Inquiry into radiotherapy and the cancer crisis

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THE APPG FOR RADIOTHERAPY (APPG RT)

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Foreword

Cancer services in the UK are facing an increasingly turbulent future; patients face record wait times for treatment, the workforce and systems are overwhelmed by the COVID backlog and advances in treatments such as radiotherapy, which have the potential to save lives and treat patients more effectively, are ignored. Inexcusably, despite this crisis, there is no suitable Cancer Control Plan in place to urgently and effectively bring about world-class cancer care for patients in the UK.

This inquiry has found that decades of systematic under-funding and under-resourcing of radiotherapy means that the UK lags far behind comparable countries in the numbers of patients able to access life-saving radiotherapy treatments and the numbers of machines delivering radiotherapy per head of population. Technological advances that cancer patients in other countries benefit from are not widely available here.

The deficit of investment in what is an incredibly cost-effective service has resulted in out-of-date equipment, a workforce on its knees, bureaucracy stifling progress and an absence of strategic leadership and investment. Ultimately, despite the best efforts of frontline workforce, this impacts on patients outcomes and is one of many reasons why the UK remains near the bottom of international tables for cancer survival.

Action is needed urgently. Following this inquiry I call on the Secretary of State for Health to deliver a Cancer Control Plan with fully funded provision for transforming radiotherapy services that include the recommendations of this inquiry. This plan needs to set out an evidenced and ambitious direction that will raise the UK to international standards for cancer care, improving how long cancer patients live and their quality of life.

Tim Farron MP
Chair, APPG on Radiotherapy

Executive Summary

1 in 2 of us will get cancer and 1 in 4 of us will require radiotherapy treatment in our lifetime. Radiotherapy is needed in 40% of cancer cures and 50% of those diagnosed with cancer. We are currently witnessing an unprecedented cancer crisis in the UK caused by a deadly combination of devastating waiting times and a lack of capacity in vital services like radiotherapy. This is deeply concerning because every four weeks of delay in cancer treatment leads to a 10% increase in risk of death[1].

The UK remains near the bottom of the international tables for cancer survival[2] and without a radical new approach to delivering radiotherapy services, this is unlikely to improve. Projections from CRUK calculate that by 2040 the number of cancer diagnoses will reach 500,000 a year. To put this into context, current cancer services are failing to cope with 375,000 diagnoses[3]. If the Governments focus on early diagnosis is to translate to improved patient outcomes, these cancer patients need to receive timely and effective treatment such as radiotherapy, which is recognized as one of the most appropriate treatments for many cancers diagnosed early as it eliminates disease effectively. However, in the absence of a bespoke Cancer Plan, with specific provision for reforming radiotherapy services, cancer services are at serious risk of being overwhelmed.

This cancer crisis is occurring at a time when technological advances in radiotherapy offer so much to gain; there has been a digital revolution in the last ten years, accelerated by Covid, which has produced low-risk, hi-tech, digital solutions which can be implemented immediately. Theses solutions have the potential to transform radiotherapy services and cancer infrastructure, support the workforce, help deal with the backlog and improve cancer survival both now and in the future.

It will take leadership, vision and will to transform the failing systems and structures. We already have a world-class front-line staff who know what to do but are limited in delivering a world class service. A bespoke Cancer Plan, with investment and direction for advanced radiotherapy delivery is urgently needed to arrest the devastating deterioration in cancer care and future-proof our cancer services for years to come. Failure to act will mean thousands of needless deaths for those living with cancer.

[1] Mortality due to cancer treatment delay: systematic review and meta-analysis | The BMJ
[2]Progress in cancer survival, mortality, and incidence in seven high-income countries 1995–2014 (ICBP SURVMARK-2): a population-based study - The Lancet Oncology
[3]Cancer Statistics for the UK (cancerresearchuk.org)

Recommendations

- DHSC to deliver an urgent and fully costed Cancer Plan with provision for transforming radiotherapy services. This should aim to be able to treat 500,000 cancer patients a year by 2040 to international standards and within Government target times.

