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## COVID-19 and cancer: 1 year on

It has been a year since the UK entered its first COVID-19 lockdown on March 23, 2020, with unprecedented consequences. Although the pandemic is far from over, what have its impacts been on cancer care in the UK and globally, and what does the future hold?

COVID-19 has had devastating effects on patients with cancer, with huge numbers of missed diagnoses and delayed treatments due to health systems under pressure and patient reluctance to seek medical care. Despite repeated reassurances from officials that the UK's National Health Service (NHS) remained open for urgent care, a study estimated that 45% of those with potential cancer symptoms did not contact their doctor during the UK's first wave of the pandemic (March-August, 2020), citing reasons including fear of contracting COVID-19 and avoiding placing extra strain on the NHS. Consequently, suspected cancer referrals fell by 350 000 compared with the same period in 2019. Combined with interruptions in cancer screening programmes and delays in scans and diagnostics, a spike in late cancer presentations and diagnoses is anticipated, making some previously curable tumours more difficult to treat and, unfortunately, further excess deaths unavoidable. This problem prevails internationally, even in countries praised for their management of COVID-19; a study estimated that in the state of Victoria, Australia, around 2500 cancer diagnoses were missed during the first 6 months of the pandemic.

The pandemic has also caused major delays in cancer treatments. Around 40 000 fewer people than normal started cancer treatment in the UK last year, and US hospitals have been deluged by COVID-19 cases, rendering patients with cancer unable to obtain timely care. WHO has reported that one in three European countries had partially or competely interrupted cancer care services early in the pandemic. The UK's NHS currently has more than 4.6 million people on waiting lists for surgery and 300 000 people have been on hold for more than 12 months—a wait time that is 100-times higher than before the pandemic. A large proportion of these delays are for patients with cancer, and the Royal College of Surgeons is particularly concerned, stating that it could take several years to clear the backlog. Moreover, UK cancer surgeons are increasingly fearful of a wave of compensation claims from patients unable to receive their treatment during the pandemic and whose cancers have subsequently progressed and become harder to treat. Moreover, lockdown-associated lifestyle habits—eg, unhealthy diets and reduced physical activity—could cause a further increase in the prevalence of obesity-related cancers in the years ahead.

Despite this gloomy narrative, perhaps some hope can be gleaned from the crisis. Remarkable scientific advances have facilitated huge progress in tackling COVID-19, with several vaccines now being distributed and others in the pipeline. The UK Medicines and Healthcare products Regulatory Agency (MHRA)'s rapid approval of the BioNTech/Pfizer and Oxford/AstraZeneca COVID-19 vaccines, enabling their swift rollout, could help to accelerate approvals of other new drugs, including cancer treatments. For example, belzutifan, a promising treatment for Von Hippel-Lindau disease that causes renal cell carcinoma, has received a so-called innovation passport from the MHRA, putting it on track to receive an approval decision within 150 days of the final submission of trial data. Furthermore, the sophisticated science underlying some COVID-19 vaccines could be used to create new interventions for other diseases, including cancer. The developers of the Oxford/AstraZeneca vaccine have founded a new biotechnology company that will use the technology underpinning their vaccine to develop new cancer therapies, and a trial of a new treatment for nonsmall-cell lung cancer will begin soon. Lastly, repurposing of existing drugs to treat patients with COVID-19 could indirectly benefit patients with cancer. If these drugs can be administered at home to prevent severe illness and hospitalisation, pressures on health systems will be reduced, allowing other health services, including cancer care, to get back on track.

To mitigate the devastating effects of the pandemic on cancer care, the UK and other countries need to capitalise on the scientific advances of the past 12 months to recoup some of the huge losses and setbacks. Effective cooperation and collaboration within and between countries, unlike that regrettably displayed by some governments regarding vaccine distribution, is essential and must not stop once the pandemic response is scaled back. Only then can the lessons from this unprecedented time be used to overcome the long-term indirect consequences of the pandemic on cancer control.

■ The Lancet Oncology





For more on this study see https://www.cancerresearchuk. org/about-us/cancer-news/news-report/2021-02-25-almost-half-of-people-with-possible-cancer-symptoms-didnt-see-gp-in-first-wave-of-pandemic

For more on Australia's missed diagnoses see https://www.cancervic.org.au/about/media-releases/2021-media-releases/march-2021/more-cancerdiagnoses-slip-through-the-covid-19-cracks.html

For more on **US hospitals** see https://www.washingtonpost.com/health/cancer-patients-covid-effect/2021/02/26/cab3c26c-7608-11eb-9537-496158cc5fd9\_story.html

For WHO's statement see https://www.euro.who.int/en/media-centre/sections/statements/2021/statement-catastroplic-impact-of-covid-

For more on **UK waiting lists** see https://www.bbc.co.uk/news/health-56360645

For more on the anticipated compensation claims see https://www.theguardian.com/society/2021/mar/07/surgeons-fear-wave-of-lawsuits-over-delays-to-cancer-treatment

For more on exercise and cancer see https://www.theguardian. com/society/2021/feb/14/ exercise-can-help-preventcancers-new-research-finds

For more on accelerated drug approvals see https://www.ft. com/content/bd80b394-ac49-41ca-aee3-8933fd7c0da9

For more on **drug development** see https://www.thetimes.co.uk/ article/oxford-vaccine-team-usesame-tech-to-revolutionisecancer-treatment-fw5zcdttk

For more on **drug repurposing** see https://scienceblog. cancerresearchuk.org/2021/03/02/ how-repurposing-a-drug-in-acovid-19-trial-could-benefitpeople-with-cancer/