

# **NCRI Clinical and Translational Radiotherapy Research Working Group (CTRad) Priorities 2022 - 2025**



## NCRI Partners

NCRI is a UK-wide partnership between research funders working together to maximise the value and benefits of cancer research for the benefit of patients and the public. A key strength of NCRI is our broad membership with representation across both charity and government funders as well as across all four nations in the United Kingdom.



## Introduction

The NCRI Groups bring the cancer research community together to develop practice-changing research, from basic to clinical research and across all cancer types, supporting NCRI's strategy. The NCRI Clinical and Translational Radiotherapy Research Working Group (CTRad) is a multi-disciplinary community of researchers and consumers focused on issues relating to radiotherapy research.

Each NCRI Group engages in a prioritisation process to identify the priority areas in its area of research (Appendix A). This process dictates the work of the group as well as providing an assessment of the state of research for the wider research community.

NCRI CTRad has identified the research priorities for this area, working with members of the research community, NCRI Partners, government bodies, funders and international organisations. Full details of the meetings held can be found in Appendix B and a list of participants can be found in Appendix C.

### Strategic priority areas:

1. Translating novel discoveries to and from the clinic
2. Evaluating and optimal implementation of new radiotherapy technologies
3. Generating evidence to change practice
4. Real-world patient experience and evidence

Each priority in this ambitious strategy is formed of multiple tasks to complete to achieve the aims of the strategic area, details of which can be found on pages 8-16 of this document. NCRI CTRad will initially focus on the first task in priorities 1-4, forming time-limited working groups to address these tasks. When one working group finishes, capacity will be transferred to address the next task in this priority area. The strategies of NCRI Groups will be refreshed every three years. In addition, the research landscape will continue to be routinely assessed by NCRI to ensure the most pressing questions in the radiotherapy research landscape are addressed over the course of this three-year strategy.



“NCRI CTRad is widely recognised as an internationally leading multidisciplinary radiotherapy research group that represents the broad UK radiotherapy research community and continues to deliver world-leading and practice-changing research with global reach. NCRI CTRad's Top 10 achievements, published in 2019 to mark the group's 10th anniversary (Chalmers et al. Clin Oncol [R Coll Radiol] 2020; 32:9-12), highlights the significant and lasting influence the group has had on the UK's cancer research landscape, and the group

has continued to thrive despite the very significant challenges of the global pandemic. As NCRI CTRad transitions to the new structure, one of our key challenges will be to maintain momentum and maximise the ongoing impact of NCRI CTRad during a time of change as well as changes within the wider NCRI Group structure. Proposal guidance for the development of radiotherapy studies will remain core business for CTRad, and we will ensure our focus is on the strategic priority areas so that the key objectives outlined are delivered over the next three years.”

**Professor Robert Huddart, Chair of NCRI CTRad**

# About the NCRI Clinical and Translational Radiotherapy Research Working Group (CTRad)

## **Mission statement:**

To maximise quantity and quality of life for patients receiving radiotherapy by optimising tumour control and minimising toxicity.

This mission statement reflects NCRI CTRad's continued focus on the need to improve radiotherapy patient outcomes by targeting cancers more accurately and effectively to increase cure rates and reduce toxicity rates.

NCRI CTRad is a world-leading radiotherapy research group which leads, coordinates and raises the profile of UK radiotherapy research. It is a unifying voice for radiotherapy research in the UK and the only national multidisciplinary research group globally that drives bench to bedside research in radiotherapy.