- The Government to appoint an Independent Radiotherapy Leadership Group, with international peer review, to work with front-line staff and industry professionals to organise the service at a national level. This group should facilitate the technological revolution in radiotherapy that cancer patients in other countries are currently benefitting from, audit results and ensure a new national radiotherapy strategy is implemented.

- DHSC to undertake an independent analysis of the numbers of cancer patients who could benefit from radiotherapy to inform a new national radiotherapy strategy setting out how they plan to improve access to international standards.

- DHSC to urgently publish a detailed and funded workforce plan.

- NHSE to implement a national replacement programme of ring-fenced funding to support planned LINAC replacements and assess and prepare for future radiotherapy needs to ensure equality of access as incidence of cancer increases and early diagnosis requires increased treatment capacity.

- Invest in a recruitment and retention strategy for radiotherapy and re-instate trainee funding schemes, as well as in-work training of staff on new techniques in advanced radiotherapy.

- There should be significant investment in IT and workforce to capitalise on the opportunities in this high tech field of medicine.

Background

About the APPG-RT

The aim of the All Party Parliamentary Group for Radiotherapy (APPGRT) is to provide an effective voice for radiotherapy in the UK and within parliament to improve access to modern radiotherapy for cancer patients. The APPGRT want to ensure radiotherapy receives increased investment so that all patients have the best radiotherapy for their individual cancer.

Background to the Inquiry

This is the second inquiry undertaken by the APPG on Radiotherapy. The first inquiry took place in 2019 before the Covid pandemic and investigated radiotherapy provision's ability to meet demands of that time and anticipated future need. The overall recommendation from the first inquiry called on the DHSC to urgently respond to key findings;

- need for significant investment in IT and workforce,
- improved understanding of why so many cancer patients in the UK were missing out on radiotherapy treatment,
- expand SABR commissioning,
- increase the number of satellite centres and reduce travel times,
- reform the national tariff and improve equality of access to advanced radiotherapy techniques.
- create a central co-ordinating position such as a Radiotherapy Tsar
- invest in upgrading existing out-of-date equipment and adopt a centrally funded rolling programme for capital and IT requirements.

Since the 2019 inquiry much has changed in the health environment, however many of the challenges that radiotherapy services navigate remain the same and indeed have been brought into even sharper focus and become more urgent. The Covid-19 pandemic had an immediate and damaging impact on the delivery of cancer services in the UK, and worldwide. A combination of public guidance to stay at home, stratified guidelines for treatment delivery, redeployment of cancer workforce to other departments and ongoing COVID-19 related absences led to complex cancer diagnostic and treatment pathways, fragile even pre-pandemic, beginning to collapse.

Cancer services have not recovered. NHS data shows a continuing significant increase in cancer treatment waiting times. The longer a cancer patient waits for treatment, the less their chances of survival – for every 4 weeks of delay, cancer mortality increases on average by 10%[1]. In England, nearly 1 in 2 cancer patients wait beyond the 62-day target, and over 10,000 patients are waiting beyond 104 days[2].The waiting list for undiagnosed and untreated cancer is the deadliest of all waiting lists.

[1] Mortality due to cancer treatment delay: systematic review and meta-analysis | The BMJ
[2] Statistics » Provider – based Cancer Waiting Times for Q1 2022/23 Provisional (england.nhs.uk)

It is widely accepted that the UK is facing a cancer crisis of record waiting times and a catastrophic cancer backlog. The cancer community have called for cancer treatment capacity to mitigate the impact. Parliamentarians have launched this inquiry following warnings from clinicians that vital radiotherapy services are now "critically threatened". Radiotherapy has been internationally recognised as offering among the best solutions to build treatment capacity through cutting edge technology and innovations helping the workforce do more. Radiotherapy is also one of the most cost-effective cancer treatments, curing patients for as little as £4,000-£7,000.

