and replacement program to maximise capital savings**
- **To immediately address the £140 million backlog in machine replacement costs due to one fifth of England's radiotherapy machines being over their 10-year recommended lifespan**

4. Increase the workforce

Address the 10–20% shortage of all three multidisciplinary professional groups with funding and support to ensure the cancer workforce is able to keep pace with the increasing demands of cancer care. Radiotherapy provision is dependent on a body of around 5,000 multidisciplinary, highly trained and well-motivated professionals: therapeutic radiographers (approximately 50%), medical physicists, dosimetrists, engineers and consultant clinical oncologists. However, evidence from Royal Colleges and Societies demonstrate that not only is recruitment failing to keep pace with demand, but numbers are on the verge of reaching crisis levels. This has to be addressed now more than ever with the Covid-19 cancer crisis approaching.

Radiotherapy services are delivered by a high-tech multidisciplinary workforce of around 5,000. Evidence from the Royal College of Radiologists highlights a doubling of vacant consultant clinical oncologist posts in the past five years. There is currently a shortfall of 19% consultant clinical oncologists (predicted to rise to 26% by 2024) according to the Royal College of Radiologists, with nearly half of all vacancies unfilled for more than a year. The Society and College of Radiographers

report a UK average vacancy rate of 7.1%, to support service growth and workforce transformation in line with government policy, as recommended by Cancer Research UK a 45% increase in the number of therapeutic radiographers will be required to support innovation and service growth over the next five years. The current student apprenticeship banding is too low, and bursaries should be brought back.^{10 11} The radiotherapy physics and engineering workforce has an up to 11% vacancy rate, and a third of engineers are over 55 years of age. Concerns have been repeatedly raised with all three professionals and CRUK for years as the situation deteriorates.

Without a plan to address this frontline workforce shortage into the three main disciplines, the service will not be able to cope with the Covid-19 backlog crisis and the increased demand as cancer incidences rise and the demand for non-surgical treatments like radiotherapy increases. In the pre-pandemic world radiotherapy is needed by 1 in 4 of us at some point in our lives, required in the treatments of 50% of cancer patients, and plays a major role in 40% of cancer cures. However, during and post Covid-19, radiotherapy will experience increased demand as it is one of the few treatments which can continue uninterrupted if adequate protections are put in place. Indeed, international comparisons are clear: to be successful, radiotherapy needs to be at the heart of any post Covid-19 cancer recovery plan. However, a desperately understaffed workforce has no chance of dealing with increased demands.

Recommendations

- **Rapidly introduce technology to immediately increase working efficiency and replace inefficient aging machinery so the available staff can work productively**
- **Facilitate recruitment from overseas through the NHS rapid access visa scheme**
- **Fund and support the immediate 10–20% increase in training in all three disciplines**
- **Support workforce transformation and plan for the recommended 45% increase in therapeutic radiographers to achieve a World Class service.**

5. Improve access to radiotherapy

Invest £250 million in increasing the number of radiotherapy facilities in underserved areas to address the situation where 3.5 million people live outside the maximum recommended 45 minute travel time. Improving access to radiotherapy has been shown to improve outcomes of cancer patients.

Excessive travel times reduce access to radiotherapy treatments by creating an added burden on cancer patients, which often results in arduous journeys, and even missed or incomplete treatments. This particularly impacts patients living in rural areas of the country. In a post-Covid-19 environment radiotherapy will be one of the few treatments which can continue uninterrupted if adequate protections are put in place, in contrast to surgical and chemotherapy options. However, the current postcode lottery of access across the country will mean that for many patients it will be much harder to access one of the safest and most effective treatments we have in the country. The

¹⁰ The College of Radiographers. (2018). Radiotherapy Radiographic Workforce UK Census 2019. Available from <https://www.sor.org/learning/document-library> [Accessed 26.06.2020]

¹¹ Cancer Research UK, Cancer Policy Research Centre, (July 2019) Targeted Research Brief – Costing the NHS cancer workforce patients need https://www.cancerresearchuk.org/sites/default/files/cancer_workforce_economic_modelling_cancer_research_uk_research_brief_0.pdf [Accessed 26.06.2020]

consequence of this excess travel time and inequality of access is poorer cancer outcomes and worse cancer survival rates. It is essential, therefore, that treatments be brought closer to people's homes.