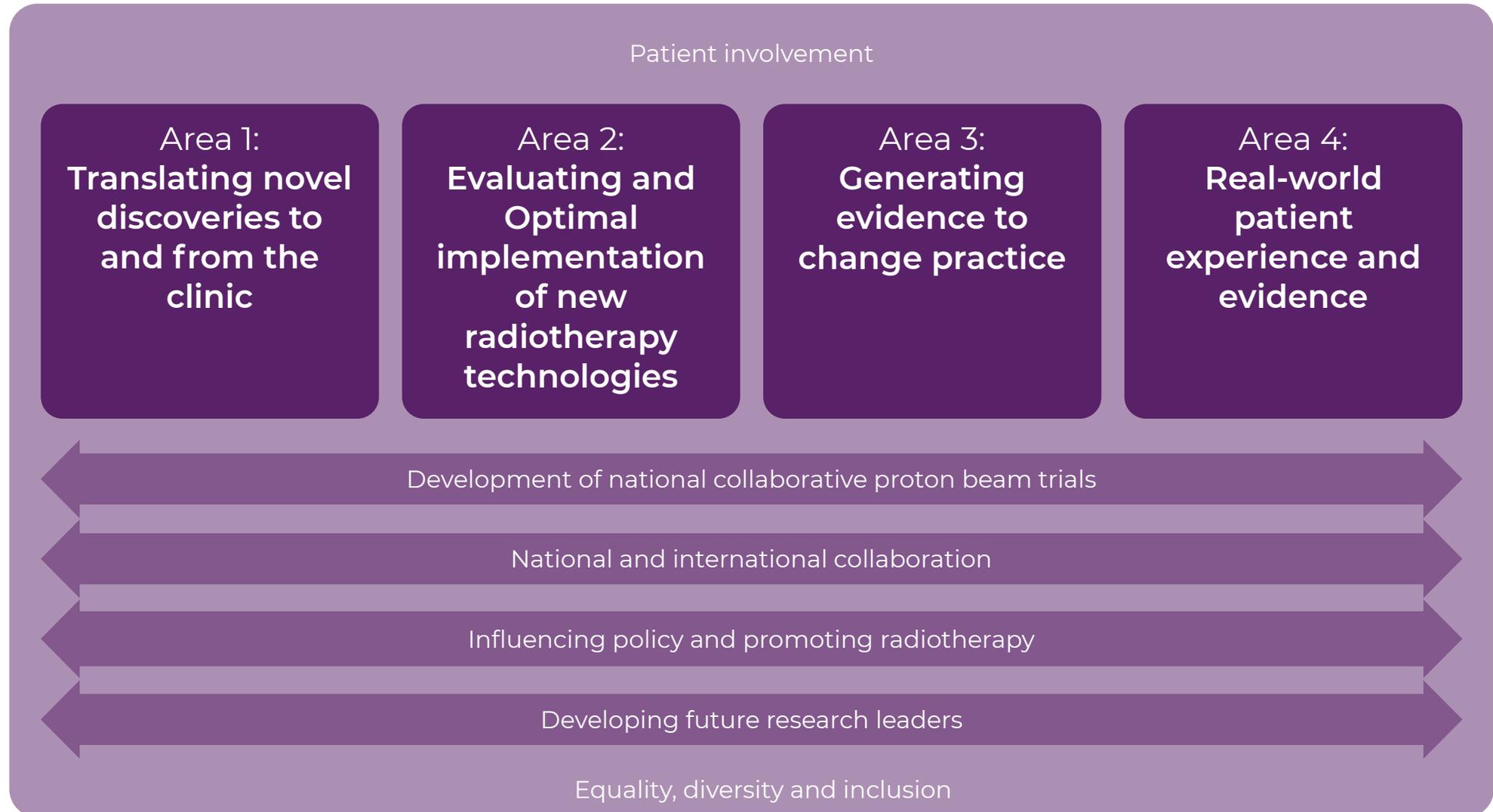
NCRI CTRad is inclusive and focused on improving patient care, experiences, and outcomes in radiotherapy centres across the UK and beyond. The group focuses on translational and clinical research, enabling the translation of novel technologies and treatments into the clinic. It demonstrates its value, distributing the benefits of research widely and equitably across the UK, resulting in practice-changing outcomes with global reach. NCRI CTRad delivers advances in radiotherapy to the clinic.

In the three years since NCRI CTRad's last strategy refresh, the UK's cancer research landscape has changed considerably as a result of:

- Advances in radiotherapy technologies
- Progress with proton beam therapy clinical trial development (led by NCRI CTRad) and funding
- Establishment of CRUK's RadNet, a network of seven radiotherapy centres of excellence
- The Covid-19 pandemic and associated challenges for cancer research
- An increasingly competitive funding landscape and the need to offer more value within each funded study

These changes provided impetus and opportunities to focus and define our future strategic priorities. The group is aware of the importance of equality, diversity and inclusion (EDI), and will be guided by the NCRI Groups as to how best to support and promote this.

## NCRI CTRad strategic priorities at a glance



# NCRI CTRad working groups

## Initial working groups in set up

NCRI CTRad has identified four strategic areas of focus, details of which can be found on pages 8-16 of this document. Tasks needed to be undertaken in order to achieve the aims of each strategic area have been identified. Time-limited working groups will be set up to address the first task in each of these areas, details of which are outlined below. Once one working group reaches completion, capacity will be transferred to the next task in this strategic area.

