

Radiotherapy UK

Flash Workforce Survey

25th August – 5th September 2022





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Executive Summary

Radiotherapy UK are the only charity in the UK dedicated to improving access to high quality radiotherapy treatment and support. We believe that everyone in the country, no matter who they are or where they live, should have access to the best of radiotherapy treatment available.

In August/September 2022, Radiotherapy UK undertook a flash survey of radiotherapy professionals to understand the current issues being faced in radiotherapy services. The response rate to this survey represents nearly 10% of the entire radiotherapy workforce in the UK.

Radiotherapy is a major weapon in curing cancer, which is required in 4 out of 10 cures. A recent editorial in the Lancet echoed Radiotherapy UK's calls for increased investment and recognised its importance in clearing the cancer backlog. Despite the vital crucial role of radiotherapy as an essential cancer treatment, it is overlooked, underfunded, and seems to be ignored by the Government and NHS leadership. The crisis in radiotherapy services is devastating and has significant impacts, yet little attention is paid to it.

This Workforce Survey highlights chronic and shocking underinvestment in workforce, machinery, IT equipment and technology. This survey is the fourth of its kind since 2020 and shows a worrying trend that the situation is getting worse.

Most shockingly, this survey signals the worst ever workforce crisis within the radiotherapy community. The radiotherapy workforce is highly specialised and technical, and hugely important for a functioning cancer service, but there is currently not sufficient trainees or training in place. Survey results point to serious concerns amongst the respondents on machine and workforce capacity, and a significant worry over future demand. The crisis faced by radiotherapy services is perhaps best emphasised by one respondent who said, "I feel like I'm working in a sinking ship." There was also an overwhelming level of frustration as these frontline professionals are acutely aware the cancer service that they deliver is perhaps the most

significant solutions to the cancer crisis we face we face in this country. One respondent said "The technology and capabilities within radiotherapy are amazing! Sadly, being in the position to offer this to patients is lacking. Investment is virtually non-existent."

"The technology and capabilities within radiotherapy are amazing! Sadly, being in the position to offer this to patients is lacking. Investment is virtually non-existent."

The survey emphasises clear problems with the morale of the radiotherapy workforce, highlighting that the vast majority (87%) of respondents have considered, or know that their colleagues have considered, leaving the profession altogether. Despite the importance of radiotherapy and its place as a vital cancer treatment service, over 90% of the respondents felt that the Government did not understand the impact of current issues within radiotherapy on cancer patients or on the workforce themselves.

Furthermore, workforce issues are significantly impacting on the ability to take advantage of hi-tech IT and technological advances, with over 50% of respondents stating that staff training is a key barrier to delivering the most up-to-date techniques to benefit cancer patients. There are clear technological solutions which can make a significant impact on the backlog, but without investment into this infrastructure, these solutions cannot be utilised.

Despite the importance of radiotherapy and its place as a vital cancer treatment service, over 90% of the respondents felt that the Government did not understand the impact of the current issues within radiotherapy on cancer patients or on the workforce themselves.

The COVID-19 backlog has had a devastating impact on waiting times for cancer treatment in the UK. The survey worryingly highlights that the frontline workforce are seeing patients presenting with later stages of cancer, and that cancer treatment waiting times are dangerously breaching targets. The survey points to shocking anecdotal evidence showing that services are struggling to meet patient needs, and that late-stage diagnoses, which are seen by over 70% of respondents, are another pressure on an already vulnerable treatment service.

This is only worsening due to lack of investment or attention from the Government, and from the significant impacts of the backlog. The survey's results are stark and point to a watershed moment in cancer care in the UK. Without immediate investment, radiotherapy – one of the three main cancer treatments that saves thousands of lives each year – could collapse. To deliver a cancer service fit for the future, the root causes of the findings of this survey must be addressed in the Department of Health and Social Care's upcoming 10-year Cancer Plan.

With a small amount of investment, radiotherapy can offer cost-effective, low-risk and high-tech solutions that can be implemented immediately and improve cancer care now, and for the future.

Radiotherapy UK are urging the Government to immediately invest in radiotherapy treatment services, including the specialist workforce and modern technology, and to urgently remove the red tape and bureaucratic processes which are currently holding it back from efficiently tackling the cancer waiting times and saving the lives of many more cancer patients.



The key findings of this survey include:

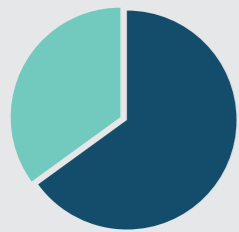
84%

of the workforce who responded say they do not have the workforce in place to meet current patient need.



92%

of the workforce who responded said they do not have the workforce to meet future demands.



Over 2/3

(65%) of respondents say they do not believe they have the machine capacity to meet future patient needs.



Over 1/3

(35%) of respondents do not have the appropriate IT and technology infrastructure to support the delivery of the most up to date techniques.



71%

of respondents said they had seen more patients with later stage disease being treated in their departments.



8 in 10

of respondents feel that the current environment has caused them or their colleagues to consider leaving.

94%

of respondents do not feel that the Government understands the impact of the current situation on the radiotherapy workforce.



72%

of respondents do not feel that senior NHS managers understand the impact of the current situation on the radiotherapy workforce.

Introduction

Radiotherapy is one of the three main cancer treatments, with surgery and systemic treatment. It is needed in 50% of cancer patients and in 40% of cancer cures. 1 in 2 people in the UK will get cancer and 1 in 4 people in the UK will need radiotherapy. It is high tech, low risk, has undergone a recent digital transformation and is recommended internationally as an innovative solution to addressing the ongoing backlog in cancer care.¹

The COVID pandemic has dominated the global world since 2020 and has had an enormous consequence on health services in the United Kingdom. Although the pandemic impact cannot be denied Quality Watch reporting² from the Nuffield Trust and Health Foundation shows that all elective waiting lists were on a downward trajectory across the NHS even before Covid. Of these waiting lists the fastest decline has been in cancer. This is particularly devastating as cancer is the deadliest waiting list, with every 4-week delay in cancer treatments leading to on average a 10% reduction in survival.³ In the past year waiting lists for cancer treatment worsened each month with the most recent available NHS England data showing that over a third of cancer patients waited beyond the 62-day target for cancer treatment and 10,000 waited beyond 104 days.⁴

We are witnessing an unprecedented cancer crisis in the UK caused by a deadly combination, dangerous waiting times and a lack of capacity in essential services like radiotherapy.

Recruiting and retaining skilled staff to deliver radiotherapy is a key challenge for the service. The Royal College of Radiologist have reported that by 2025 the NHS will be 272 full-time clinical oncology consultants short of the number it needs to meet basic cancer care demands.⁵ A census report from the Society of Radiographers shows that the number of posts vacant in radiotherapy centers are 30% higher than the number of new graduates qualifying, and that over half of departments have reported needing to reduce capacity due to staff shortages.⁶ Further evidence gathered by the Institute of Physics and Engineering IPEM indicates a 10% vacancy rate.⁷

Radiotherapy could play a key role in solving the current cancer crisis however, this cancer treatment has not been prioritized. In February 2022, the then Secretary of State for Health, Sajid Javid announced a ‘War on Cancer’ in the form of another 10-year cancer plan. However, no plan has yet been published and the date for publication is uncertain.

Radiotherapy is needed in **50%** of cancer patients and in **40%** of cancer cures.

1 in 4 people in the UK will need radiotherapy at some point in their lives.