As we need more treatment capacity to deal with the Covid-19 cancer backlog created by a 60% drop in the number of cancer referrals and a 20% drop in the number of people starting cancer treatment, it is vital we invest in access to cancer treatments through the deployment of networked satellite centres within the 45 minute travel distance. As the country looks to improve cancer diagnosis and people live longer, potentially requiring retreatment in their lifetime, the demands on services were always expected to increase as cancer becomes a chronically managed disease. The surge in demand created by the Covid-19 cancer backlog further amplifies the situation. Improving access to cancer services, so no matter where you live you can expect access to the most innovative treatments and quality of care, should be central in our push to improve cancer survival rates. With modern centralised remote technology, the highest standards of radiotherapy can be supported close to patient's homes; this should be the model for the future. Up to ten of such centres were either approved or in planning over the last ten years but none funded or progressed.

Recommendations

- **Within the next three years invest £250 million for new radiotherapy treatment delivery centres to bring treatments closer to people's homes**

6. Raise the profile of radiotherapy

Actively raise awareness amongst the general public, the medical profession, and patients, on the curative and palliative potential of radiotherapy so it can be included in more of the cancer pathway and ensure this cost-effective treatment can be used to its full potential, saving lives and saving money for the NHS. This should be achieved through funding a public relations campaign to highlight the lifesaving impact of treatments, and bring perceptions in line with the clinical reality. Radiotherapy should no longer be the country's secret lifesaver but rather known as the innovative cancer treatment needed in nearly half of all cancer cures.

The August 2019 APPGRT inquiry into radiotherapy services highlighted a shocking lack of awareness among professionals, politicians and the public, that a main cancer cure like radiotherapy warranted. Many of the problems today and found during the mini-inquiry carried out in May 2020, could have been avoided with a better understanding of the treatment. We therefore recommend that an aspect of the radiotherapy Tsar's role should be to raise the profile of radiotherapy to bring it onto the level of more high profile cancer treatments such as chemotherapy during policy discussions and spending reviews.

In 2015 CRUK conducted a YouGov poll which showed half of people were unaware of advanced lifesaving radiotherapy, with only 3% having heard of SBRT, and shockingly perceptions were much worse than with other types of treatment like chemotherapy and surgery¹². The CRUK and NHSE Vision for Radiotherapy 2014–2024 report concluded that awareness of radiotherapy in the NHS

¹² [CRUK 2015 radiotherapy awareness study](#)

should be a priority action point as it was not as good as it could be, and that patients and clinicians should view radiotherapy as the cutting-edge treatment that it is. However, we have found no evidence to suggest that a plan has been put in place, or any action has been taken to change this situation. Worse still it has been suggested that the responsibility for improving the profile of radiotherapy should rest on the radiotherapy providers themselves; so the depleted frontline staff are expected to develop and implement a public awareness campaign? A nationally organised campaign to improve perceptions is vital to bringing the profile of the treatment up to the level deserved by its curative and lifesaving impact.