This inquiry explores why UK cancer patients have not been able to benefit from these solutions and get a frontline perspective on the extent of the problems and reforms that are needed to deliver world-class cancer care.

About radiotherapy

There are three main pillars of cancer treatment: surgery, radiotherapy and systemic therapy (chemotherapy, immunotherapy etc). Radiotherapy is a treatment that kills cancer cells by delivering high-energy radiation to a tumour. The UK was one of the pioneers of radiotherapy, developing the first Linear Accelerator (LINAC) radiotherapy machine and one of the big three global radiotherapy machine manufacturers still make 25% of their LINACs for international export here in the UK. One in four people will need radiotherapy at some time in their lifetime. Radiotherapy is needed in the 40% of people who are cured of cancer and is highly effective curing 16% of cancer patients on its own compared with 2% with chemotherapy.

Advanced radiotherapy is now delivered in submillimetre accuracy, limiting damage to healthy cells around the cancer and there have been major revolutionary technology advances in the last 10 years. Radiotherapy is delivered by 62 radiotherapy providers in the UK.

The APPG-RT manifesto

The APPG-RT was formed in May 2018 in response to concerns from patients and the radiotherapy community. Since 2018, the All-Party Parliamentary Group (APPG) for Radiotherapy has worked tirelessly with frontline professionals, cancer experts, charities, the private providers, industry and professional bodies to highlight the problems and to call for urgent action. The APPG-RT have produced a Manifesto for Radiotherapy, last updated in 2022 which sets out short and long-term solutions to the chronic underfunding of radiotherapy (which has only allowed 27% of UK patients to access radiotherapy against an international standard of 53-60%) and to address the acute Covid induced radiotherapy crisis which poses serious threats to the service and with it wider cancer services.

Aim of the Inquiry

To investigate how current radiotherapy provision is coping with the ongoing cancer crisis. To explore solutions that could reduce the record numbers of cancer patients not receiving treatment on time, increase access to radiotherapy, improve how long cancer patients live for and their quality of life, future-proof developing cancer treatments, and deliver cost-effective cancer treatment

Evidence

Written evidence

A range of individuals and key organisations were invited to submit written evidence, of which a total of 18 responded.

See Appendix 1 for a list of those who submitted written evidence.

Oral evidence

Oral evidence was invited from individuals/organisations working and representing those on the frontline of radiotherapy services. The oral-evidence session was held on Wednesday 18th January 2023 and was an opportunity for the APPG RT members to explore in more detail issues raised in the written evidence submissions.

NHS England and representatives from Government, including the Secretary of State for Health, Steve Barclay and Cancer Minister Helen Whately MP, were invited but did not attend.

See Appendix 2 for attendees.

Findings

1. Access to Radiotherapy

International standards state that 50%[1] of newly diagnosed cancer patients should have access to radiotherapy. In the UK only 24 -27%[2] [3] of patients currently do. This deficit was reflected in analysis presented at the inquiry which highlighted that England only has 4.8 LINACs per million population, much lower than the 7 LINACs per million population set out in international recommendations[4]. To meet international standards England needs a further 125 LINACs. The radiotherapy workforce are under immense pressure meeting the current needs of patients at this reduced access. To reach internationally accepted standards, a clear and ambitious workforce plan is needed.

Targets established within NHS England (NHSE) recommend that radiotherapy provision should be within 45-minute travel time[5]. The uptake of radiotherapy treatment by patients is known to diminish with distance travelled by patients to reach a radiotherapy centre[6]. In England 3.4 million people in England live further away than the NHSE target[7]. Evidence presented to the inquiry exploring why so few patients are being treated with radiotherapy in the UK in comparison to European countries, indicated that travel distances from radiotherapy centres played a significant role, as well as a need for increased Multi-Disciplinary Team discussions about the availability of radiotherapy and the benefits it provides.