### Working group 1

Develop and publish a translational research roadmap

This group will publish and promote a roadmap to illustrate how to take discoveries from pre-clinical to clinical evaluation and translate clinical trial results into practice.

### Working group 2

Produce and publish a roadmap/position paper on the barriers and challenges in molecular radiotherapy research with proposed solutions and opportunities

This group will publish a roadmap/position paper on the current developments in molecular radiotherapy in the UK, outlining the barriers and challenges to research capabilities, with proposed solutions and commercial and clinical opportunities.

### Working group 3

Produce publication(s) showing the impact of NCRI CTRad supported trials on UK radiotherapy practice

This group will produce articles or undertake case studies to demonstrate NCRI CTRad's impact on patient care, e.g. by determining the proportion of radiotherapy patients who receive a treatment designed by an NCRI CTRad-supported trial through our proposal guidance meetings and mentoring process (for example, breast and prostate cancer hypofractionation trials, lung or head and neck studies); explore and determine the capacity released for the NHS by our trials, sparing vital 'man hours' that enabled cancer treatments to continue during Covid-19; and measuring the broader benefits to patients and society of our clinical trials, for example by reducing long term toxicities and demonstrating the cost-effectiveness of the intervention.

### **Working group 4**

Convene a workshop to explore the potential for patient-guided radiotherapy, and write a position paper on the best practice for patient-guided radiotherapy and patient-reported outcome measures in radiotherapy trials

This group will start with assessing the current status of patient-reported outcome measures in radiotherapy trials and scoping the potential of patient-guided radiotherapy - including methodologies for the use of patient-reported outcome measures and incorporating real-time data such as from wearables devices, aiming to publish a position paper on the best practice for patient-guided radiotherapy and patient-reported outcome measures in radiotherapy trials with implementation in routine care. When patient-reported outcomes are included in radiotherapy trials, outcomes and risk-benefit analyses would be more patient-centred and facilitate more personalised radiotherapy relevant to an individual patient's characteristics and preferences.

# NCRI CTRad strategic areas in full

## Strategic area 1: Translating novel discoveries to and from the clinic

Our aim will be to drive the translation of radiotherapy research from bench to bedside, working with other groups to support the translational pipeline to bring novel discoveries into the clinic to test their efficacy. Learning, data and samples from the clinic will be fed back rapidly to enable new scientific discoveries.

We envisage that new discoveries will be made in UK academic institutions. NCRI CTRad will link with institutions including CRUK RadNet Centres and Units, industry and other academic partners nationally and internationally to enable the evaluation and testing of the new discoveries in the clinic, in the context of fundable, high-quality, collaborative clinical trials with line of sight to later phase testing and clinical practice. Our role will be to advise on developing efficient and novel clinical trial design, promote the importance of experimental studies in radiotherapy and liaise with patients and the wider UK radiotherapy community to enable the delivery and implementation of the findings into future clinical practice.

### **Task 1: Develop and publish a translational research roadmap**

This priority aims to publish and promote a roadmap to illustrate how to take discoveries from pre-clinical to clinical evaluation and translate clinical trial results into practice.

### **Task 2: Deliver a workshop to promote collaboration between translational scientists and early clinical researchers**

This priority aims to arrange and deliver a workshop to promote collaboration between scientists, clinical researchers, and methodologists to develop translational radiotherapy research to enhance the translational richness of radiotherapy clinical trials and facilitate reverse translation from the samples and data generated within them (bedside to bench and back again). These could include trials already proposed or in progress translational research or ensuring translational research is included in radiotherapy clinical trials.

### **Task 3: Identify a network of UK centres with interest and capability to deliver early phase drug-radiotherapy clinical trials and scope opportunities for radiotherapy combination studies, including ones which could be in collaboration with industry partners**

This priority aims to work with partners, including ECMC, CRUK RadNet, amongst others, to identify a network of UK centres with the interest and capability to deliver Early Phase Drug-RT Clinical Trials for different tumour types (delineating between Phase I and Phase II), identifying strategic leads for specific areas – matching clinical and translational research leads (from NCRI CTRad) with pre-clinical leads (predominantly but not exclusively from RadNet working groups) to create a dynamic interface from academic science (RadNet) to the clinical space (NCRI CTRad) and back again.