¹ Lancet Oncology, Editorial| Volume 23, Issue 9, P1109, September 01, 2022

² QualityWatch | The Nuffield Trust

³ Mortality due to cancer treatment delay: systematic review and meta-analysis | The BMJ

⁴ Cancer-Waiting-Times-Statistical-Release-August-2022-Provider-based-Provisional.pdf (england.nhs.uk)

⁵ RCR census reports 2021 launched | The Royal College of Radiologists

⁶ Radiotherapy Radiographic Workforce UK Census 2021 | SoR

⁷ www.ipem.ac.uk/resources/workforce-intelligence/workforce-intelligence-resources/radiotherapy-resources/radiotherapy-workforce-summary-2019/

Survey Method

Radiotherapy UK undertook a flash survey of radiotherapy professionals between 25th August – 5th September 2022 to understand the current issues being faced in radiotherapy services. This is Radiotherapy UK's fourth flash survey (previous surveys undertaken in April 2020, May 2021 and Oct 2021). Previous flash surveys have been effective in providing early and accurate indications of workforce pressures which were subsequently supported by government data and this method of information gathering has consistently provided reliable information and feedback. Some questions remained the same throughout the three surveys, while others have

been adapted to reflect the current radiotherapy service environment.

The survey was conducted using Google Forms and contained a mix of 25 quantitative and qualitative questions. The survey was distributed to radiotherapy professionals via the charity's Daily News email and through social media (Twitter, Facebook and Instagram) over 11 days. The responses contained details of a respondent's profession and geographical area of working, but individuals could not be identified.

Results

Survey Respondents

A total of 622 radiotherapy professionals responded to this flash survey. 3 respondents who did not work within radiotherapy services have been omitted from the analysis. Of the remaining 619 respondents, 97.1 % worked in the NHS and 2.4 % in the private sector. With the estimated radiotherapy workforce totalling 6,400^{6,7,8} the response rate of 619 represents nearly 10% of the entire radiotherapy workforce in the UK.

The job role of 56.4% of respondents was Therapeutic Radiographer or Advanced Practitioner/ Consultant Therapeutic Radiographer, 11.3% were Clinical Scientists/ Trainee Clinical Scientists, 11% Engineers, 8.7% Heads of Radiotherapy Services/ Heads of Radiotherapy physics with the remaining 12.6% working in the roles of Medical Physicist, Student Therapeutic Radiographer, Clinical Oncologists (doctors) and Dosimetrist. As in previous flash surveys, the majority of respondents came from the Therapeutic

Radiographer profession, however this year there were many more respondents from other areas of the workforce with strong representation from scientists and engineers. With an estimated 57% of the radiotherapy workforce being Therapeutic Radiographers our response rate is reflective of the workforce diversity in job roles, strengthening the survey's credibility as a comprehensive portrayal of what is happening across all front-line areas in radiotherapy services.

There was representation from all four of the UK's devolved nations with 89% of respondents from England, 1.4% Northern Ireland, 5.1% Scotland, and 3.2% from Wales. To enable comparative analysis against NHS England data the England responses were broken down into regions. This indicated a fairly even split of responses from across the country, with the highest number of respondents coming from the South East (18.9%) and the lowest from the North East (4.6%).

⁶ 2021_CoR_radiotherapy_radiographic_workforce_uk_census_report_v3.pdf (sor.org)

⁷ clinical_oncology_census_report_2021.pdf (rcr.ac.uk)

⁸ ipem-workforce-summary-radiotherapy.pdf

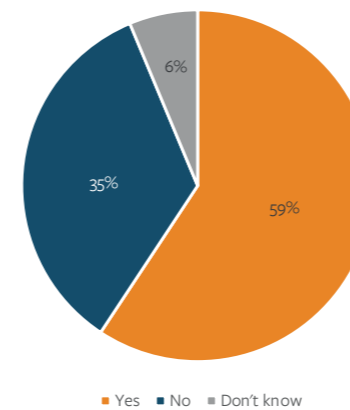
Radiotherapy Capacity

Respondents were asked about their department's machine and workforce capacity to meet current patient needs expected more patients come through from the backlog and future demand.

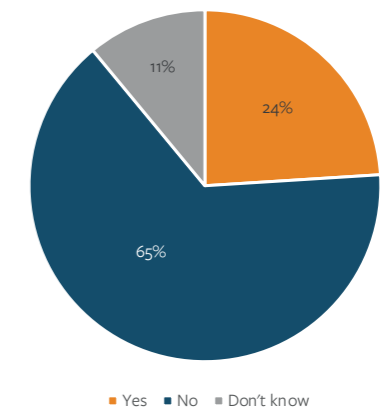
Machine Capacity

35% respondents said they do not have the machine capacity to meet current patient need.
65% respondents said they did not have enough machine capacity to meet future need.

Does your department have the machine capacity required to meet current need?



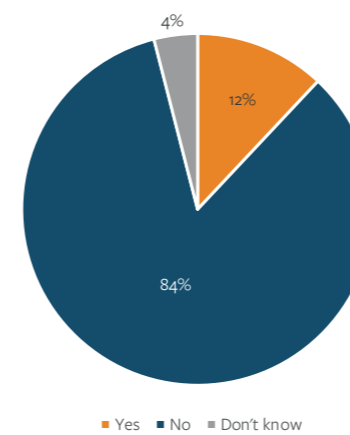
Do you think your department has the machine capacity required to meet patient needs when more patients come through from the backlog and future demand?



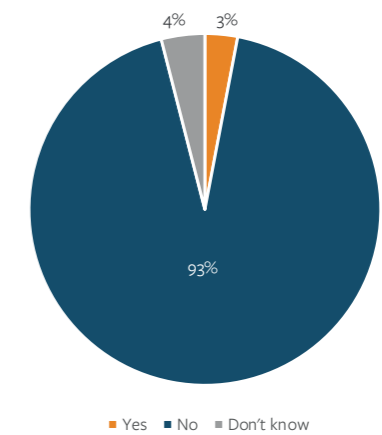
Workforce capacity

84% respondents said they do not have the workforce in place to meet current patient need.
93% respondents said they did not have the workforce to meet future patient needs.

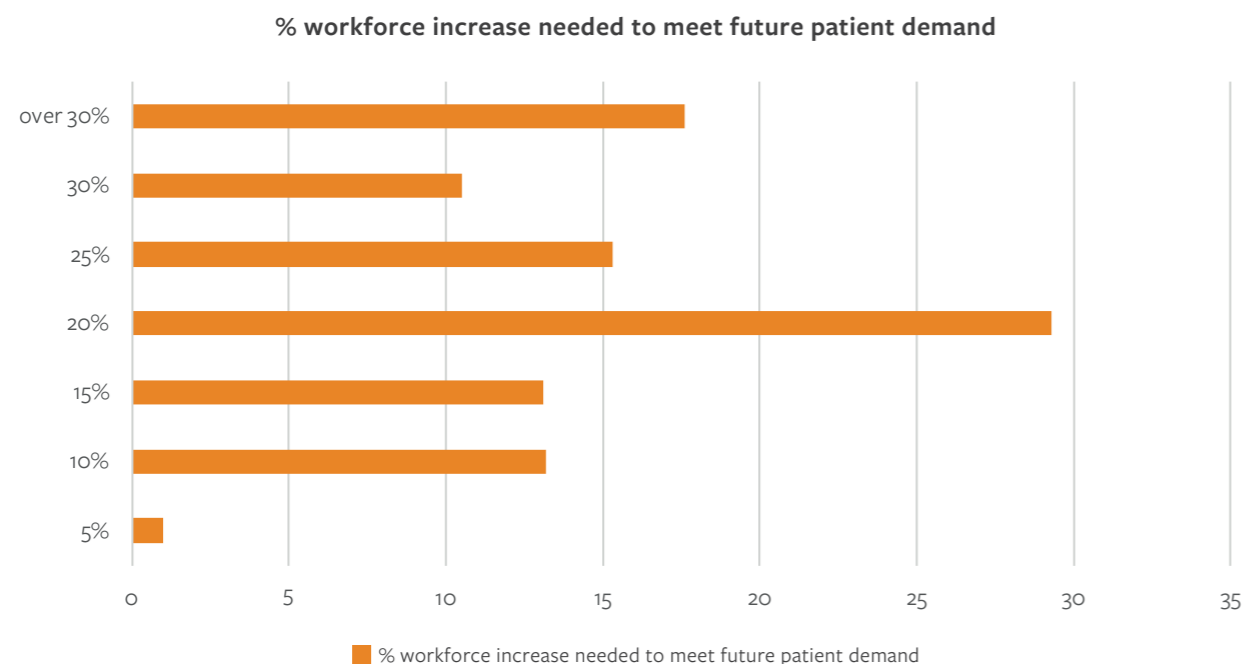
Does your department have enough work force to meet Current Capacity?