2. Workforce

Radiotherapy services in the UK are delivered by a small, multidisciplinary workforce of around 6,400 professionals made up of therapeutic radiographers, engineers, physicists, and oncologists. They treat over 100,000 cancer patients a year. Issues around the recruitment, training and retention of radiotherapy workforce are severe and were identified as a major challenge.
Submitted evidence to the inquiry highlighted many key issues including;

- 10% vacancy rates for scientific engineer professionals, critical to the delivery of radiotherapy.
- numbers of therapeutic radiographer posts vacant at least 30% higher than numbers of new graduates qualifying.
- a therapeutic radiography workforce growing at 4% rather than the 16% needed between 2021 – 2026.

[1] Borras JM, Lievens Y, Barton M, et al. How many new cancer patients in Europe will require radiotherapy by 2025? An ESTRO-HERO analysis. Radiotherapy Oncol 2016; 119: 5–11.
[2] https://www.cancerdata.nhs.uk/covid-19/rcrd
[3]Chemotherapy, Radiotherapy and Surgical Tumour Resections in England - GOV.UK (www.gov.uk)
[4]19107_COC_Radiotherapy_Age_Profile_web4.pdf (cocir.org)
[5]Main heading (publishing.service.gov.uk)
[6] Dept of Health (2012) Radiotherapy Services in England1.pdf
[7]Travel-times-summary-rtuk.pdf (radiotherapy.org.uk)

- Half of all radiotherapy departments report needing to reduce capacity due to staff shortages.
- Although small workforce numbers represent an extremely cost-effective and productive service delivery, their specific skill sets and training make the service vulnerable if the shortages of staff identified continues.

Despite much discussion of a workforce plan, a funded plan has still not been introduced. Its absence hinders the delivery of potentially transformative digital advances as the workforce needed to train and deliver these are already facing extreme pressures.

3. Patient-centred care

Focusing on patient needs was central to all evidence submitted about how to improve radiotherapy services. Despite a committed and passionate workforce, the current conditions of being consistently under-resourced and under-funded mean radiotherapy services in the UK are often not meeting patients' holistic needs. To do this appropriately, the service needs to be considered in its entirety – from the point of diagnosis, through treatment, to understanding and providing tailored support for patients experiencing late effects many years after treatment.

The disparity in access to advanced treatments and the impact this inequality has on patients was also highlighted with cancer patients noting their frustration when being unable to access the same treatments that others in the UK with similar conditions and prognosis could. The importance of early diagnosis and timely treatment was raised by patients in written submissions telling of the adverse impacts these have had on their care and treatment.

4. Radiotherapy equipment

The replacement and procurement of radiotherapy machines is an area requiring significant overhaul. The inquiry heard of machines aged between 12 – 15 years old that are still treating patients, despite their limited ability to implement more advanced treatment regimens, offering less reliability, treating less patients and being harder to repair. Analysis presented at the inquiry estimated that in 2023 55 LINACS currently in operation will reach their 10 year recommended life span and therefore need replacing.

A proposed new NHS Payment scheme[1] delivered through Integrated Care System's (ICS) outlines a welcome shift in moving from tariff based payments based on activity levels to a system based on quality and ensuring more timely machine replacements. However, at the time of this inquiry, the addition of Integrated Care System's (ICS) to the governance structures for radiotherapy was noted as adding another layer of confusion and bureaucracy to the current systems as Radiotherapy Departments had received no clear guidance regarding their role within procurement and there were concerns that this development would lead to some departments competing with each other for funding.

[1] 23-25 NHSPS Annex DpB Guidance on currencies (england.nhs.uk)

It was noted that a National Replacement Programme would be an efficient and cost-effective way to deliver a more productive service. This would also more adequately reflect the advanced and digitally agile world of radiotherapy to allow for rapid and national implementation of treatments and technologies that could improve patient outcomes, increase capacity and support the stretched workforce.