### **Task 4: Facilitate the development of early phase drug-radiotherapy combination studies**

This priority aims to facilitate the development of early phase drug-radiotherapy combination clinical trials, building on previous experience with CONCORDE. The studies

will be facilitated through cross-community interdisciplinary engagement, such as through the NCRI CTRad/CRUK RadNet/British Society for Immunology (BSI) “Building Immuno-Radiotherapy Collaborations” meeting on 12 July 2022, as part of the NCRI Strategic Partnership with the BSI to enhance cross-community interdisciplinary engagement.

## **Strategic area 2: Evaluating and optimal implementation of new radiotherapy technologies**

Our aim will be to pioneer the next generation of radiotherapy developments by evaluating robustly the benefit of new radiotherapy technologies and techniques and maximising the utilisation of evidence-based, cutting-edge radiotherapy techniques in clinical practice across the UK. We will engage with industry and relevant groups to enable the translational and evaluation pipeline for new radiotherapy technologies into the clinic across the UK.

### **Task 1: Produce and publish a roadmap/position paper on the barriers and challenges in molecular radiotherapy research with proposed solutions and opportunities**

This priority aims to publish a roadmap/position paper on the current developments in molecular radiotherapy in the UK, outlining the barriers and challenges to research capabilities, with proposed solutions and commercial and clinical opportunities.

### **Task 2: Organise a meeting with funders and industry to develop a joint understanding of the UK molecular radiotherapy funding landscape, to inform and support collaborative trial development and delivery mechanisms**

This priority aims to promote joint working between researchers, NHSE, NIHR and industry to take full advantage of the opportunities available, such as commissioned calls or investigator-led study opportunities and support growing infrastructure where that is required.

### **Task 3: Organise a workshop or sandpit to explore new ideas for MRT trials to encourage multidisciplinary collaboration**

By organising a workshop or sandpit, bring together key stakeholders, including those not usually associated closely with cancer, to explore new ideas or proposals for MRT trials and encourage multidisciplinary collaboration.

### **Task 4: Develop and seek funding for two academic UK MRT trials**

This priority aims to develop and seek funding for two academic UK MRT studies, engaging with the entire multidisciplinary team to ensure translational research opportunities are fully exploited. One study will be a multicentre phase II/III trial, and another one an exemplar phase I study (for example, one which involves the production of a Pb-212 labelled CTIMP).

### **Task 5: Support a workshop to scope ideas for magnetic resonance-guided radiotherapy research and to develop an idea for a collaborative magnetic resonance-guided radiotherapy trial proposal**

This priority will evaluate and optimise magnetic resonance-based image-guided radiotherapy planning and functional MRI imaging for radiotherapy treatment adaptation, to include researchers interested in utilising magnetic resonance-Linac and functional MRI imaging to optimise radiotherapy treatment planning and delivery, which will lead to developing ideas for a collaborative UK (+/- international) clinical trial utilising this technology.

## **Task 6: Arrange a workshop to promote collaboration between multidisciplinary researchers to develop and drive research in MRI-guided and molecular radiotherapy or other emerging radiotherapy technologies**

Building on the previous priority, this priority aims to organise a workshop to promote collaboration between multidisciplinary researchers (physicists, radiographers, methodologists and oncologists) to develop and drive research in MRI-guided and molecular radiotherapy or other emerging radiotherapy technologies as and when appropriate, across the UK in collaboration with appropriate partners such as NIHR and CRUK RadNet Emerging Radiotherapy Technologies Working Group. As this topic develops, there may be opportunities to explore and learn more from radiotherapy-related imaging and make the most of the data it generates.

## Strategic area 3: Generating evidence to change practice

Our aim will be to lead and coordinate the development of a portfolio of world-leading radiotherapy clinical trials which are highly fundable, translationally rich and quality assured (linking with RTTQA). We will continue to build on our successful NCRI CTRad proposal guidance meetings to support the development and funding of UK radiotherapy clinical trial protocols and our established leadership in proton beam therapy trials to generate the evidence base to inform future clinical practice across the UK and internationally, and we will facilitate mentorship to new proposals to maximise funding applications and success of applications.

NCRI CTRad will aim to make future clinical trial entry criteria inclusive to ensure the results are applicable to real-world patients and to harness patient involvement and NCRI Consumers to promote radiotherapy research to patient groups and networks, especially groups currently under-represented in studies. We will be the organisation that translates advances in radiotherapy to improve clinical outcomes and patient experience.