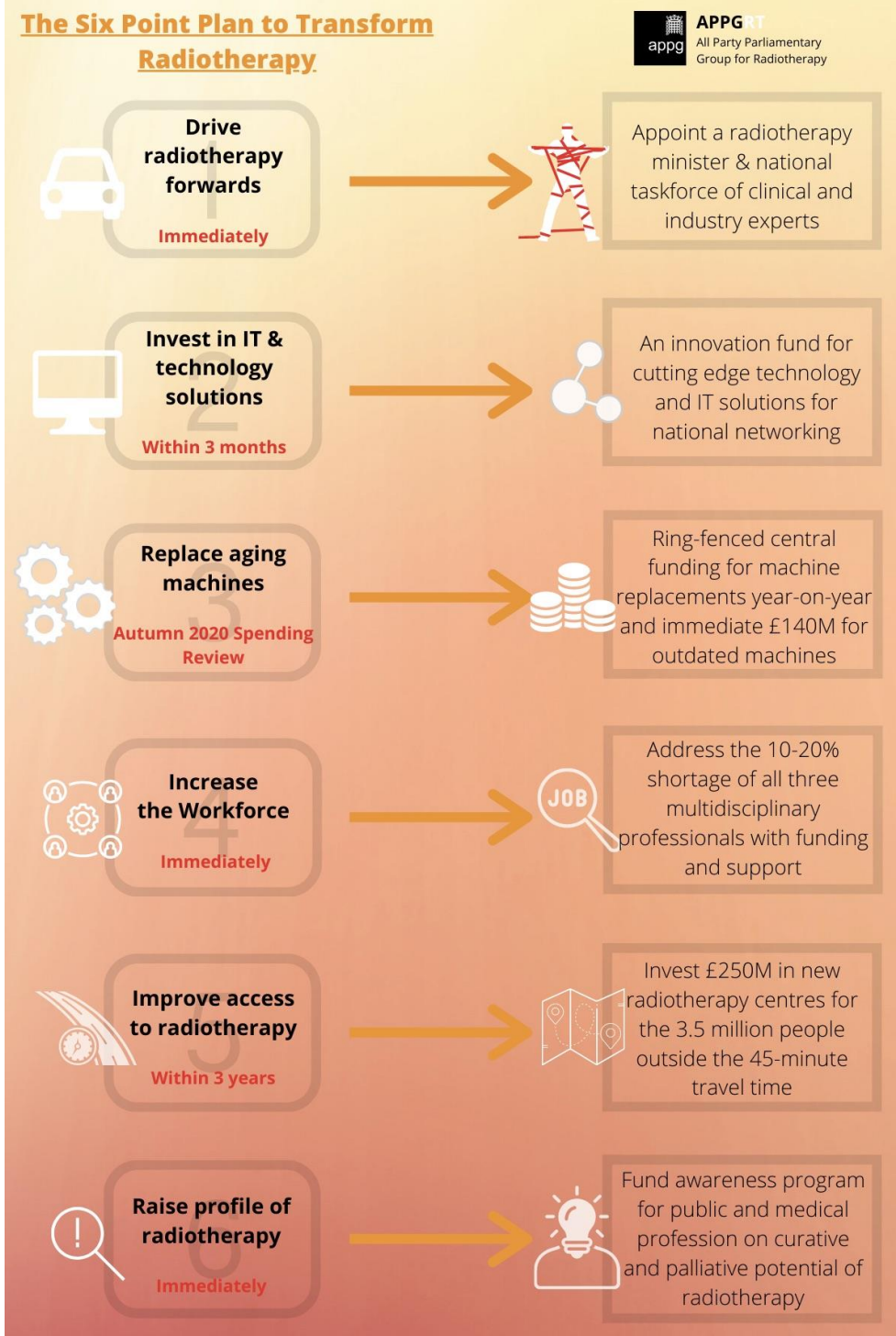
Many people would be shocked to hear that radiotherapy treatments can be delivered for as little as six thousand pounds compared to £60 thousand pounds for more high profile treatments like some chemotherapy. Only around £424 million has been spent on radiotherapy in total over the last six years, compared £1.95 billion over those six years spent on new cancer drugs¹³, yet radiotherapy is clinically proven as the more effective form of curative treatment². Until recently, radiotherapy has suffered an undeserved lower profile than many other cancer treatments and, as a result, has experienced years of underinvestment and led to the current situation: where access to these vital treatments is a postcode lottery and one fifth of machines are over the 10-year recommended lifespan. If a member of the public reads about radiotherapy today it is normally as a result of the dedicated professionals who work in services calling for the very actions we recommend in this report. There is no dedicated lobby for raising the profile of this highly technical treatment. The 5000 professionals who run the service are its champions. The lack of awareness in the public and NHS has led to the current crisis in a service which should be celebrated as one of the most important in our cancer fighting armoury. Raising the profile and awareness is vital in driving investment into this lifesaving treatment that can play a key role in fighting the Covid-19 cancer backlog and bringing cancer survival rates in the UK in line with other countries, and be an example of how the digital and technical revolution can be implemented by the NHS.