4. State of the art technology

The inquiry heard of a climate of 'missed opportunities' within radiotherapy services. Radiotherapy is one of the most technologically advanced and innovative medical disciplines. Hi-tech radiotherapy technologies have transformed what is possible over the last five years. Advanced technologies and relatively inexpensive 'off the shelf' software are available to improve patient outcomes through precision targeting of tumours, which can also boost the number of patients the service can treat and support the radiotherapy service. However, there are no straightforward processes in place or budget mechanisms that enable their procurement on a nation-wide basis.

One example is AI cloud based tools that that could allow oncologists to reduce patient planning time by clinical oncologists by 80% at a cost of around £50k per centre. This type of software saves time and could transform treatment, freeing up the oncologists' time to focus on other areas such as patient clinical review and improving patient communications. However, the lack of central and rolling funding mechanisms means this proven solution is not being widely implemented.

One written contribution described the UK as a 'late-adopter' of technologies and innovation that other countries have adopted such as MRgRT Linacs, SGRT and ProKnow software. It was also highlighted that where innovation can improve productivity it was too often stifled by red-tape and limiting IT provision.

5. Bureaucratic Challenges

The inquiry heard that the way radiotherapy is organised in this country ties the hands of front line clinicians and allied health care professionals and prevents them from using advanced treatments.
The levels of bureaucracy required to implement change or even simply replace equipment are actively hampering improving patient care. Complex business cases are required to re-justify a known and accepted need, and one contributor to the inquiry highlighted that implementing a new software development through the Trust's IT processes took so long that their Department couldn't complete the process within the yearly budget timescale and were then penalised the following year for underspend.

The uncertainty regarding the new ICB's responsibility for radiotherapy services added to fears that this has the potential to further increase an already overwhelming bureaucratic load.

6. Strategic Oversight and Leadership

Evidence collected through this inquiry indicates that radiotherapy is not well understood by NHS leaders, local commissioners, NHS procurement, or the Government. Responsibility for its commissioning and delivery is split across a number of bodies and several ministerial briefs, to the detriment of cohesive and cost-effective planning and service delivery.

The need for a central planning and advice body, such as the previous National Radiotherapy Advisory Group (NRAG), which was led by Professor Mike Richards was noted. This body would be independent and lead on a co-ordinated approach to the provision of radiotherapy services - working to a wider Radiotherapy 10 year vision promoting equality of access to radiotherapy and national roll-outs of advanced technologies that improve patient outcomes, workforce flows and capacity. The group would also monitor and analyse the relevant cancer data to support reducing the variation in patient access and outcomes. This body should be focused on providing value-based care where all elements of a service work towards the same outcomes – promoting quality care that reflects what is important for the patient ie. cures, accessibility and reducing side effects.

Conclusions

Despite being one of the most cost-effective and productive solutions to the cancer crisis, radiotherapy continues to be overlooked. Radiotherapy typically costs between £4,000 - £7,000 per patient, representing one of the most cost-effective cancer treatment available. In the UK access to radiotherapy as a primary treatment is only 50% of what is recommended internationally and 3.5M people live outside of the recommended travel time of 45 minutes from a radiotherapy centre. There is also a widening inequality of access to advanced radiotherapy, which can deliver more precision treatments to cancer patients, dependent on where in the country they live.

Delivering radiotherapy capacity at an internationally recommended level would require an immediate addition of 125 LINACs (the machines that deliver radiotherapy) to the current operational fleet of 272 LINACs. 20% of these 272 LINACs will pass their recommended life-span in 2023. This means that many centres are working with older equipment and are unable to implement or commission advanced technologies that can improve patient outcomes, workflows and capacity. These limiting factors are characteristic of the entire radiotherapy procurement process where advanced digital technologies and software solutions such as AI are hampered by a lack of investment and unnecessarily burdensome bureaucracy.

