



# Consequences of COVID-19 for cancer care — a CRUK perspective

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We reflect on the past 10 months of clinical activity in oncology in the UK during the COVID-19 pandemic and suggest how services can be protected during subsequent waves of infection.

“A need remains for a strong clinical voice to inform regional, national and international decision-making”

Since March 2020, the focus for the Government and National Health Service (NHS) of the UK has been on managing the coronavirus disease 2019 (COVID-19) pandemic; however, cancer has also remained a high priority. How badly have cancer services been affected? Fortunately, comprehensive data are collected in the UK that provide insight into many aspects of cancer services in a timely manner. Analyses of these data performed by Cancer Research UK (CRUK) can inform on what happened throughout the peak of the pandemic and how well services started to recover. A survey sent to ~1,800 patients with cancer (all stages) in May 2020 provided an early indication of the effect on cancer services: 2 in 3 patients reported that their cancer care had been affected, and 1 in 3 reported changes in treatment.

## Screening

Before the pandemic, ~210,000 people participated in the UK national bowel, breast and cervical screening programmes each week. From March 2020, these programmes were temporarily suspended and, as a result, ~3 million people have not received an invitation<sup>1,2</sup>. Addressing this backlog poses unique challenges for each programme, such as making screening spaces ‘COVID-secure’ and maintaining laboratory capacity. Of note, endoscopy services are among the worst hit, with a 90% drop in the number of colonoscopies in April 2020 (REF.<sup>3</sup>). The number of individuals waiting ≥6 weeks for an endoscopy in August 2020 was nine times higher than in August 2019.

## Cancer diagnosis

Between March and September 2020, >350,000 fewer people than usual had a referral for ‘fast-track’ investigations in the UK, largely owing to fewer people seeking primary care advice<sup>4</sup> but also to primary care services being reluctant to make hospital referrals during the height of the pandemic. These figures are steadily improving, but remain lower than before this period. With such a drop, the NHS will need to manage and expedite referrals for individuals with suspected cancers above pre-pandemic figures, while still managing COVID-19 through winter-related pressures.

Understanding how COVID-19 has disrupted diagnostic service provision is difficult because the figures available cover all diagnostic test activity and are not cancer specific. The overall number of individuals receiving or awaiting key cancer diagnostics tests of endoscopies, CT imaging, non-obstetric ultrasonography and MRI investigations declined in March 2020 (REF.<sup>4</sup>). In England, ~3.4 million fewer key diagnostic tests (~35%) were performed between March and August 2020 compared with the same period in 2019. The number of individuals receiving these tests has started to recover since the lowest point in April 2020 but has not returned to pre-pandemic levels. Despite fewer patients undergoing diagnostic tests owing to the decline in screening and referrals, the cessation of some procedures deemed high-risk for COVID-19 transmission, combined with additional safety measures put in place during the pandemic that delay each investigation, has increased waiting times for those receiving these tests. In August 2020, the number of individuals waiting ≥6 weeks for one of these key diagnostic tests was tenfold higher than in August 2019.

Various studies have attempted to quantify the effect of the delays to diagnosis. In the USA, almost 10,000 excess deaths from breast and colorectal cancer are predicted over the next 10 years<sup>5</sup>. In England, estimates vary regarding the effects of COVID-19 on cancer deaths. One study estimated that, within 5 years, >3,000 additional deaths from breast, lung, oesophageal and colorectal cancer will result from delayed diagnosis owing to COVID-19-associated disruption to diagnostic services<sup>6</sup>. Protecting diagnostic, referral and screening pathways during subsequent waves of COVID-19 will be crucial to minimizing late-stage presentations brought about by the pandemic. The European Commission expects the situation to be similar in other EU countries, presenting severe disruption to breast cancer screening as an example<sup>7</sup>.