Recommendations

- **A dedicated budget to improve the profile of radiotherapy services**
- **The radiotherapy Tsar should implement a plan to raise awareness of radiotherapy among the general public, medical professionals and public health, on the curative and palliative potential of the therapy so it can be included in cancer pathways and ensure this cost effective treatment can be used to its full potential**

¹³ Most drugs paid for by £1.27bn Cancer Drugs Fund had no “meaningful” benefit”. BMJ 2017 and New Cancer Drugs Fund keeps within £340m a year budget. BMJ 2018

Summary of Findings and Next Steps



Appendix

List of APPGRT members

APPGRT members

Chair	Tim Farron	Liberal Democrat	Westmorland and Lonsdale
Vice-Chair	Derek Thomas	Conservative	St Ives
Vice-Chair	Grahame Morris	Labour	Easington
	Andrea Jenkyns	Conservative	Morley and Outwood
	Catherine West	Labour	Hornsey and Wood Green
	Damian Green	Conservative	Ashford
	David Evennett	Conservative	Bexleyheath and Crayford
	Mark Tami	Labour	Alyn and Deeside
	Oliver Heald	Conservative	North East Hertfordshire
	Scott Mann	Conservative	North Cornwall
	Tonia Antoniazzi	Labour	Gower
	Jim Shannon	Democratic Unionist Party	Strangford
	Mike Hill	Labour	Hartlepool
	Fay Jones	Conservative	Brecon and Radnorshire
	Jonathan Gullis	Conservative	Stoke-on-Trent North
	Selaine Saxby	Conservative	North Devon
	Ian Paisley	Democratic Unionist Party	North Antrim
	Alex Davies-Jones	Labour	Pontypridd
	Barbara Keeley	Labour	Worsley and Eccles South
	Beth Winter	Labour	Cynon Valley
	Derek Twigg	Labour	Halton
	Diana Johnson	Labour	Kingston upon Hull North
	George Howarth	Labour	Knowsley
	Jack Dromey	Labour	Birmingham, Erdington
	Jeff Smith	Labour	Manchester Withington
	Kate Hollern	Labour	Blackburn
	Kim Johnson	Labour	Liverpool Riverside
	Marsha De Cordova	Labour	Battersea
	Mary Glendon	Labour	North Tyneside
	Paula Barker	Labour	Liverpool Wavertree
	Rosie Cooper	Labour	West Lancashire
	Taiwo Owatemi	Labour	Coventry North West
	Yvonne Fovargue	Labour	Makerfield
	Christina Rees	Labour/Co-operative	Neath
	Rachael Maskell	Labour/Co-operative	York Central
	Ben Lake	Plaid Cymru	Ceredigion

	Liz Saville Roberts	Plaid Cymru	Dwyfor Meirionnydd
	Martyn Day	Scottish National Party	Linlithgow and East Falkirk
	Henry Smith	Conservative	Crawley
	Baroness Armstrong of Hill Top	Labour	House of Lords
	Lord Tyler	Liberal Democrat	House of Lords
	Baroness Redfern	Conservative	House of Lords
	Baroness Golding	Labour	House of Lords
	Baroness Healy of Primrose Hill	Labour	House of Lords
	Viscount Simon	Labour	House of Lords
	Lord Rennard	Liberal Democrat	House of Lords

For further details visit the APPGRT website:

www.appgrt.co.uk

or email: appg-rt@actionradiotherapy.org

Endorsement

This 6- point plan has been endorsed by the Institute of Physics and Engineering in Medicine (IPEM) <http://www.ipem.ac.uk>

“IPEM is the learned society and professional organization for physicists, clinical and biomedical engineers and technologists working in medicine and biology. Our charitable aim is to advance physics and engineering applied to medicine and biology for the public good”.