Do you think your department has the workforce capacity required to meet patient needs when more patients come through from the backlog and future demand?



Respondents who replied that they did not believe their department would have the required workforce levels to meet future demand were asked to estimate by **what percentage their workforce would need to increase to meet future patient needs.**



Analysis

These findings are stark. **35%** of respondents believe they do not have the machine capacity to meet current demand which increases, to **65%** believing they do not have the machine capacity to be able to meet future demands. This has potentially devastating consequences for patient care and access to essential cancer treatment.

When coupled with the response to the question about workforce capacity where the overwhelming majority of respondents believe they have neither the workforce to deliver current patient demands (**84%**) or future patient demands (**93%**), it is a clear indication that an already vulnerable radiotherapy service is in a state of crisis.

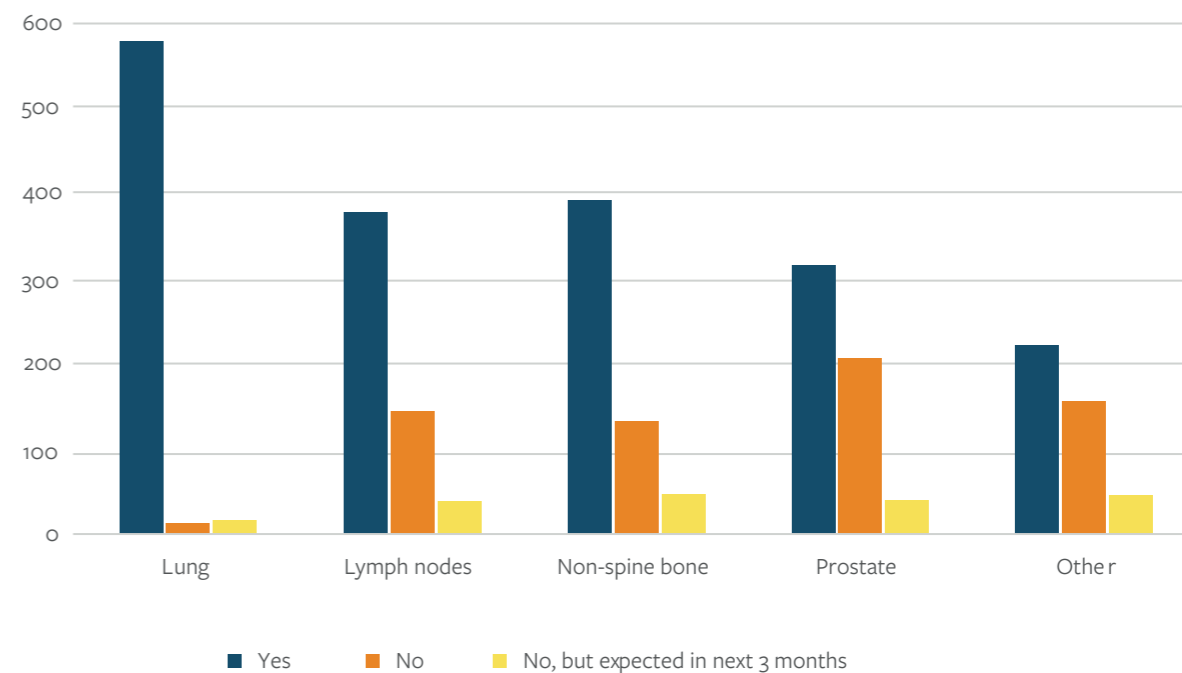
Technology & Innovation

SABR Capacity

SABR (also known as stereotactic body radiation therapy - SBRT), is a highly focused radiation treatment that gives an intense dose of radiation concentrated on a tumour, while limiting the radiation dose to the surrounding organs. It has been shown to increase cure rate in select tumours, allows tumours previously treated to be re-treated, reduces side effects and allows treatment to be given in a shorter overall fractionation. In June 2020, following an open letter to the Secretary of State for Health, signed by the radiotherapy community, NHS England announced the expansion of the use of SABR for non-small cell lung cancer and those with lung, lymph nodes and non-spine bone oligometastatic disease to all centres by April 2021.

Respondents were asked if their centre was using SABR for lung, lymph nodes, non-spine bone, prostate and other. The top five tumour areas noted under 'other' were livers, spine, pancreas, oligometastatic disease and adrenal.

Is your centre using SABR for any of the following?



We asked those who aren't delivering SABR to expand on why this is the case in a free text answer, to which 92 respondents replied. **37%** of respondents referenced workforce issues, **20%** noted it was due to time and capacity issues, **10%** stated that they were not commissioned for all sites, **6%** had equipment limitations and another **6%** highlighted that issues with training and/or lack of expertise was preventing them from delivering SABR.

Analysis

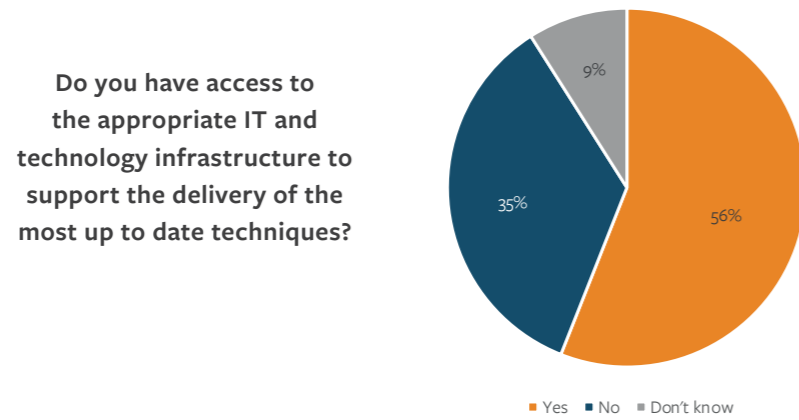
93.5% of respondents stated that their centres were able to deliver SABR which is a marked improvement on our last survey data when only **72%** of respondents said their centre was delivering it. This shows that the small investment made by NHS England following the open letter in 2020 did result in centres responding and delivering lung SBRT. Encouraging though this is, this figure only relates to lung diagnosis and still does not meet the 100% of centres commitment from the NHS. Additionally, it is clear that the government target that all centres should be delivering SABR to lymph nodes and non-spine bones by April 2021 is not being met, with our findings showing only **60%** of respondents stated these areas were being treated using SABR in their centres.

The use of SABR is a key clinical advance for radiotherapy and cancer treatment, improving patient outcomes and improving capacity for treatment provision. That it is not being implemented as standard across all centres further exacerbates the inequality of access to high quality radiotherapy treatment for cancer patients across the UK. Radiotherapy centres and the workforce should be supported by their senior management and local commissioners to train for and implement SABR for their patient population. Workforce issues such as shortages of staff and lack of training are an impediment to this important treatments application.

