Perspectives on cancer and COVID

A webinar discussion with key opinion leaders

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Spring 2021

A link to the webinar recording can be found here and the full report here.

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Overview

On the one-year anniversary of the first UK national lockdown, we published a report looking at the impact of COVID-19 across the cancer pathway. This report was shaped by a 12-strong clinical advisory board and consisted of insights from interviews with 56 clinicians, managers and cancer experts, and was complemented by quantitative analysis of datasets from across the cancer pathway. The report championed the critical innovations that had kept the service running, highlighted the position of recovery as of spring 2021 and proposed a forward view of cancer services of the future.

The ambition of the report, and subsequent webinar, was to highlight the ongoing impact of COVID-19 on cancer services, promote and share knowledge from the first waves of the pandemic and help mitigate the impact of subsequent waves, as well as supporting the redesign of services for the future. The full report was published at the end of March and can be found **here.**

On the 31 March we held a webinar for health care professionals, NHS managers and cancer experts to share findings and continue the discussion looking ahead. The following document summarises the session.

The webinar panel, and report advisory board members, consisted of:

Prof Sir Mike Richards
Former National Cancer Director, Webinar chair

Prof David Cameron
NHS Lothian, Innovative Healthcare Delivery Programme Deputy Director, Medical Oncologist, Former Clinical Director CRUK Edinburgh

Dr Patricia Fisher
South Yorkshire and Bassetlaw Cancer Alliance, Clinical Director, Clinical Oncologist

Dame Clare Gerada
General Practitioner South London, Former Chair Royal College of General Practitioners

Dr Giles Maskell
Royal Cornwall, Radiologist Former President Royal College of Radiologists

Ben Richardson
Managing Partner - CF

Introduction

We invited cancer clinicians and NHS managers to attend the webinar to continue the critical conversation on cancer services. Attendees could submit questions before and during the session with live attendee polling supplementing the discussion. The panel experts covered four key areas across the cancer pathway, each considered from four perspectives:

1) Screening and primary care
2) Diagnostics
3) Secondary care
4) Data and research

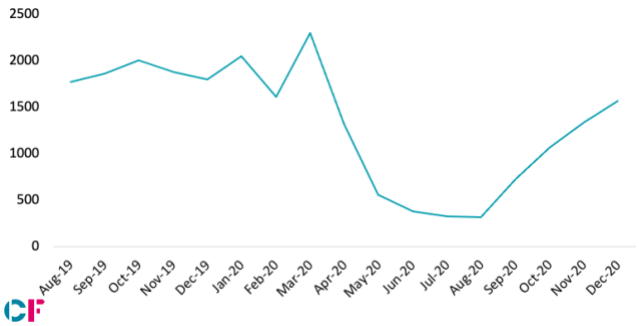
- Initial impact
- Key innovations
- Where we are today
- Looking to recovery and beyond

The discussion highlighted the need to support recovery, but also promote resilience in the face of COVID-19 resurgence, new variants and new pandemics. In addition to the resilience theme, 91% of those attending the webinar shared the view that rather than targeting a return to pre-pandemic business as usual, now was the time to set an ambitious vision to trigger a transformation in the future of NHS cancer services.

1) Screening and Primary Care – Dame Clare Gerada

Invitations to attend screening fell by up to 3 million in the time leading up to October 2020. A good proxy for activity across the three national screening services (breast, cervical and bowel) is the total numbers of patients receiving their first cancer treatment referred from screening services. Cumulatively, over 2020 the number of patients receiving their first treatment for cancer who were referred from screening totalled 8,871 fewer in 2020 than in 2019[1].

Figure 1: **Patients receiving first treatment for cancer referred by screening services,** England[1]



Patients referred from screening services in Jan 2021 were 29% down vs Jan 2020. NHS board papers from 25 March[2] state bowel screening is running at over 100% of pre-COVID levels and aim to catch up in terms of invitation intervals by end of March 2021.