## Cancer treatment

Since March 2020, the number of patients beginning treatment in England has decreased substantially<sup>4</sup>; in May 2020, >9,500 fewer patients (~37%) started treatment compared with May 2019. The real effect of

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COVID-19 on cancer treatment overall might be masked by the fact that some individuals, including those who started treatment before the pandemic, have had changes to their treatment (for example, radiotherapy before or instead of surgery). These changes were justified in view of the uncertainty at the time but the long-term effects on patient outcomes are hard to predict especially owing to the absence of reliable data on how many patients had their treatment switched. The number of patients starting treatment increased through June to August 2020, although in August 2020 >5,500 fewer patients (–22%) started treatment compared with August 2019, and many patients likely received different treatment courses compared with before the pandemic. Overall, ~31,000 fewer patients started treatment for cancer across the UK between April and August 2020 compared with the same period in the previous year.

### Disproportionate effect on lung cancer

In England, 5-year survival estimates for lung cancer diagnosed at the earliest or most advanced stage are 57% and 3%, respectively, according to the [Office for National Statistics](#). Of all cancer types, the number of referrals for suspected lung cancers has had the largest reduction, and while this number is recovering from its lowest point in April 2020, by the end of September 2020 the number of people sent for urgent review and tests on a 2-week wait in England was 60% of that before March 2020, according to the [NHS](#). Therefore, ~16,000 fewer patients have been urgently referred for lung cancer tests between March and September 2020, perhaps unsurprisingly given the initial advice during the pandemic in the UK to stay at home and isolate if one had a new, continuous cough. CRUK surveyed 1,000 general practitioners across the UK in July 2020 to determine the biggest barriers they faced investigating and diagnosing patients with respiratory symptoms since the start of the pandemic. They reported fewer people making appointments, issues accessing chest X-rays and patients not wanting to go to hospital for tests<sup>8</sup>.

### Clinical trials

Cancer drug development is a central aspect of clinical care. Globally, many clinical trials have been put on hold during the pandemic, and research infrastructure has been repurposed for COVID-19 trials. Moreover, COVID-19 has forced a rapid adaptation to new clinical practices including remote monitoring, accelerated regulatory approval pathways and global trial collaborations that promise to accelerate drug development well beyond the pandemic<sup>9</sup>.

### Conclusions

In 2020, the NHS has possibly faced the most challenging period in its history. The commitment and dedication from health-care staff and service planners has been extraordinary. During this period, the oncology community has seen innovation at scale and pace, with examples such as telemedicine, accelerated access to innovative types of radiotherapy and regulatory

approvals of alternative drug treatments. But sadly, and probably inevitably, cancer services have been badly hit. Recovery is in progress, but it will be a while before services are restored back to pre-pandemic levels. The most important aspects for the service to focus on will be: 1) establishing a robust testing system for health-care professionals and patients regardless of symptoms<sup>10</sup>; 2) protecting cancer diagnostic services and getting each screening programme back to its planned cycles; 3) increasing capacity in the short term through continued use of the independent sector and optimizing use of the existing workforce; 4) continuing to innovate and sharing that innovation for rapid rollout; and 5) re-invigorating clinical trials with urgency.

A need remains for a strong clinical voice to inform regional, national and international decision-making. Clinicians will increasingly have a sense of the effect of decisions taken during the first peak of the pandemic on patient outcomes — crucially, this knowledge must inform the further development of guidelines to ensure that patients have access to the best possible diagnostics, care and cancer clinical trials<sup>9</sup>.

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### Competing interests

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### RELATED LINKS

Cancer Research UK Cancer Patient Experience Survey 2020: [https://www.cancerresearchuk.org/sites/default/files/pes-covid\\_2020.pdf](https://www.cancerresearchuk.org/sites/default/files/pes-covid_2020.pdf)  
 Cancer survival in England — adults diagnosed: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/cancersurvivalratescancersurvivalinenglandadultsdiagnosed>  
 NHS e-Referral Service (e-RS) open data dashboard: <https://digital.nhs.uk/dashboards/ers-open-data>