IT & Technology Infrastructure

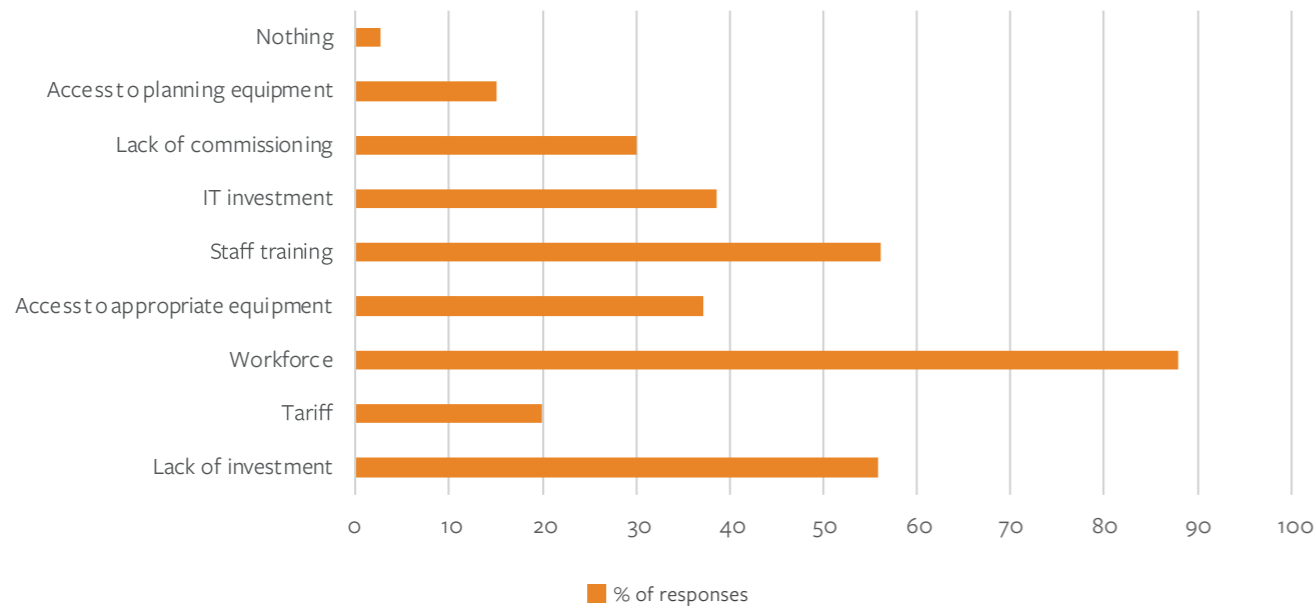
Respondents were asked if they have the appropriate IT and technology infrastructure to support the delivery of the most up to date techniques.

Out of 619 responses **56%** said yes, **35%** no and **9%** don't know.



When asked what impacts on your departments ability to deliver the most up to date techniques the overwhelming factor was 'workforce issues' stated by **88%** of the 603 responses. In close association with this, staff training was featured at **56%**. Lack of investment both overall and in IT specifically scored very highly (**56%** and **39%** respectively) along with lack of access to appropriate equipment (**37%**) and lack of commissioning (**30%**)

What impacts on your departments ability to deliver the most up to date techniques?



Analysis

According to the respondents to this survey two key areas that are limiting the delivery of the most up to date techniques and advancements are; workforce issues including staff training, and the lack of investment in and access to the latest IT and technology infrastructure.

The radiotherapy profession is made up of a specialised, diverse workforce who combine their knowledge and skills to treat complex cancer patients. The cross over between science, technology and clinical knowledge is what makes radiotherapy one of the most technologically advanced and innovative medical disciplines. Technological advances in radiotherapy are moving, requiring regular and supported training and development initiatives. This is paramount to ensure that the radiotherapy workforce can implement advances to continue maximising capacity solutions and transform patient outcomes.

Hi-tech radiotherapy technologies have the capability to rapidly improve cancer care in the UK and reduce treatment time. New software tools for planning, adapting, and delivering radiotherapy treatment continue to raise the bar for patients and their outcomes. To do so, up-to-date equipment that can support rapid, comprehensive implementation of modern advanced radiotherapy is essential.

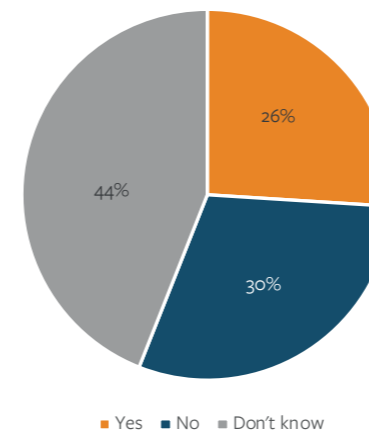
We know from Freedom of Information Queries and front-line industry feedback that there are currently 36 machines over 10 years old in radiotherapy centres across the UK with no plan in for replacement (13% of entire Linac population) In 2023 19 more machines will reach 10 years old – therefore 55 (20% of Linac population) machines will need replacing next year. Older machines are less able to support new technologies and have higher rates of downtime due to reliability issues, thus reducing capacity. This requires substantial investment (highlighted as another limitation by the respondents) which ultimately will prove cost-effective in the number of patients it can treat, the ability to implement new advanced techniques and the provision of reliable capacity.

20% of respondents also highlighted the tariff system as an issue. The current funding model is convoluted and does not reflect what delivering advanced treatments to the benefit of patients looks like on the ground. For example where funding is based on the metric of patient visits rather than the complexity of treatments delivered, Trusts are financially disadvantaged if offering more advanced, complex treatment and imaging options which although deliver improved patient outcomes, also require fewer patient visits to hospital. It is clear there is a need for this system to be reviewed immediately, enabling better use of resources and improving patient outcomes.

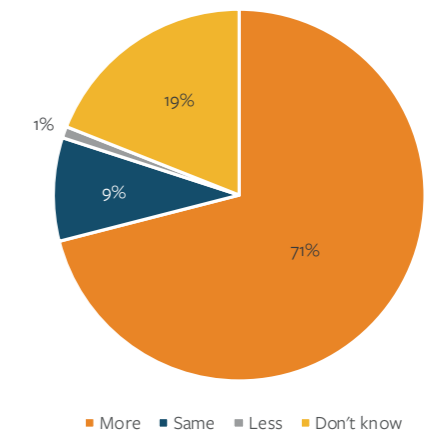
Patient Presentation

We asked the respondents two questions about the pathway of patients they were treating and how patients were presenting.

Do you still see patients treated with radiotherapy as a substitute for surgery, as occurred during COVID?



Have you seen a shift to later stages of diagnosis in the patients treated with radiotherapy at your centre in the last 6 months?



26% of respondents replied that they are still seeing patients treated with radiotherapy as a substitute for surgery, **30%** said no and **44%** did not know. When asked whether they had seen a shift in later stages of disease being treated with radiotherapy at their centre over the last 6 month **71%** of the 620 responses said they had seen more patients with later stages of diagnosis. **9%** said the same and **19%** didn't know.

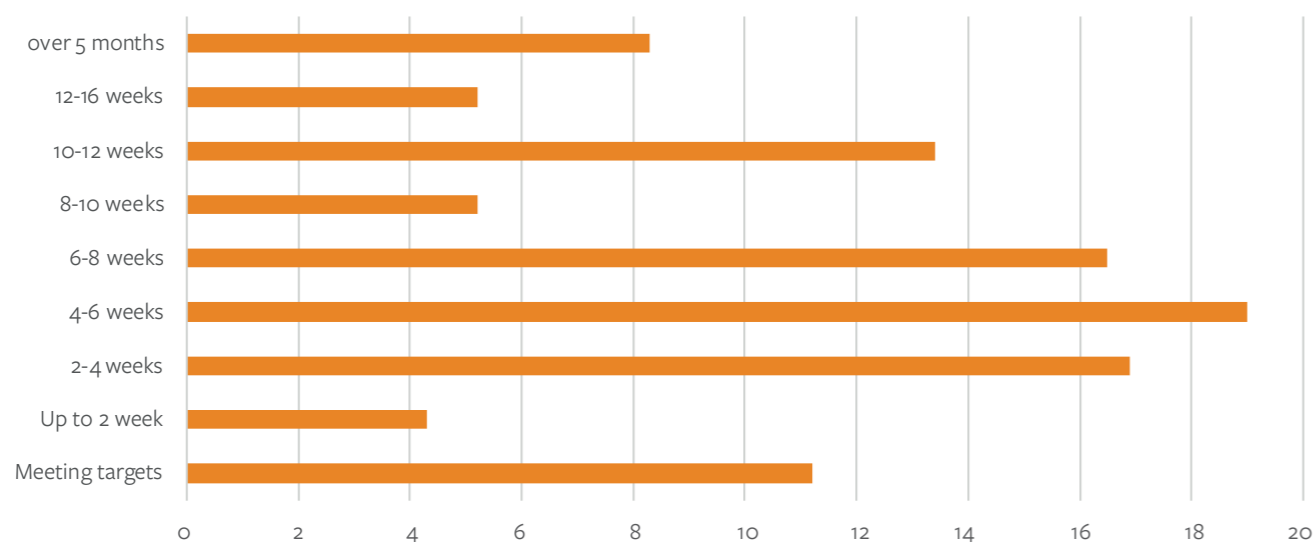
Analysis

The increase in patients presenting with later stage of disease is a clear consequence of the Covid pandemic when those with symptoms were dissuaded from accessing medical services and many diagnostic and screening services were delayed or suspended. Every 4 weeks delay in treatment can lead to a 10% reduction in survival⁹ and this is being borne out on the frontline with the increased later presentation of disease. More of these later stage patients coming through means a greater need for complex radiotherapy within their treatment pathways and increased pressure on an already vulnerable service.