The same board papers note cervical screening volumes from primary care and sexual health services are now above pre-COVID levels. Despite this the number of patients receiving their first treatment referred from screening in Jan 2021 dropped by 7% compared to Dec and was 29% down vs Jan 2020[3].

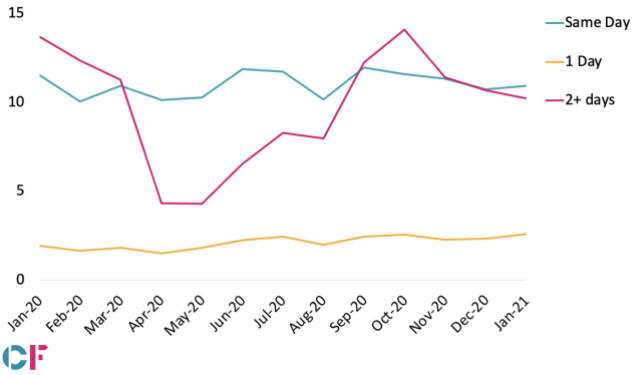
"Cumulatively, the number of patients receiving their first treatment for cancer referred from screening was 37%, or 8,000 patients, fewer in 2020 than in 2019."

The public became better attuned to communications as subsequent waves of the pandemic had a less significant impact on patient presentation. The "Protect the NHS and stay at home" messaging from the first peak was translated by some into "stay away if you are ill". Thankfully this changed as subsequent waves didn't see the same drop off in presentation volumes and there appears to have been a better recognition that the messaging is nuanced, and the NHS is still open for business as usual.

What's interesting is that the drop off and recovery in primary care activity appears to have spared the urgent appointments and was almost entirely felt by appointments booked 2+ days in advance[4]. There is a worry that patients have delayed appointments for the unexpected weight loss or chronic cough etc. that previously would have been a non-urgent booking but might have led to a cancer diagnosis.

"There is a worry that patients delayed their appointments .... that previously would have been non-urgent but might have more often led to a cancer diagnosis"

Figure 2: **Total GP appointments, time between booking and appointment**
England, Jan 2020 to Jan 2021, million[4]



Primary care is busier now than pre-pandemic. The latest NHSE board papers show primary care is now delivering c.1Million, or 15%[5], more consultations per week than pre-pandemic. The increased workload is a mix of 1) long COVID related appointments, 2) sequelae of lockdown including new mental health presentations or related to ill health exacerbated by previous reluctance to seek healthcare and 3) vaccination related consultations including administration, side effects, counselling patients and community outreach.

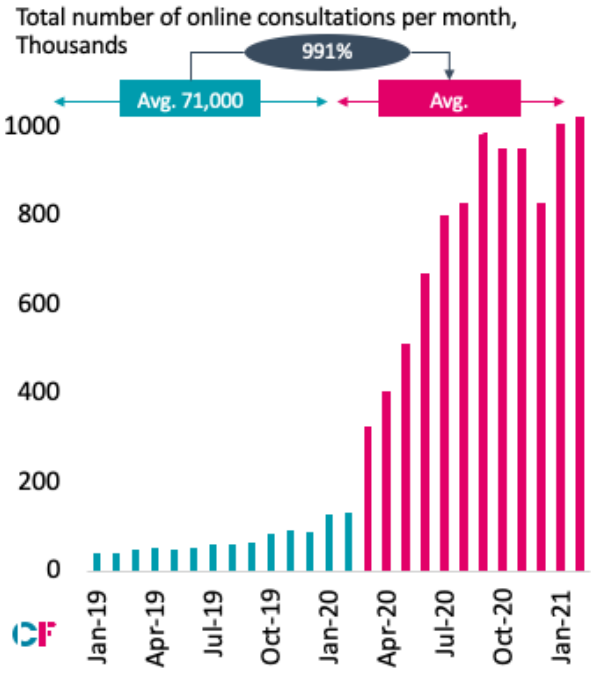
"Primary care is now delivering c.1Million, or 15%, more consultations per week than we were pre-pandemic, and the vaccine related activity may become semi-regular!"