### **Task 1: Produce publication(s) showing the impact of NCRI CTRad supported trials on UK radiotherapy practice**

This priority aims to produce articles or undertake case studies to demonstrate NCRI CTRad's impact on patient care, e.g. by determining the proportion of radiotherapy patients who receive a treatment designed by a NCRI CTRad-supported trial through our proposal guidance meetings and mentoring process (for example, breast and prostate cancer hypofractionation trials, lung or head and neck studies); explore and determine the capacity released for the NHS by our trials, sparing vital 'man hours' that enabled cancer treatments to continue during Covid-19; and measuring the broader benefits to patients and society of our clinical trials, for example by reducing long term toxicities and demonstrating the cost-effectiveness of the intervention.

### **Task 2: Organise a methodological workshop to consider alternative methodologies to randomised controlled trials and early trial methodologies, identify appropriate settings for alternative methods and develop practical examples of alternative designs (in collaboration with strategic area 1)**

This priority aims to develop trials methodology – exploring novel trial designs with our methodologists, working on pragmatic/real world/Commissioning through Evaluation trial designs and big data, engaging with NCRI tumour-specific groups to identify unanswered radiotherapy research questions, exploring links with industry to encourage trials in the area of immuno-oncology and radiotherapy-drug combinations and including under-represented patient groups such as the elderly and patients with comorbidities. This could also include data collection and reporting, and implementation of statistical methods or in collaboration with the NIHR/ECMC early phase trials workshops.

### **Task 3: Organise a workshop to support early career researchers in radiotherapy-related professional groups to lead future studies (in collaboration with NCRI Early Career Researcher Forum and strategic area 1)**

This cross-cutting priority aims to support the radiotherapy research workforce to lead future studies and implement clinical trial findings into practice by supporting junior/early career researchers in radiotherapy-related professional groups on trial development, training and mentorship, promoting the benefits of multi-disciplinary collaboration and team science, potentially in partnership with the corresponding professional organisations. This will be delivered in collaboration with the NCRI Early Career Researcher Forum.

**Task 4: Publish a paper on health economics in radiotherapy trials discussing the need to integrate economic evaluation into trials to demonstrate cost-effectiveness and benefits**

This priority aims to produce a publication which surveys how many UK radiotherapy trials currently incorporate economic evaluations, provides guidance to including economic evaluations in radiotherapy trials, and considers what information should be collected and how it should be analysed and reported.

## Strategic area 4: Real-world patient experience and evidence

Consumer involvement will remain at the core of NCRI CTRad's work. It will be further developed in this strategic priority area, working with the NCRI Consumer Forum and NCRI Living with and Beyond Cancer Group, and be led by NCRI Consumers themselves. We aim to develop qualitative and supportive care studies in radiotherapy to reduce toxicity and improve survivorship for our patients. We aim to maximise the opportunities for outputs from collecting large-scale clinical and radiotherapy data. Research in this strategic priority area will be co-produced with consumers and will have patient preferences and priorities at its core.

### **Task 1: Convene a workshop to explore the potential for patient-guided radiotherapy, and write a position paper on the best practice for patient-guided radiotherapy and patient-reported outcome measures in radiotherapy trials**

This priority starts with assessing the current status of patient-reported outcome measures in radiotherapy trials and scoping the potential of patient-guided radiotherapy - including methodologies for the use of patient-reported outcome measures and incorporating real-time data such as from wearables devices, aiming to publish a position paper on the best practice for patient-guided radiotherapy and patient-reported outcome measures in radiotherapy trials with implementation in routine care. When patient-reported outcomes are included in radiotherapy trials, outcomes and risk-benefit analyses would be more patient-centred and facilitate more personalised radiotherapy relevant to an individual patient's characteristics and preferences.

### **Task 2: Scope the evidence gaps in the use of palliative radiotherapy and the opportunities for palliative radiotherapy trials. Support a workshop for discussing a proposal for a palliative radiotherapy trial**

To follow from task 1 (patient-reported outcome measures), this priority aims to undertake a scoping exercise to determine the important evidence gaps in the use of palliative radiotherapy, considering when doing less may be better (trials omitting radiotherapy) and developing patient-centred outcome measures for these trials; this is followed by scoping opportunities for palliative radiotherapy trials and supporting the development of a trial proposal based on the above exercise.

### **Task 3: Publish a paper from the COVID RT project to maximise outputs from the real-world data collected on radiotherapy patients and radiotherapy services during the Covid-19 pandemic**

As and when the relevant collected data is transferred from Public Health England to NHS Digital and released to the CRUK trusted research environment, the ongoing COVID RT project will collaborate with the National Radiotherapy Dataset (RTDS) and relevant experts in the field to analyse the impact of the Covid-19 pandemic on UK radiotherapy services and patient outcomes.