Waiting times

When asked what was the longest waiting time for a radical treatment in the last 6 months in their centres, the range of responses varied considerably. Out of the 441 responses 138 did not know and the remaining are listed below.

Waiting times breaching targets



Analysis

The 4 week wait data is crucial given that we know this to be a key delay that can negatively impact a patients survival on average by 10%. Over **60%** of respondents stating that many radical (treatment with curative intent) patients were waiting over 4 weeks. Notably, all the responses highlighting wait times over 5 months were in relation to patients diagnosed with prostate cancer where hormones can be administered until radiotherapy capacity is available. From these responses it seems that radiotherapy departments are struggling to see patients within the target times, with one respondent noting that things were so bad that,

“Some patients are not even referred for Radiotherapy as the Clinical Oncologist knows it would be ineffective by the time it was delivered”

Only **11.4%** said they were meeting treatment targets, which is at odds with the data from NHS England which states that **95%** of all cancer patients are being treated within treatment targets (31-day) diagnosis to first treatment.¹⁰

⁹ Mortality due to cancer treatment delay: systematic review and meta-analysis | The BMJ

¹⁰ NHS annual report for 2020/21 - Waiting Times for Suspected and Diagnosed Cancer Patients

Possible solutions for cancer backlog

We asked the workforce to share, in their opinion, what immediate and innovative solutions can be implemented in radiotherapy to assist the staff in tackling the cancer backlog?

443 respondents answered. The vast majority of responses featured the need to urgently improve conditions for the workforce with **40%** emphasising the immediate impact more staff and more flexible work patterns could have, **21%** highlighting the need to improve financial incentives to retain staff and **9%** referencing the need for improved training and career progression.

“Backlog can never be cleared if we don’t even have enough resources to keep up with normal demands of a constantly increasing population.”

“Workforce training is key, the use of the assistant practitioner and apprentice roles in radiotherapy radiography, dosimetry and medical physics should be expanded and a proper career pathway built.”

12% of respondents also highlighted the importance of improving recruitment with an emphasis on setting up apprentice schemes, bringing back bursaries and fast-tracking immigration clearance for overseas workers. The lack of recruitment is creating serious gaps in the workforce which will have an ever-growing impact on capacity and patient care.

“We have rolling band 6 adverts out but we can’t appoint to them. This is the same in RT Research, we couldn’t appoint for a while as there were no appropriate candidates. The impact is we can’t run the machines for longer as it isn’t safe conditions for the patient or the staff... Most people are doing the job of 2 people. This is extremely marked since the pandemic and in 15 years I have never seen it as desperate as it is now.”

Another key theme was the need for improved access to technology (**18%**) and more up to date equipment (**10%**). AI contouring and SGRT were both regularly mentioned as a key technology that could improve capacity and planning.

“Investment in IT and automated (paperless) systems that help manage the radiotherapy pathway offline and more efficiently. This would streamline patient flow and reduce the bottlenecks due to outdated working practices in planning, pre and treatment delivery.”

“Use of auto contouring software - have been trying to obtain but no funding source. Would provide huge staff time saving.”

“Machine capacity is flexible and longer running hours makes best use of equipment. Use of SABR and more conformal techniques, Surface guidance systems, 6DOF couches and MR guided treatment capability all improve both setup times and overall treatment times. Investment in innovative technologies and staff is crucial as radiotherapy offers a relatively cheap solution to other modalities.”

Other areas of implementation highlighted included improving collaboration with other providers such as other departments, Trusts or private partners (**5%**) and the potential for improvement if care pathways were streamlined.

Analysis

The considerable response to this free question indicates a front-line who are not only working through immense challenges when delivering services but are also engaged with what needs to be done to address these challenges. The solutions offered cover the spectrum from long-term plans such as workforce planning that needs to be established now to have future impact, and shorter-term solutions such as implementing new technologies nationwide to immediately increase capacity.

“...allow depts and rads more autonomy to try different ways of working, fund apprenticeship salaries outside existing establishment ... reduce red tape regarding investment in new equipment, support international recruitment ...fund student training, pay decent overtime rates for WLI [waiting list initiatives] for rads, fund equipment that maximises efficiency eg immobilisation.”

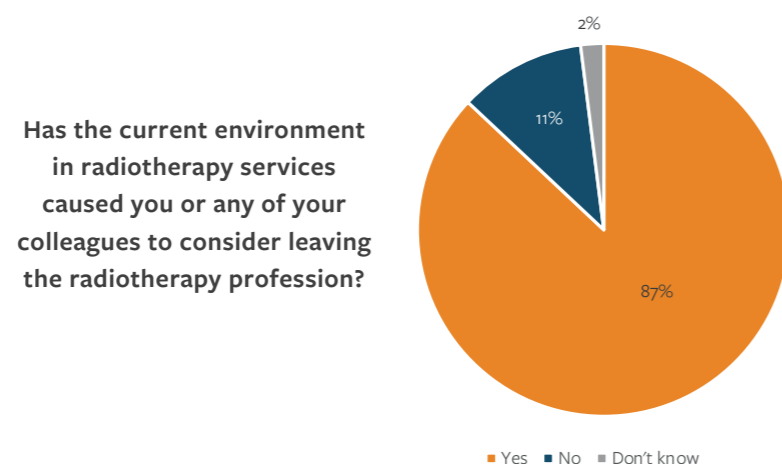
Radiotherapy professionals on the front-line are the best placed to understand what is required to stabilise and grow the radiotherapy services. It is important that their feedback and solutions are listened to and acted upon. Failure to do so could have devastating consequences for services and cancer patients in the UK.

“Our lack of senior/experienced planning staff make it impossible to increase the number of patients we currently treat. We also have a terrifying shortage of clinical oncologists. Both situations are causing a very high risk of the department failing completely, let alone trying to reduce waiting times and the cancer backlog.”

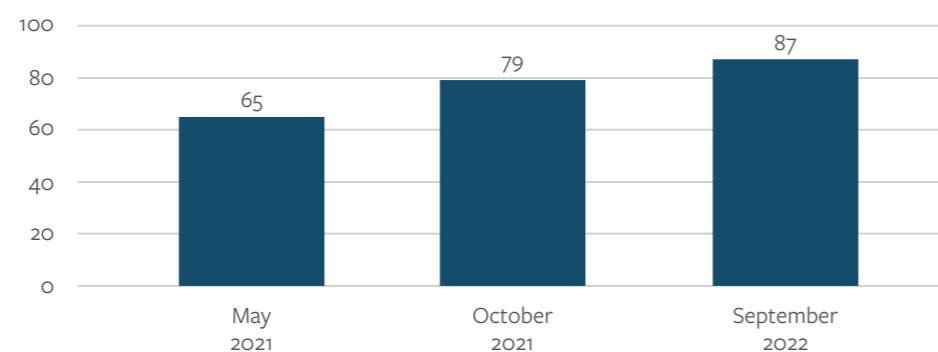
Workforce

We asked respondents whether the current environment in radiotherapy services had caused them or any of their colleagues to consider leaving the radiotherapy profession.

87% of those responding said they or a colleague were considering leaving the profession, with only **11%** saying no and **2%** don't know.