Up to 98% of all practices in the UK are now able to offer some sort of digital consultation. There has been a paradigm shift in the route of GP appointments forever. What we have seen over the pandemic has been an absolute shift away from face-to-face consultations towards true digital remote consultations. It also means more than video-consultations which are just another means of face-to-face.

"True digital means more than just the telephone, which was invented in 1876. We are now performing more digital consultations in a month than in the entirety of 2019"

However, digital isn't always best and we are still learning about when it works and when it doesn't. The number of practices using the GP platform eConsult has increased by over 200% since the start of the pandemic with the number of online consultations having increased by almost 1000%.

Figure 3: **Growth in eConsult online consultations,** Jan 2019 to Feb 2021, provided by eConsult



"For the last 10 years we have been trying to persuade our patients and our colleagues to transform the way we interact; it has mainly been our colleagues who had been slightly reluctant."

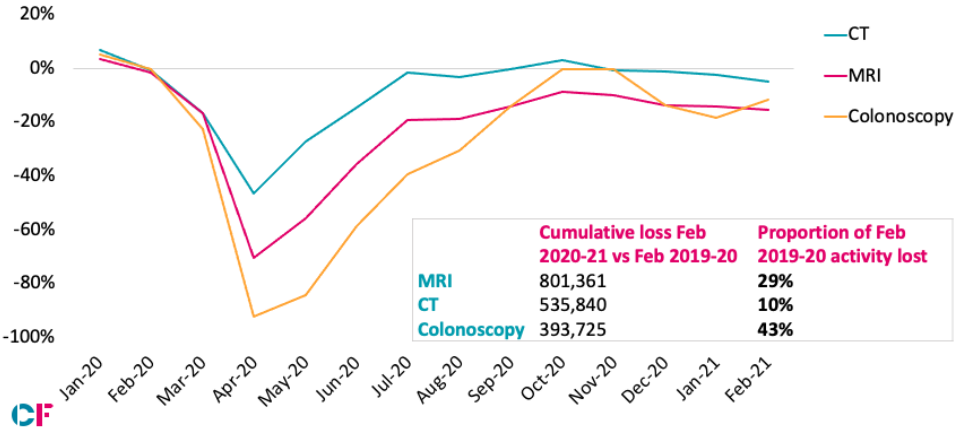
Digital triage won't work for everyone and needs to be facilitated and enhanced. A safe, digital streamlined front end can allow us to have more time in the consultations who need it. We have to be mindful of exacerbating inequalities with digital and facilitate its use as much as possible. Ignoring digital will become a bit like ignoring the provision of written leaflets if you were worried a small number of patients couldn't read.

2) Diagnostics – Dr Giles Maskell

CT activity was more resilient than MRI or endoscopy[6] due to the extent of its use in unplanned and emergency care. Around 40% of CT activity is related to unplanned care for trauma, stroke or chest pain for example that was less likely to be paused compared to elective activity. The patient cohort undergoing MRI tend to be not as acute. CT services were prioritised so part of the delay in MRI recovery can be attributed to the workforce shortages felt as MRI staff were redeployed to staff more critical CT scanning.

"We do have a crisis in diagnostic services, and it is not caused by COVID-19….it is a result of the failure to keep up with the relentless increases in diagnostic demand over the past 20 years"

Figure 4: **Diagnostic imaging activity: percentage change from 2019 average,** Jan 2020 – Feb 2021, England[6]



Very little endoscopy activity is carried out as an emergency meaning that activity could be paused almost completely at the height of the first wave. Overlay the impact of CT being one of the most useful investigations for COVID-19 and it is easy to see why CT activity didn't drop as much as other modalities and why it recovered faster.

Returning to pre-pandemic diagnostic levels is a false baseline as a year on we would expect to have a further 10% of demand. The crisis in diagnostic services has been brewing for many years and is a result of the failure to keep up with the relentless increases in demand for diagnostic tests over the last 15 – 20 years. CT and MRI demand has increased 6-10% year on year and we haven't nearly kept pace with that. This means returning to pre-pandemic levels is a false baseline as you'd expect that a year on, we would have a further 10% of demand.