Over 100,000 cancer patients have radiotherapy treatment in the UK each year, delivered by a committed workforce of around 6,400 multi-disciplinary professionals. This workforce report consistently feeling overwhelmed, undervalued and unsupported . A lack of support or incentives to join the workforce mean vacancies are not filled and departments face acute workforce shortages. These shortages limit the workforces training and development opportunities which impacts on skills, experience and retention levels. This places increased pressure on the remaining workforce, meaning many are working in an increasingly stressful work environment trying to maintain safe services for patients and staff alike.

The ultimate benefit of improving radiotherapy equipment and technologies is the positive impact this can have on the care cancer patients receive through curing more patients, improving how long they live for and their quality of life. Patients can suffer for many years from long term side effects following their radiotherapy treatment due to the damage caused by irradiating normal tissue surrounding the cancerous tumors. Advanced radiotherapy treatments that limit and prevent the irradiation of the normal tissues can help to prevent these late effects. A more streamlined service will create the space needed for clinical teams to better inform and support cancer patients holistically.

The lack of leadership and accountability for radiotherapy services in the UK is evident in the piecemeal funding it receives, the current postcode lottery for access to advanced radiotherapy treatments, time-wasting bureaucratic practices, and the ongoing confusion about the role of the Integrated Care System (ICS). There is a clear need for a central body such as an Independent National Radiotherapy Advisory Group to oversee and transform the delivery of radiotherapy services.

References

Journals

Borras JM, Lievens Y, Barton M, et al. How many new cancer patients in Europe will require radiotherapy by 2025? An ESTRO-HERO analysis. Radiotherapy Oncol (2016)
Mortality due to cancer treatment delay: systematic review and meta-analysis | The BMJ
Progress in cancer survival, mortality, and incidence in seven high-income countries 1995–2014 (ICBP SURVMARK-2): a population-based study - The Lancet Oncology

Reports

Radiotherapy Travel Time analysis, Radiotherapy UK (2019)
Flash Workforce Survey, Radiotherapy UK (2022)
Radiotherapy Services in England 2012 Report, DoH (2012)
Radiotherapy Age Profile & Density, 2019 Edition (2019). COCIR, the European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry

Data

Statistics » Provider – based Cancer Waiting Times for Q1 2022/23 Provisional (england.nhs.uk)
Cancer Statistics for the UK (cancerresearchuk.org)
https://www.cancerdata.nhs.uk/covid-19/rcrd
Chemotherapy, Radiotherapy and Surgical Tumour Resections in England - GOV.UK (www.gov.uk) (2020)

Appendix 1

Written evidence submissions

Written evidence submissions
Advanced Accelerator Applications (AAA)
Berkshire Cancer Centre, Reading
ELEKTA
Gynae Narratives Team
Institute of Physics and Engineering in Medicine (IPEM)
Leo Cancer Care
MediPass
Society and College of Radiographers
South West Radiotherapy Operational Delivery Network
University Hospital Coventry and Warwickshire – Radiotherapy Department
Varian Medical Systems
Vision Radiotherapy
Written evidence was also submitted from 6 patients or patient's family members.

Appendix 2

Oral evidence sessions and attendees

Tuesday 18th January 10am – 11 am

IPEM	Nicky Whilde	Head of Radiotherapy Physics Mid and South Essex NHS Foundation Trust
Society of Radiographers	Spencer Goodman	Professional Officer for Radiotherapy The Society and College of Radiographers
Individual Professional	Stephen West	Head of Radiotherapy, University Hospital of Coventry and Warwickshire
CRUK	Naser Turabi	Director of Evidence and Implementation
CRUK	Mads Thomsen	Policy Advisor (Health)
Varian	Adele Lyons	Zone Head Great Britain and Ireland
Leo Cancer Care	Tracy Underwood	Senior Physicist UKRI Future Leaders Fellow
Gynae Narratives Group	Dr Lisa Ashmore	Associate Dean (Engagement), Faculty of Health and Medicine Senior Lecturer in Social Sciences, Lancaster Medical School
Radiotherapy UK	Professor Pat Price	Clinical Oncologist, Imperial College London Co-founder, CatchUpWithCancer campaign Chair, Radiotherapy UK
Radiotherapy UK	Sarah Quinlan	Director
Radiotherapy UK	Lynsey Rice	Development Manager
MediPass	John Muolo	CEO
MediPass	Jacqui McElhinney	Partnerships & Development Lead (UK)
Individual Professional	Richard O Brien	Network Manager, West London, Surry and Sussex Radiotherapy ODN.