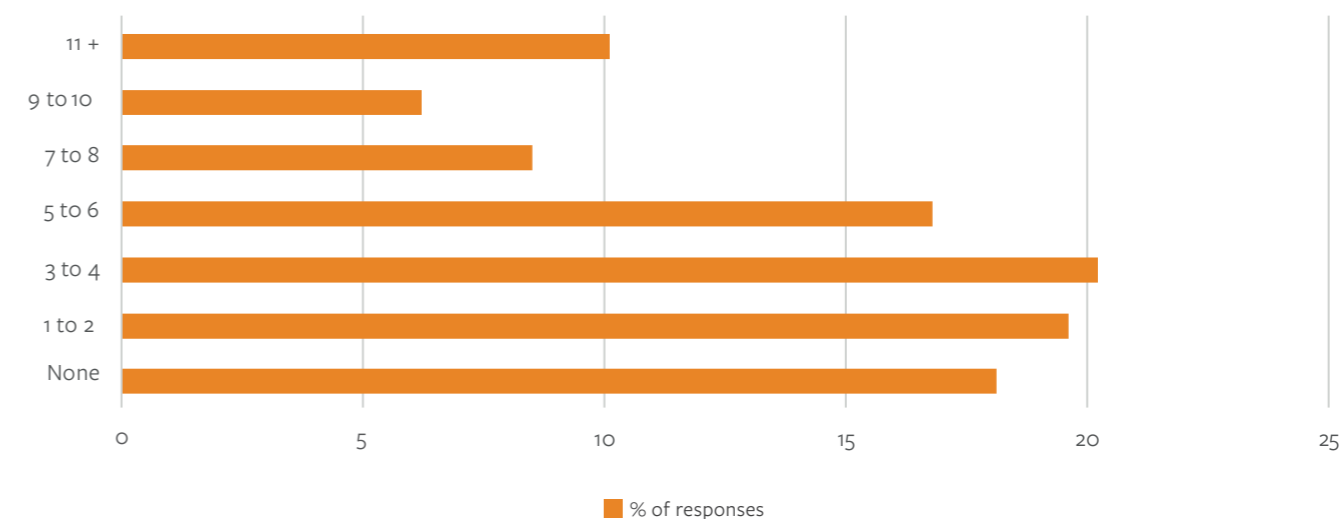
Percentage of respondents who themselves have considered leaving the profession or know a colleague. -Trend analysis.



When compared with similar questions asked in previous flash surveys, we can see that those considering leaving the profession or know of someone considering leaving has increased.

We also asked about how many roles in the respondents' department had been vacant for over 3 months, and whether they had any further comments to make regarding the workforce.

How many roles in your department have been vacant for over 3 months?



Out of the total 523 responses **21%** noted that they did not have access to specific numbers.

It is relatively normal for departments to have a few vacancies, however over **40%** of respondents highlighted 5 or more vacancies for longer than three months and noted financing roles as a major issue;

“Issues getting roles funded”

“Can't get funding to employ staff to meet service needs”

“No money to fill a vacancy once someone has left”

“We need more posts funded”

273 respondents replied to the free text question asking for any further comments around workforce. Most respondents identified key issues that are all intrinsically interlinked; workforce shortages (**26%**), issues with recruitment (**21%**), damaging workplace culture (**20%**), low salary (**11%**) and lack of training opportunities (**7%**)

“We cannot find clinical scientists with appropriate qualifications and have failed to recruit several times. Our clinical engineers are approaching retirement and we will not be able to recruit to replace them”

“Unable to recruit band 5's as no one is training in the profession due to tuition fees/negative views on the profession in the press/poor pay. Experienced staff are leaving due to being over worked, underappreciated and being put into situations that is unsafe for patients and staff”

“...my perception is that there are now serious vacancies across the whole RT MDT [multidisciplinary team] and this is causing breaches and delays to all category of patients and high stress levels to all staff grps involved and of course the patients most of all”.

Analysis

That such a large majority are either considering or know someone considering leaving the profession is a troubling finding. This number has increased since we last asked this question in our October 2021 flash survey when 79% of the workforce replied yes, illustrating a decline in workforce morale and reflecting the overwhelming pressures that the workforce are faced with.

Radiotherapy services are dependent on a small, committed workforce delivering care to thousands of cancer patients across the UK. This survey indicates that there is a serious risk of many professionals leaving which if realised will push the services to the point of collapse. There is an urgent need for immediate action and plans to alleviate this crisis.

These findings support analysis from the Society of Radiographers (SoR) which demonstrates that there are not enough therapeutic radiographers in training to fulfil vacant positions.¹¹ IPEM data tells us there are vacancy rates in med physics and engineering of 10% and the RCR forecast that there will be a consultant oncologists' shortfall of 26% by 2026 (currently 17%).¹² It is evident that the workforce required for this highly skilled profession are simply not there to employ and there is currently limited safeguarding or future workforce planning to ensure a sustainable service.

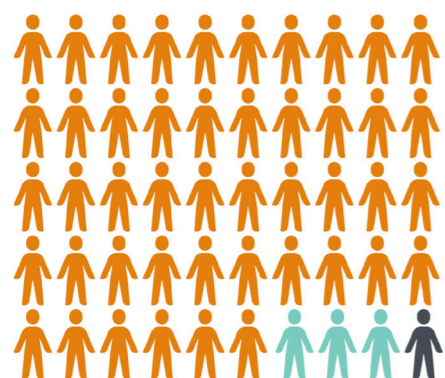
The current model seems to be “do more with less”, providers are staffing for the bare minimum to get through the clinical day, with no additional recruitment or resource to drive new initiatives, techniques or training that could in the long run support a more efficient delivery

Government Support

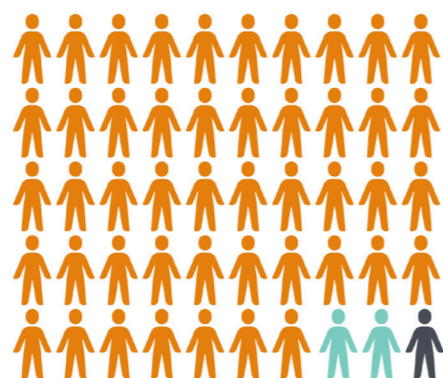
Previous Flash Surveys undertaken by the charity have asked the workforce their feelings on whether the Government and senior NHS managers understand the impact of the current situation in radiotherapy services on both cancer patients and the workforce. Cancer patients refers to patients than have been diagnosed and are presenting for care. This provides us with longitudinal data enabling deeper understanding of how workforce sentiment regarding policy makers and decision-makers who influence their ability to deliver services on the front-line has changed over time. 619 respondents responded to each of these questions.

92% of respondents felt that the government did not understand the impact of the current situation in radiotherapy on cancer patients and **94%** felt they did not understand the impact on the workforce.

Do you feel the government understands the impact of the current situation in radiotherapy on cancer patients?



Do you feel the government understands the impact of the current situation in radiotherapy on the radiotherapy workforce?



¹¹ 2021_CoR_radiotherapy_radiographic_workforce_uk_census_report_v3 (sor.org)

¹² clinical_oncology_census_report_2021.pdf (rcr.ac.uk)

When asked for 'any other comments' 167 respondents added further thoughts.

31% expanded on the initial question with comments that the government don't understand the complexities of radiotherapy or its potential.

"I'd be surprised if most people in the government know anything about Radiotherapy. We are constantly asked to do more with less and then even more with even less."

27% felt that the government didn't understand the importance of workforce pay, retention or progression for the delivery of the service,

"The staffing crisis is critical. Linacs are closing. Staff are leaving the profession. Overseas recruitment is challenging and takes 6-7 months. Apprentice posts are expected to be funded out of establishment as opposed to additional posts, which means B5 qualified posts have to be sacrificed to an apprentice post. Depleting the qualified workforce further."

17% believed that the government did understand the needs of radiotherapy service but didn't care and **11%** felt their lack of understanding or care was evident in the continuing lack of financial investment.

"There are always headlines or charity statements about how many of us will get cancer and ageing population etc but there seems to be no correlation with requirement to invest in equipment and staff. No action once it was known how many radiographers were required to man both proton centres. No future planning to increase workforce."