"It's quite a hard trade off…if you haven't got enough diagnostic capacity, someone along the pathway is going to lose out. We got to the stage where we could either perform the screening CT scans, to find the patients with cancer, or the staging and treatment scans of the patients we knew had cancer."

The pandemic allowed us to turnaround reports in days rather than weeks and the image reporting backlog disappeared completely. At the start of the pandemic the imaging waiting lists actually fell with the reduction in demand. This had the effect of eliminating reporting backlogs and the pre-pandemic widely accepted 2, 3,4, week wait for a report disappeared for the first time in years. We also temporarily stopped the outsourcing of scan reports outside of the NHS.

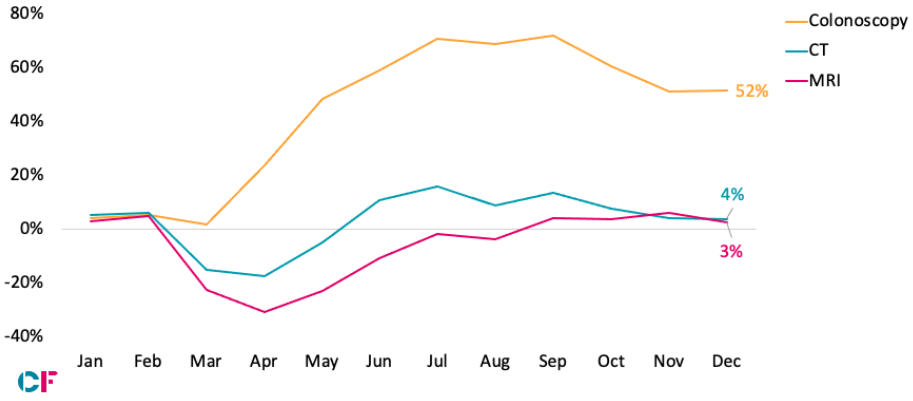
"This had the effect of eliminating reporting backlogs and the pre-pandemic widely accepted 2,3,4, week wait for a report disappeared for the first time in years."

The colonoscopy waiting lists in December 2020 stood 52% above the 2019 average[7]. The pandemic impact on the colonoscopy waiting list does look awful, but there are grounds for optimism:

- colonoscopy services are in transition to a service largely provided by non-doctors which will increase the practitioner pool,
- the roll out of FIT (Faecal Immunochemical Test) in the national screening programme looks at the amount of blood in a stool sample and allows us to better stratify those who probably don't need a colonoscopy. Whilst evaluation is ongoing this is likely to allow screening and symptomatic waiting lists to combine and reduce demand overall,
- new clinical guidance recommends reducing the number of surveillance endoscopies by nearly as much as 50%,
- new technologies such as capsule endoscopy becoming more established.

"The impact on the colonoscopy waiting list looks horrendous, but there are grounds for optimism"

Figure 5: **Diagnostics waiting list,** Percentage change from 2019 average, England[7]