### **Task 4: Undertake a workshop with appropriate stakeholders to discuss real-world data in radiotherapy research and produce a position paper on best practice**

To follow the patient-reported outcome measures and palliative radiotherapy working groups, this priority explores how to make the best use of real-world data to inform radiotherapy research - determining the relevant clinical questions, collaborating with others working in this field (NCRI Health Data group, useMYdata, DATA CAN, RTDS etc.) and supporting late effects work (considering challenges of funding long term follow-up

in clinical trials), through organising a workshop to determine the most important and relevant clinical questions to focus on and produce a position paper on best practice.

## Overarching priorities

The priorities below are relevant to the work of NCRI as a whole and will be embedded in the work of NCRI CTRad across the board.

### **Priority 1: Continue to support the development of national collaborative proton beam trials**

Continue to lead the UK proton beam therapy research portfolio via the established NCRI CTRad Proton Beam Therapy Clinical Trials Strategy Group, in collaboration with NHSE, and ensure that funded proton beam therapy studies are successfully delivered and supported by the CTRad community and develop technological challenges that need to be addressed and will facilitate clinical trials which are not currently possible.

### **Priority 2: Collaboration and international links**

We will address this priority through our workshops, links with professional bodies (Royal College of Radiologists, Institute of Physics and Engineering in Medicine and Society of Radiographers) and collaboration with CRUK RadNet centres and units and link with NIHR to support the delivery of the radiotherapy trial portfolio, as well as increasing future focus on developing international partnerships and collaborations to increase the reach of UK radiotherapy trials.

### **Priority 3: Influencing policy and promoting radiotherapy research**

NCRI CTRad will link with NHSE's radiotherapy Learning Healthcare System (LHCS) and devolved nations, aiming to ensure that the UK's radiotherapy research outputs are implemented into practice. We will also continue to engage with funders and support the promotion of the importance of radiotherapy research nationally via the media and patient groups.

### **Priority 4: Inspiring and developing future research leaders**

NCRI CTRad is committed to continuing to inspire and develop the next generation of radiotherapy research leaders by providing educational seminars and workshops, training days, providing role models, encouraging mentorship and promoting equality of opportunity across different groups, working alongside the Royal College of Radiologists Academic Committee and NIHR who have similar aspirations. The NCRI Early Career Researcher (ECR) Forum will be key in achieving these aims.