NHS Management Support

61% of respondents felt that senior NHS Managers did not understand the impact of the current situation in radiotherapy on cancer patients and **72%** felt that they did not understand the impact on the workforce.

Do you feel senior NHS managers understand the impact of the current situation in radiotherapy on cancer patients?



Do you feel senior NHS managers understand the impact of the current situation in radiotherapy on the radiotherapy workforce?



When asked for ‘any other comments’ 139 respondents added further thoughts. **33%** of respondents added that they didn’t feel senior NHS management knew what radiotherapy was with **13%** noting that it was not promoted or invested in and **9%** stating that they felt senior NHS management simply didn’t care.

“As a department we are often forgotten, people do not know what we do or even that we exist.”

“It feels that they think that working extra Saturdays or increasing shift times will help ease the backlog without the understanding of often long course treatments and an already stressed workforce. Treatments are only getting more complex and the strain on the staff is huge.”

25% believed that senior management needed to focus on workforce reforms.

“Senior managers may be aware of the waiting times or backlog of patients but they see it as a problem to be fixed by putting pressure on departments to sort it out rather than understanding the challenges facing the workforce and the complexities of patients which are more sick and advancements in techniques which lead to longer appointments being needed.”

7% were positive about the impact their local NHS managers were having on radiotherapy services.

“Locally (ie within Trust) managers understand the challenges faced I am not sure that NHSE do.”

Analysis

The overwhelming majority of the radiotherapy workforce do not feel that the government has an understanding of the impact of the current situation on either cancer patients or the workforce. For NHS senior management this figure is also high with the majority of respondents feeling their understanding of the situation is inadequate.

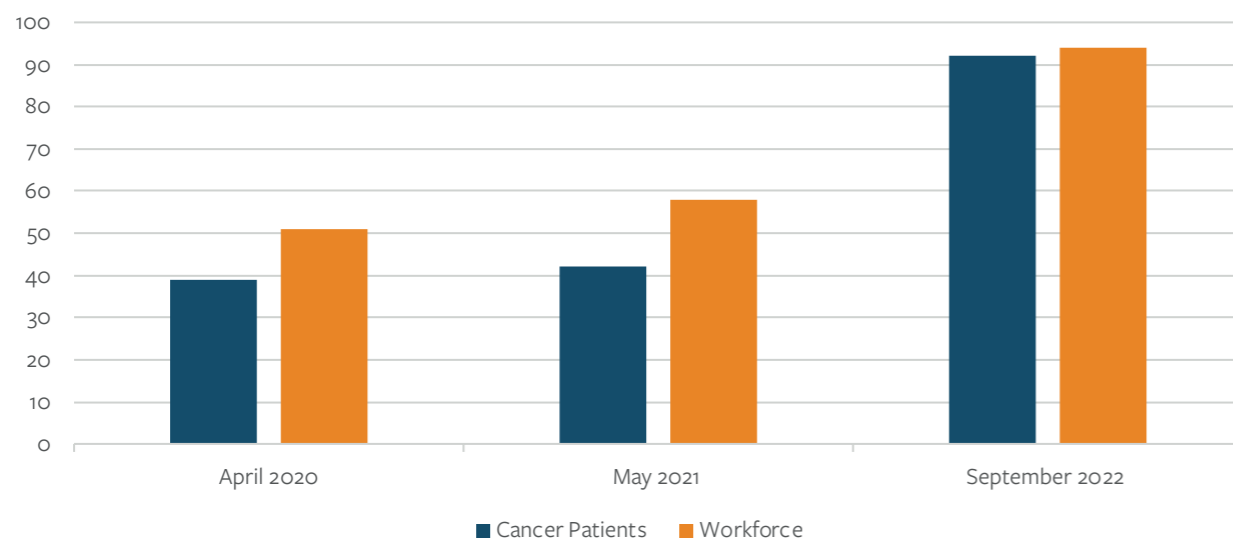
There is a strong feeling that both Government and senior NHS leaders pay little attention to radiotherapy.

“Whilst welcoming the investment in diagnosis, it doesn’t feel like there is any thought of what happens after detection. Who is going to treat the detected cancers and on what machines? We’re decades behind our peers in Europe and USA.”

“We can’t continue with such little staff. And cannot afford on the pay to work for NHS anymore when I can earn same in Tesco.”

“More emphasis and resources spent on chemotherapy and surgery. Senior management still do not understand role of RT in cancer treatment”

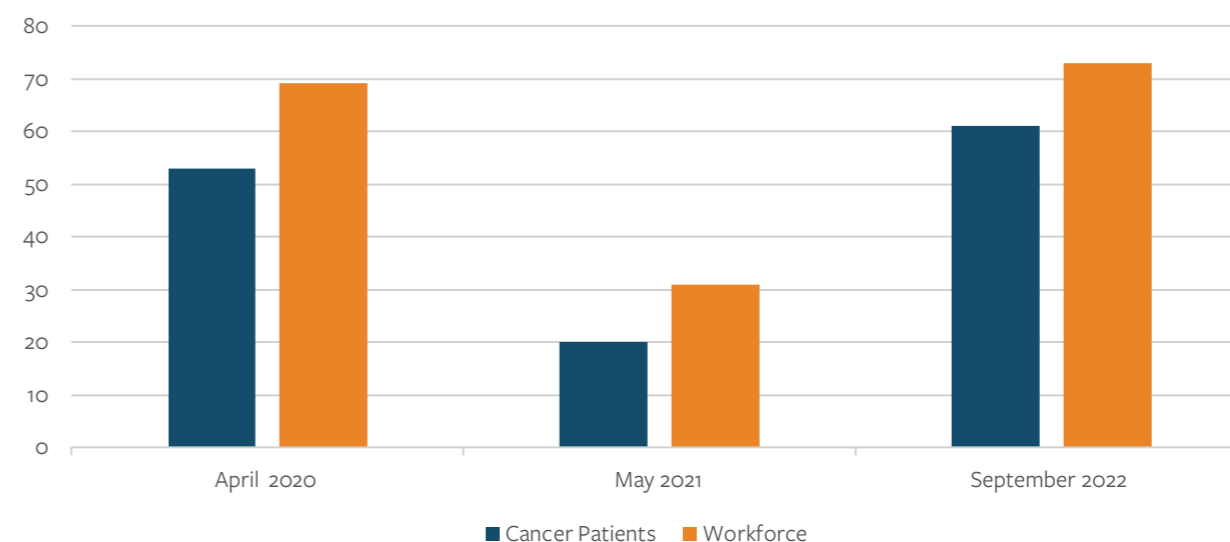
Workforce lack of confidence in governments understanding of current radiotherapy situation -Trend analysis



When compared with similar questions asked in previous flash surveys, we can see that the workforce’s confidence in the governments understanding of radiotherapy has decreased dramatically since April 2020.

Given the April 2020 and May 2021 surveys took place in the middle of a global pandemic when COVID-19 services were prioritized, it is alarming to see that confidence has decreased at a time when services are supposed to be stabilizing and are being relied upon to cope with the impending cancer backlog. Instead, we have a front-line workforce feeling disconnected and undervalued by those making policy decisions.

Workforce lack of confidence in NHS managers understanding of current radiotherapy situation on cancer patients and the workforce- Trend analysis.



A comparison of questions regarding workforce confidence in NHS Managers from previous surveys again shows an overall increase in the feeling that NHS managers do not understand the current situation on cancer patients and the workforce. The survey of May 2021 saw a rise in confidence however this has since eroded again.

“Smaller services such as RT gets left on the side-lines, are just expected to get on with it, with little support from senior managers. Nursing and Dr’s have the loudest voice, so it is very hard to be heard!!”

Final Thoughts

The final question in the September 2022 Flash Workforce Survey asked if there was anything else the respondents wanted to tell us. 149 respondents answered with the vast majority emphasising their deep concerns about the current unsustainable workforce levels and how this was leading to burn out and many considering leaving the profession. Many noted how they loved their profession but that the feeling of being overworked and undervalued by low salaries and historical underinvestment in radiotherapy services, coupled with the pressures of significant cost of living increases meant that they were struggling to see a future in the service.