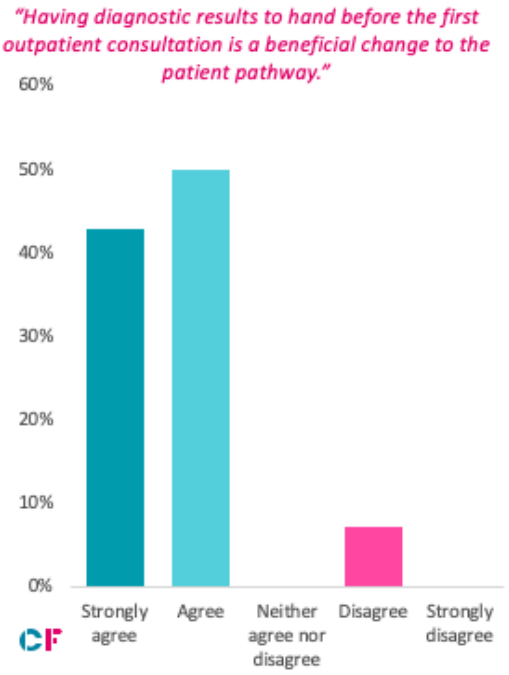


Virtual consultations have led to the potential for the resequencing of the patient pathway. The old mantra of a careful history, a full examination and then some special tests is not always the right sequence for the patient. There are now increasing indications for investigations that are not from a history or examination such as risk scores, e-triage, FIT tests and others. It is also absurd and slightly embarrassing that GPs and other health care professionals don't always have the access they need to investigations. What should matter is what's wrong with the patient and not who's referred them for the test.

"It is absurd and slightly embarrassing that GPs and other health care professionals don't always have access to the investigations they need. What should matter is what's wrong with the patient and not who's referred them for the test."

The division of elective and non-elective care, including diagnostics, have many benefits but don't make best use of scarce staff. The establishment of community diagnostic hubs will keep vulnerable patients away from acute sites as well as enhance workflow. However, we must recognise that this doesn't make best use of scarce staff so future plans need to make allowances for that. I hope we can bring some of the digital interfaces to diagnostic services so patients can book tests at times that suit them, and we can provide patients the information needed in advance.

Figure 6: **Polling results from webinar audience**



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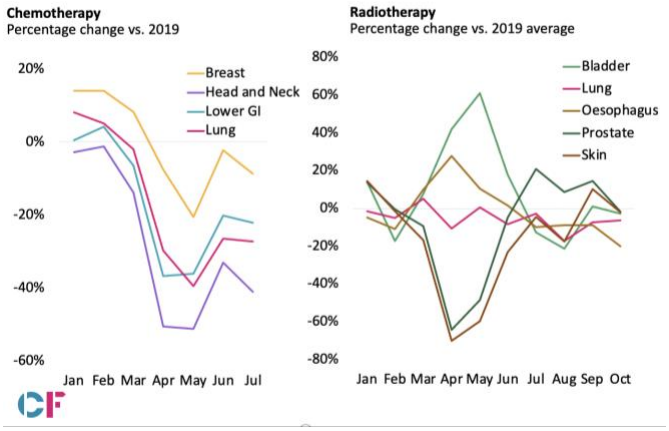
3) Secondary care – Dr Trish Fisher

Lack of data on the safety of treatments during the pandemic lead to dramatic decreases in activity. At the start of the pandemic, we had essentially no data about how safe it was to continue oncology treatments and so we saw some quite dramatic decreases. Essentially, we were trying to reduce the risks to our, by definition, vulnerable patients by reducing their number of hospital visits. In aggregate the total amount of chemotherapy fell by roughly a third during the first peak[8], but the picture was incredibly varied within tumour types and was considered against other treatment types. For instance, as radiotherapy was the definitive treatment for Head and Neck cancers, it was decided it would be prioritised for continuation, but Head and Neck chemo would be paused. A lot of combination treatments became single modality.

Figure 7: **Treatment activity percentage change vs 2019 average,** England[8,9]

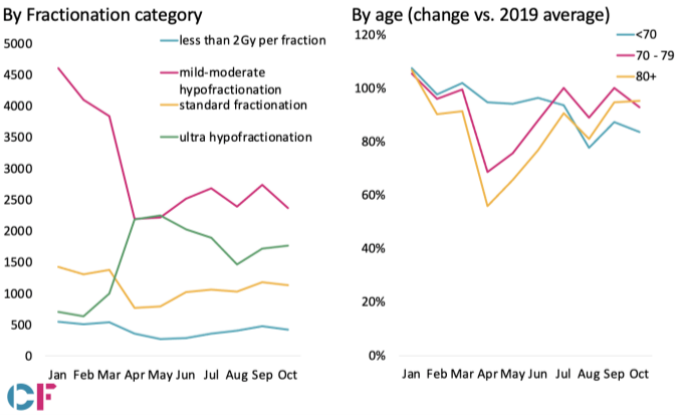


The same rationale to minimise visits meant that patients who were able to delay radiotherapy were given alternative treatments. For instance, prostate patients were kept on hormone treatment for longer whilst their radiotherapy was delayed. We also saw an uptick in radiotherapy [9] for tumour types that would have previously been treated with surgery or endoscopy, e.g., bladder and oesophagus, as the anaesthetic staff and some operating theatres were repurposed.