MPs chairing

Tim Farron MP	Liberal Democrats MP for Westmorland and Lonsdale, APPGRT Chair

Appendix 3

List of APPGRT Members

Members	Constituency
Lisa Cameron	SNP MP for East Kilbride, Strathaven and Lesmahagow
Liz Twist	Labour MP for Blaydon
Mike Amesbury	Labour MP for Weaver Vale
Patrick Grady	SNP MP for Glasgow North
Sarah Olney	Liberal Democrat MP for Richmond Park
Afzal Khan	Labour MP for Manchester Gorton
Alex Davies-Jones	Labour MP for Pontypridd
Alex Norris	Labour/Co-operative MP for Nottingham North
Andrea Jenkyns	Conservative MP for Morley and Outwood
Andrew Gwynne	Labour MP for Denton and Reddish
Barbara Keeley	Labour MP for Worsley and Eccles South
Ben Lake	Plaid Cymru MP for Ceredigion
Beth Winter	Labour MP Cynon Valley
Catherine West	Labour MP for Hornsey and Wood Green
Christina Rees	Labour/Co-operative MP for Neath
Damian Green	Conservative MP for Ashford
David Evennett	Conservative MP for Bexleyheath and Crayford
Derek Thomas	Conservative MP for St Ives and Vice Chair
Derek Twigg	Labour MP for Halton
Diana Johnson	Labour MP for Kingston upon Hull North
Fay Jones	Conservative MP for Brecon and Radnorshire
George Howarth	Labour MP for Knowsley
Grahame Morris	Labour MP for Easington and Vice Chair
Greg Smith	Conservative MP for Buckingham
Henry Smith	Conservative MP for Crawley and Vice Chair
Ian Paisley	DUP MP for North Antrim
Jeff Smith	Labour MP for Manchester Withington
Jim Shannon	DUP MP for Strangford
John Spellar	Labour MP for Warley
Jonathan Gullis	Conservative MP for Stoke-on-Trent North

Kate Hollern	Labour MP for Blackburn
Kim Johnson	Labour MP for Liverpool Riverside
Liz Saville Roberts	Plaid Cymru MP for Dwyfor Meirionnydd
Mark Tami	Labour MP for Alyn and Deeside
Marsha De Cordova	Labour MP for Battersea
Martyn Day	SNP MP for Linlithgow and East Falkirk
Mary Glindon	Labour MP for North Tyneside
Oliver Heald	Conservative MP for North East Hertfordshire
Paula Barker	Labour MP for Liverpool Wavertree
Rachael Maskell	Labour/Co-operative MP for York Central
Rosie Cooper	Labour MP for West Lancashire
Scott Mann	Conservative MP for North Cornwall
Selaine Saxby	Conservative MP for North Devon
Taiwo Owatemi	Labour MP for Coventry North West
Tim Farron	Liberal Democrat MP for Westmorland and Lonsdale and Chair
Tonia Antoniazzi	Labour MP for Gower
Yvonne Fovargue	Labour MP for Makerfield
Therese Villiers	Conservative MP for Chipping Barnet
Lord Dubs	Labour Peer
Baroness Armstrong of Hill Top	Labour Peer
Baroness Golding	Labour Peer
Baroness Healy of Primrose Hill	Labour Peer
Baroness Redfern	Conservative Peer
Lord Rennard	Liberal Democrat Peer
Lord Tyler	Liberal Democrat Peer
Baroness Ritchie	SDLP Peer

For further details visit the APPG-RT website:

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