A selection of comments reflecting these responses are;

“Feel like I’m working in a sinking ship, a lot more stressed than I used to be in the role, thinking of leaving profession as a result.”

“I have seen sicker patients/ longer waits than ever. To cover the staffing shortages/increased workload and low pay I worked the equivalent of one extra month in a 6 month period (between Feb-July).”

“I have worked clinically for over 23 years. The technology and capabilities within radiotherapy are truly amazing! Sadly, being in the position to be able to offer this to patients is lacking. Investment is virtually non-existent, vision by senior management is short sighted.”



Conclusions

The findings in this report must ring alarm bells for all those in government and NHS England who make the strategic, policy and financial decisions about cancer services in the UK. Radiotherapy treats over 100,000 patients a year with just over 6000 staff for an average of £4-7K a course and saves the lives of thousands of cancer patients.

It is apparent respondents to this workforce survey consistently feel overwhelmed, undervalued and unsupported. The 2022 annual flash workforce survey received nearly three times the number of responses of any previous flash survey, is representative of nearly 10% of the entire radiotherapy workforce and clearly articulates the profound and pressing issues that are impacting on the workforce’s ability to deliver treatment. By responding to our survey, the radiotherapy workforce are seeking ways to make their voices heard and effect positive change, but they require the tools, resources and infrastructure to enable them to make the radical changes needed to ensure the service is not only maintained but also future proofed to provide for the ever-growing numbers of cancer patients.

Overall analysis of the responses tells us that the workforce are caught up in a vicious cycle that they are continually trying to navigate to provide care. It starts with the chronic underinvestment in radiotherapy, coupled with crippling bureaucracy which means many centres are working with older equipment and are unable to implement or commission advanced technologies that can improve patient capacity and outcomes. It continues with a lack of support or incentives to join the workforce meaning 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 ultimately means more workforce leave the service. This places increased pressure on remaining workforce, meaning many are working in an increasingly stressful work environment trying to maintain safe services for patients and staff alike, are at high risk of

burn-out, and all compounded by a salary that does not adequately recognise the responsibilities of the role or the current economic climate we are living in. In this environment it is not surprising that 87% of respondents said that they or a colleague they knew of were considering leaving the profession.

This is a watershed moment. The combination of dangerous wait-times for treatment, and chronic underinvestment in a workforce that is now at breaking point means that radiotherapy services in the UK are close to breaking down. Without urgent sustainable and intelligent investment, the risks are so high that no action could mean the collapse of this essential cancer treatment. The government need to act immediately. Without functioning radiotherapy services, the UK does not have a functioning cancer service.

This crisis is occurring at a time in the technological development of radiotherapy when there is so much to gain; there has been a digital revolution in radiotherapy in the last ten years, accelerated by Covid which has produced efficiency and productivity solutions which could revolutionise the service. There are cost-effective, low-risk, hi-tech, digital solutions available that can be implemented immediately and have the potential to transform radiotherapy services and cancer infrastructure, help deal with the backlog and improve cancer survival both now and in the future. This will take leadership, vision and will to transform failing systems and structures. We already have a world-class front-line staff who know what to do but are prevented from delivering a world class service. Failure to act will mean thousands of needless deaths for those living with cancer. Investing in Radiotherapy and the workforce can play a central role in arresting the devastating deterioration in cancer care and has the capacity to future-proof our cancer services for years to come. But it needs to happen now.

Recommendations



Development of targeted and financially supported recruitment schemes for all specialties involved in radiotherapy.



Value the front-line radiotherapy workforce by investing in their training opportunities and paying them on a scale that reflects cost-of living increases.



Upgrade the machines, technology and equipment so that the workforce can implement high quality and more efficient radiotherapy solutions to patients throughout the UK.



Remove the red tape and unnecessarily bureaucratic funding models that stifle innovation and enable the frontline expert workforce to make and implement decisions that will benefit patients and improve survival outcomes.

Appendices

Appendix I - Survey questions

General Information

1. Do you work within Radiotherapy?
2. What is your current occupation?
3. Where is your centre located?
4. If in England what region?

Radiotherapy capacity

5. Does your department have the machine capacity required to meet current patient need?
6. Do you think your department has the machine capacity required to meet patient needs when more patients come through from the backlog and future demand?
7. Does your department have the workforce capacity required to meet current patient need?
8. Do you think your department has the workforce capacity required to meet patient needs when more patients come through from the backlog and future demand?
9. By what percentage do you estimate your workforce would need to increase to meet future patient needs?

Technology & Innovation

10. Is your centre using SABR for any of the following? lung, lymph nodes and non-spine bone oligometastatic disease, prostate, other?
11. If other to Q10 please state site
12. If your department has not been delivering this please say why?
13. Do you have access to the appropriate IT and technology infrastructure to support the delivery of the most up to date techniques?
14. Which of the following impacts on your ability to deliver the most up to date techniques (tick all that apply)?

Patient presentation

15. Do you still see patients treated with radiotherapy as a substitute for surgery, as occurred during COVID?
16. Have you seen a shift to later stages of diagnosis in the patients treated with radiotherapy at your centre in the last 6 months?

Wait times

17. What is the longest waiting time for radical radiotherapy you have experienced in your department over the past 6 months?
18. In your opinion, what immediate or innovative solutions can be implemented in radiotherapy to tackle the cancer backlog?

Workforce

19. Has the current environment in radiotherapy services caused you or any of your colleagues to consider leaving the radiotherapy profession?
20. Currently, in your department how many roles have been vacant for over 3 months? Please expand here if there are further comments on workforce

Government and NHS Support for radiotherapy

21. Do you feel that the Government understand the impact of the current situation in radiotherapy on cancer patients?
22. Do you feel that the Government understand the impact of the current situation on the radiotherapy workforce? Please add any further comments on the above question
23. Do you feel that senior NHS managers understand the impact of the current situation in radiotherapy on cancer patients?
24. Do you feel that senior NHS managers understand the impact of the current situation on the radiotherapy workforce? Please add any further comments on the above question
25. Is there anything else you would like to tell us?

Appendix II – Radiotherapy Dataset (RTDS) showing the most up to date results published by NHS Digital using National Disease Registration Service (NDRS).

Data published by NHS digital shows the actual radiotherapy activity since March 2020, compared to the corresponding month in 2019 (PRE-PANDEMIC)

	Radiotherapy Episodes (No. of patients)		
	2019	2020	% Difference
March	9229	9365	+1.5%
April	9576	7590	-21%
May	9321	7909	-15%
June	8908	8544	-4%
July	10462	8964	-14%
August	9179	7696	-16%
September	9353	8690	-7%
October	10439	8496	-19%
November	9272	8105	-13%
December	8445	7444	-12%

	Radiotherapy Episodes (No. of patients)		
	2019	2021	% Difference
January	10374	7931	-25%
February	9293	8159	-17%
March	9229	9731	5%
April	9576	8512	-11%
May	9321	8605	-8%
June	8908	9674	+8%
July	10462	9340	-12%
August	9179	9291	+1%
September	9353	9060	-3.2%
October	10439	8687	-16.8%
November	9272	9583	3.4%
December	8445	8587	+1.7%

	Radiotherapy Episodes (No. of patients)		
	2019	2022	% Difference
January	10374	8907	-17%
February	9293	8945	-3.8%
March	9229	9940	+7.7%
April	9576	8346	-12.9%
May	9321	9397	+0.8%
June	8908	9051	+1.6%
July	10462	8692	-17%

Between April 2020 – July 2022 there have been **21,957** fewer radiotherapy episodes recorded.

Radiotherapy UK would like to acknowledge and thank all those in the radiotherapy workforce who took the time to respond to our Flash Survey. We recognise that the workforce are continuing to do their utmost to support each other and deliver the best care possible for cancer patients. On behalf of those patients, their families and all those involved with Radiotherapy UK, we extend our deep appreciation for all you do.



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