"Essentially we were trying to reduce the risks to our, by definition vulnerable patients, by reducing their number of hospital visits."

Radiotherapy ultra-fractionation meant we could deliver the same therapeutic outcome through less treatment visits. The most common course of radiotherapy pre-pandemic was mild-moderate hypofractionation which would be given daily over an extended period of time. The biggest change we saw in type of fractionation was the adoption of ultra-hypofractionation in place of mild-moderate hypofractionation as the ultra-hypofractionation effectively translated to less visits required for the same therapeutic outcome.

Figure 8: **Radiotherapy activity**, Jan - Oct, England[9]



In breast cancer we were able to offer daily treatment for 1 week with ultra-hypofractionation instead of daily treatment for 3 weeks with the mild-moderate hypofractionation. This was achievable thanks to a research paper published in April of 2020[10] that established the same efficacy for both. We have a good evidence base to continue ultra-hypofractionation in breast cancer and there are now prospective studies collating data to assure us of the evidence base in other tumour types. The evidence for ultra-hypofractionation was emerging irrespective of the pandemic but it helped the radiotherapy community rapidly embrace the change.

"Ultra-hypofractionation effectively translated to less visits for the same therapeutic outcome….and the pandemic catalysed treatment adoption"

There are sadly lots of reasons why lung cancer appears to have suffered the slowest recovery from the pandemic.[11] If you look at the routes of presentation, we didn't lose the 40-50% of lung cancer presentations that come through emergency, but we did see a reduction in numbers through the consultant upgrades from incidental findings and the 2WW. Very sadly, those at the highest risk of not surviving COVID-19 if they caught it were older people, men, and people with heart and lung disease and these are the same cohort who commonly go on to develop lung cancer. We estimate nationally that up to 700 or 800 of these people who would have gone on to be diagnosed with lung cancer have passed away from COVID-19 without ever entering the lung cancer pathway. The other difficulty was the confusion of symptoms with COVID-19 and the prevailing advice to self-isolate with a cough.

Figure 9: **Two week wait referral rates, 4 tumour types,** Percentage change of pre-pandemic baseline, England[10]

"We had a gentleman who needed a bronchoscope for his lung cancer, but it took him 3 attempts as every time he arrived at hospital and said he had a cough he was turned away"

We unfortunately saw a lot more advanced presentations with metastases than we are used to and at times over the past year we felt like an extension of the palliative care team with the limited interventions we could offer our patients.

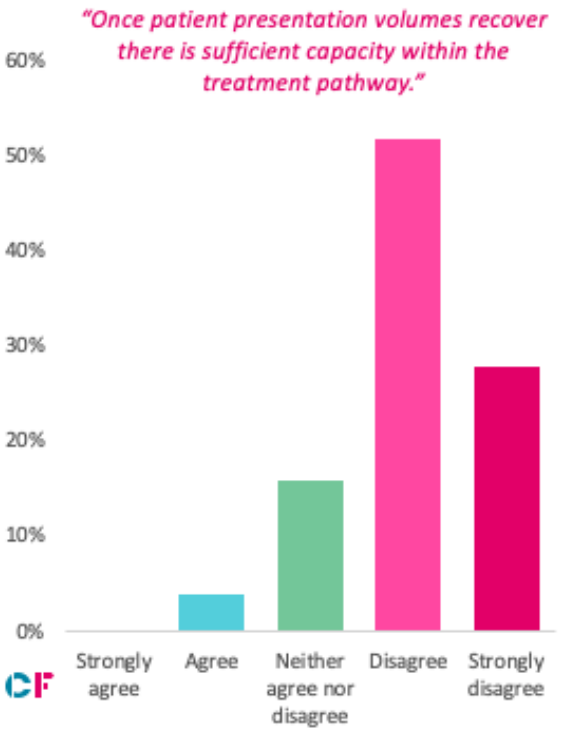
"At times we felt like an extension of palliative care team with the limited interventions we could offer"