### **Priority 5: Consumer involvement**

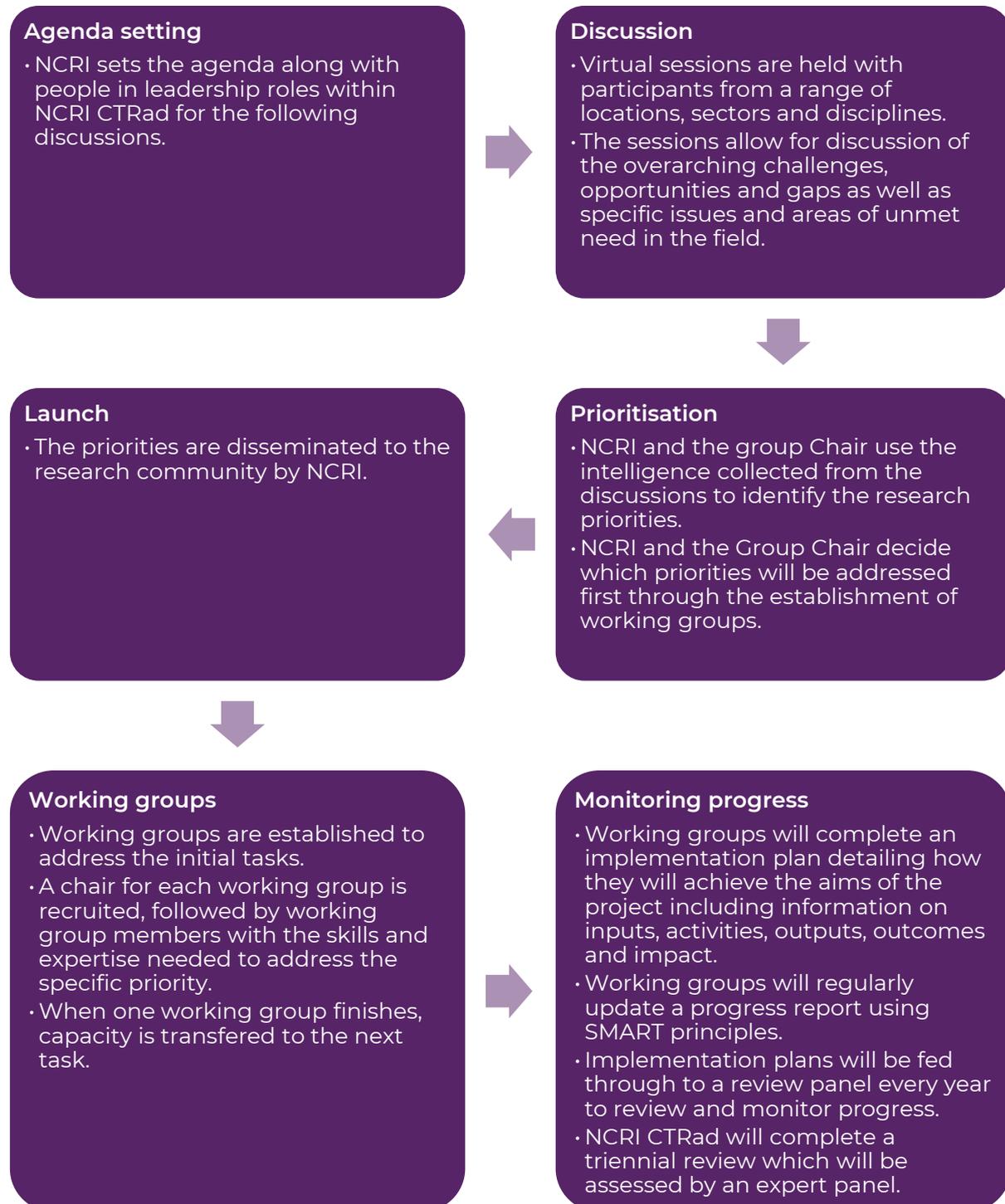
Patient and public involvement and working with the NCRI Consumer Forum is part of CTRad's DNA. We will continue engaging with patients to ensure that radiotherapy research continues to be patient-focused and that the metrics/endpoints reflect patient priorities, in particular, the research priorities identified in the NCRI's Living With and Beyond Cancer Priority Setting Partnership with the James Lind Alliance; this could be through the development of patient engagement events.

## Next steps

Working groups addressing the highlighted tasks are currently being formed. These groups will be made up of the experts needed to address each research question. To be the first to hear about opportunities to join these working groups please sign up to the [NCRI Radiotherapy Network](#). The progress of these working groups will be published in the annual reports and triennial review of NCRI CTRad. These can be found on the [NCRI website](#). Members of the NCRI Radiotherapy Network will also be updated periodically on the progress of the group.

Please [get in touch](#) if you have any questions or comments regarding this report or if you are interested in joining one of the [NCRI Networks](#), the [NCRI Consumer Forum](#) or our [NCRI Early Career Researcher Forum](#).

**Appendix A**  
**NCRI CTRad priority setting process**



## Appendix B

### NCRI CTRad priority discussion sessions 2021

The NCRI CTRad strategy day, held in September 2021, attracted 45 participants from a range of sectors and disciplines, including NCRI Consumer Forum members, early career researchers and NCRI Partners. The introductory presentation allowed for discussion of the overarching challenges, opportunities, and gaps in radiotherapy research, whilst the subsequent presentation presented a proposed framework for NCRI CTRad's future strategic priorities developed by the NCRI CTRad Executive Group. During the breakout groups sessions experts exchanged ideas on priorities areas of future research in this field, with each group involving researchers from wide ranging disciplines encouraging cross-cutting collaboration to meet the most pressing needs in radiotherapy research today.

#### Session 1: Introduction and setting the scene

**Chair: Professor David Sebag-Montefiore, University of Leeds**

Speakers:

- **Professor David Sebag-Montefiore**, University of Leeds – Welcome and Introduction
- **Professor Tim Maughan**, University of Oxford – NCRI / Strategy Advisory Group (SAG) Priorities
- **Professor Mererid Evans**, Velindre Cancer Centre – Proposed framework for new NCRI CTRad strategy

#### Session 2: NCRI CTRad Future Strategy

Breakout group chairs and topics:

- **Professor Chris Nutting**, Institute of Cancer Research and **Professor Corinne Faivre-Finn**, The Christie NHS Foundation Trust – Generating evidence to change practice
- **Professor Tim Maughan**, University of Oxford and **Professor Karen Kirkby**, University of Manchester – Evaluating and optimising technology
- **Professor Anthony Chalmers**, University of Glasgow and **Dr Sarah Brown**, University of Leeds – Translating novel therapies into the clinic
- **Professor Jon Wadsley**, Weston Park Cancer Centre and Mr Richard Stephens, National Cancer Research Institute – Real world patient experience and evidence / LWBC

## Appendix C

### Strategy day and NCRI CTRad contributors:

**Chair – Professor David**

**Sebag-Montefiore,**

University of Leeds

**Professor Richard**

**Adams,** Cardiff

University

**Dr Shreerang Bhide,**

Royal Marsden NHS

Foundation Trust

**Dr Sarah Brown,**

University of Leeds

**Mr Sean Buckland,**

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**Dr Alexander Burnett,**

NHS England

**Dr Antony Carver,**

University Hospitals

Birmingham NHS

Foundation Trust

**Professor Anthony**

**Chalmers,** University of

Glasgow

**Professor Nicola Curtin,**

University of Newcastle

**Dr David Cutter,**

University of Oxford

**Ms Aileen Duffton,**

Beatson West of

Scotland Cancer Centre

**Professor Mererid**

**Evans,** Velindre Cancer

Centre

**Professor Corinne**

**Faivre-Finn,** The Christie

NHS Foundation Trust

**Mrs Helen Fleming,**

National Cancer

Research Institute

**Dr Sarah Gulliford,**

University College

London Hospitals NHS

Foundation Trust

**Dr Shaista Hafeez,** Royal

Marsden NHS

Foundation Trust

**Professor Emma Hall,**

Institute of Cancer

Research

**Dr Jo Haviland,** Institute

of Cancer Research

**Professor Maria**

**Hawkins,** University

College London

**Dr Mark Hill,** University

of Oxford

**Professor Robert**

**Huddart,** Royal Marsden

NHS Foundation Trust

**Mr Chris Hurt,** Cardiff

University

**Dr Anna Kirby,** Royal

Marsden NHS

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**Professor Karen Kirkby,**

University of

Manchester

**Professor Tim**

**Maughan,** University of

Oxford

**Dr Jamie McClelland,**

University College

London

**Mrs Elizabeth Miles,**

National RTTQA Group

**Professor Chris Nutting,**

Royal Marsden NHS

Foundation Trust

**Mr Thomas O'Regan,**

National Cancer

Research Institute

**Dr Beatrice Seddon,**

University College

London Hospitals NHS

Foundation Trust

**Mr Richard Stephens,**

National Cancer

Research Institute

**Dr Yat Man Tsang,**

Mount Vernon Cancer

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**Professor Jon Wadsley,**

Weston Park Cancer

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**Dr Tim Ward,** National

Cancer Research

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**Professor Kaye**

**Williams,** University of

Manchester

**Mrs Julie Wolfarth,**

National Cancer

Research Institute

**Dr Huiqi Yang,**

Addenbrooke's Hospital

**Dr Carolyn Chan,**

National Cancer

Research Institute

**Dr Abbie Fearon,**

National Cancer

Research Institute

**Ms Nicola Keat,** National

Cancer Research

Institute

**Ms Alice Kidd,** National

Cancer Research

Institute

**Dr Ian Lewis,** National

Cancer Research

Institute

**Dr Alexander**

**Renziehausen,** National

Cancer Research

Institute

**Ms Rachel Lawrence,**

National Cancer

Research Institute

## CTRad Workstream contributors

The following CTRad workstream members were unable to attend the CTRad strategy day but have contributed to the direction of CTRad's strategic priorities through their involvement with their appointed workstreams.

**Dr Paul Shaw**, Velindre  
Cancer Centre

**Dr Samantha Terry**,  
King's College London

**Dr Timothy Humphrey**,  
University of Oxford

**Prof R Barbara Pedley**,  
University College  
London

**Prof Gillian Tozer**,  
University of Sheffield

**Dr Ross Carruthers**,  
University of Glasgow

**Dr Vessela Vassileva**,  
Imperial College  
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**Dr Andrew Scarsbrook**,  
Leeds Teaching  
Hospitals NHS Trust

**Prof Ananya  
Choudhury**, The Christie  
Hospital NHS Trust

**Dr Martin Forster**,  
University College  
London

**Dr Richard Baird**,  
University of Cambridge

**Dr Ane Appelt**,  
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