The detrimental impact of virtual consultations on the workforce shouldn't be underestimated and can't be sustained. We shifted to do as much as possible non-face to face and it works really well with patients who you already have a rapport with. It is often a less formal conversation than what you have in a clinic, but it is much more difficult building the relationship with new patients. It is really challenging to have conversations involving breaking bad news or difficult decision making either digitally or through copious PPE. It is especially difficult if patients are restricted the support of an accompanying relative.

"It is really challenging to have the types of conversations about breaking bad news or difficult decision making digitally"

I hope that we can get the balance right so that in the future we can make use of digital for the right consults but use face-to-face for the harder conversations. The detrimental impact of virtual consultations on the workforce shouldn't be underestimated.

Figure 10: **Polling results from webinar audience**



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4) Cancer research and data – Prof David Cameron

The pandemic catalysed the sharing of data and fuelled new open-source dashboards, however, there remains a notable absence of clinical trial activity data. We can now see data detailing impacts across presentation, referrals, diagnostics and treatment but the true impact on trials and research activity has not yet been made public. It's very true that much of the management data we now have is considerably better than it was a few years ago, however it is still many months out of date despite the impact on the service being felt yesterday and today. We've seen the fantastic speed with which COVID-19 trials and COVID-19 data can be collated, assembled, reported nationally and fed back to the public. The hope is that we can learn the lessons from what happened with COVID-19 data and apply these to make similar progress in other, relatively routine, disease areas such as in cancer care. We should be able to similarly pull together the different data sets that exist across the NHS to give us a much better read out of what is happening in our services today, where the current challenges lie and help with service delivery.

"Over COVID-19 the sharing of endoscopy waiting list data across the health boards in Scotland allowed us to coordinate better, share access to services and actually improve patient outcomes."

We know other countries were able to continue and restart their enrolments into clinical trials, sometimes curative trials, better than we did in the UK. There is no doubt that embedding clinical research in our cancer pathways, right from screening throughout the pathway, improves patient outcomes. Looking at cancer research, there was the same crash in activity as seen across the pathway, but the difference is there hasn't been the same recovery. Some of the challenge we faced in restarting or continuing trial enrolments is down to the shift in workforce we saw in the UK. Regardless of roles we had research team members from imaging staff, pathologists, data managers, research clinicians and nursing staff all redeployed to support the crisis in ITU and acute medicine. We didn't have capacity in depth to maintain trial activity.

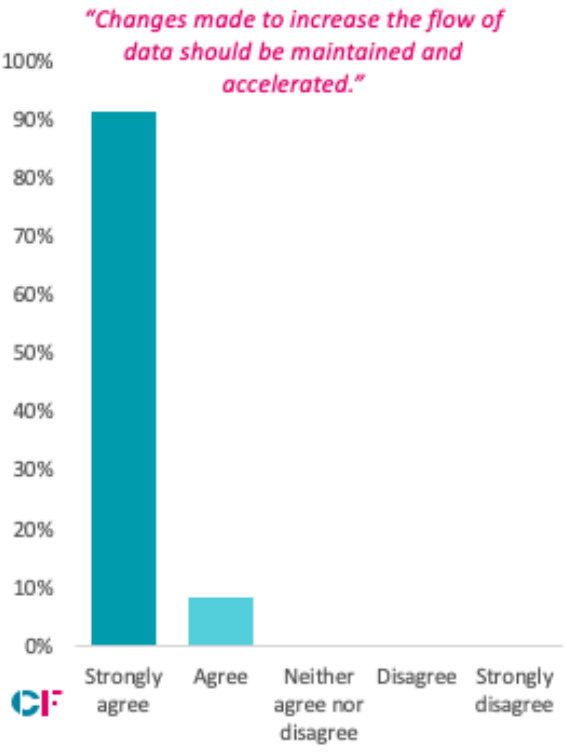
"We know that other countries across the western world were able to continue their enrolments into trials much better than we did in the UK."

The good news is that interest in performing clinical research in UK cancer services is unchanged. Many research sponsors internationally, both commercial and academic, suspended trials at the start of the pandemic but we are now receiving similar levels of approaches to run trials as we were pre-pandemic, although we are not yet back to the same levels of recruitment.

"I hope data controllers will see the greater good that's missing by not sharing data and focus on how to facilitate sharing and mitigate risks. If you can only see the risk and not the benefit, then it's hard to make the case for data sharing so we need to champion it."

The UK has shown great abilities in clinical research, data sharing and COVID genomics and we now need to redirect these towards cancer. We need to continue to provide open access to the datasets shared

Figure 11: **Polling results from webinar audience**



over the past year, continue to update them and expand the data sets available. Whether you are involved in the screening, diagnosis, treatment or palliative care, we are all constrained by resources, but by having better data we can plan, share and deliver our services better. The UK has great abilities in clinical research and has shown it is possible to set up trials in weeks, as seen by the highly successful REACT and RECOVERY trials which would previously have taken years. However, more people die of cancer every year than die of COVID-19. We need to redirect some of this pace of change and the ability to rapidly translate research into clinical practice towards other disease areas such as cancer.

"We've proved we can do things better, quicker and just as safely. Whether setting up online access, digital flow of data, images or people, or setting up clinical trials. We can do things just as well, but quicker and more efficiently than before, and ultimately patient outcomes will benefit."

Call to action

Experts working across the cancer pathway have highlighted their deep concern regarding the effect of the COVID pandemic and how this will playout for NHS patient outcomes for years to come. They have also articulated the challenges faced by the cancer pathway which pre-date the COVID pandemic and highlight why recovering to the status quo is not the target NHS patients need.

Amongst the challenges, the experts also spoke about some of the many innovations to have emerged in the midst of the pandemic and championed the rapidity in which they were implemented and adopted. Whilst supporting the recovery of services, it is now more critical than ever to lock in both the innovations of the last year as well as the mindset to adapt, integrate and embrace the potential of data.

Several key actions were discussed to help deliver a sustainable recovery and a reimagined cancer service—

1) Ensure no one is left behind in recovery by leveraging data and analytics to ensure ethnicity, deprivation or post code do not prevent people from accessing the care they need
2) Embrace digitally enabled pathways to allow patients to more rapidly access investigations and specialist opinion, making use of asynchronous virtual clinics, sharing of data and machine learning to break down barriers between GPs and cancer care
3) Expand diagnostic infrastructure in line with the Richards' Review[12] to catch up with comparable health care systems to provide the capacity that allows for the timely actioning of diagnostic referrals, from a wider cast of appropriate health care practitioners
4) Restart trial recruitment and involvement with a renewed focus, harnessing the success of COVID-19 trials and encourage the rapid adoption of validated research into clinical practice

Across all of these actions data is a critical enabler and hence there is an imperative to:

5) Integrate all available data and share access widely to power the recovery across all health and care organisations involved in delivering cancer services
6) Make the "duty to share" an expectation with patients and data controllers to unlock all relevant data to support recovery, including referral, diagnostics, staging, treatment (including surgery, systemic therapy and radiotherapy) data
7) Invest in data infrastructure to support standing up research faster and at lower cost to accelerate research through use of routinely collected data to support clinical trials and real-world evidence

There is a sense now that the time is ripe for a step change in how we deliver our services and how we ultimately improve NHS cancer patient outcomes. This needs the same continued experimentation, ambition and integration as shown through the pandemic.

We seek to support providers and alliances across the UK and encourage interested parties to reach out. We are looking for partners to co-create and establish scalable proof-of-concept initiatives to support cancer recovery and reimagine cancer services.

Please express interest to cancer@carnallfarrar.com

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