



Essay

UK cancer care: a watershed moment and the need for urgent intervention

In November, 2022, NHS England reported the worst ever waiting times for cancer treatment (figure 1).^{1,2} In the past 12 months, 69 000 patients in the UK have waited longer than the recommended 62-day wait for suspected cancer referral to start of treatment (twice as many than in 2017–18), with 13% of patients with cancer in England waiting more than 104 days in September, 2022—double the advised maximum waiting time.³ Waiting times for cancer treatment have been steadily deteriorating since 2013, but this deterioration has been exacerbated since the COVID-19 pandemic. Across all three major modalities of cure—surgery, radiotherapy, and systemic therapy—a 4-week delay in treatment increases mortality by between 6% and 13% for solid cancers, with further increases if the delay is longer.⁴ Communities with the largest cancer burden and suffering the strongest effects of COVID-19 are often also the communities with the least access to timely cancer care, further exacerbating the differences in cancer care throughout the UK. Despite the stated commitment of the UK Government to so-called levelling up, health inequalities in the UK continue to widen.

The slow descent into crisis

Before the COVID-19 pandemic, the International Cancer Benchmarking Partnership reported progress in cancer survival between 1995 and 2014. Of seven high-income countries, the UK had the worst cancer survival rates in most cancer types.⁵ Improved outcomes were related to early diagnosis, improved cancer treatment, and policy reforms to improve pathways to diagnosis and treatment. The Organisation for Economic Co-operation and Development⁶ reported that UK death rates from cancer were higher than the international mean in 2019 (figure 2). The UK has spent approximately 20% less on health per person over the past decade compared with similar Organisation for Economic Co-operation and Development countries, and the NHS was almost operating at maximum capacity. The NHS England 10-year Long Term Plan for Cancer, published in January, 2019, aimed to improve survival by 2028 by increasing the number of cancers diagnosed at an early stage from 25% to 75%.⁷ This diagnostic target was ambitious, with little progress made before the start of the COVID-19 pandemic. Even if achieved, on its own it would not close the survival gap.

COVID-19 exposed the existing inequalities in cancer services

The COVID-19 pandemic had an immediate and damaging impact on the provision of cancer services worldwide.

The public were initially advised to stay at home unless they required urgent medical attention, and cancer specialist guidelines allowed for stratified delays and non-standardised treatment pathways. Repeated surges of COVID-19 required redeployment of health-care staff to other departments, including some cancer staff, and repeated COVID-19-related absences occurred. In the UK, the recovery of cancer services after lockdowns was slower than expected due to continuing workforce shortages, diagnostic capacity being breached, and pressure from non-oncology areas of the NHS, including elective treatment backlogs (currently 7 million) and delays in hospital discharges due to the crisis in social care.

In December, 2020, the NHS Cancer services recovery plan⁸ was published, which aimed for “full recovery of NHS cancer services in England” by March, 2021, including a major public awareness campaign to encourage patients with suspicious symptoms to make an appointment with their general practitioner (GP). However, the COVID-19 pandemic continued and the complex cancer diagnostic and treatment pathways, which were fragile even pre-pandemic, coupled with the emerging backlog of patients waiting for care, meant that demand began to outstrip capacity.

In October, 2021, the UK Government announced a £350 million investment in 40 new community diagnostic centres across England as part of £8 billion funding to reduce backlogs⁹ and in March, 2022, the My Planned Care service allowed patients to choose their treatment hospital on the basis of the length of the waiting lists. However, these initiatives were not guaranteed to be provided to cancer care and research indicates that so-called shopping around for treatment is not a solution to the cancer backlog.¹⁰

As of December, 2022, the March, 2021, cancer recovery deadline has been revised twice, and has now been changed to March, 2023. The guidance¹¹ from February, 2022, clarified this focus (ie, to improve performance) on the diagnostic part of the cancer pathway and the use of the “62-day urgent referral to first treatment standard”¹⁰ metric to measure progress. This metric is a once per week overview across NHS Trusts of the number of patients referred for suspected cancer who have been waiting more than 62 days and have either not yet received a decision to treat or who are waiting for treatment. This target provides an early warning of numbers of patients who are likely to or who have already waited for more than 62 days between referral and cancer

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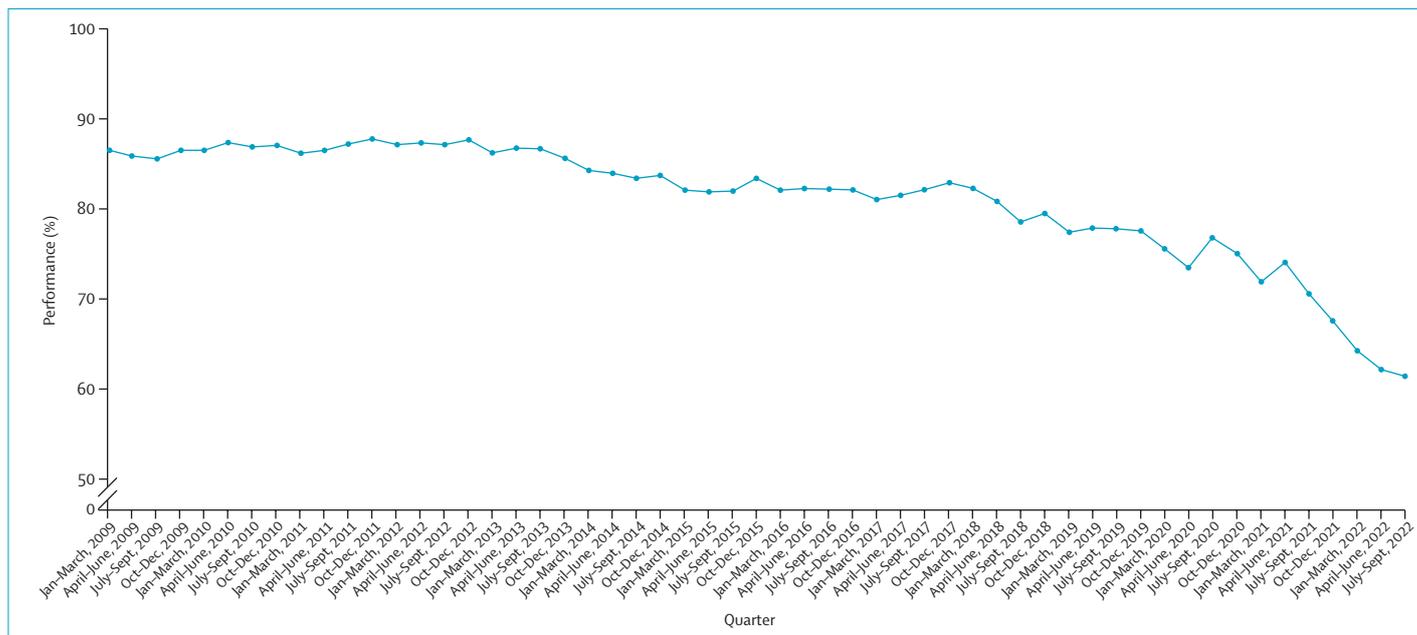


Figure 1: Proportion of patients with cancer receiving first definitive treatment within 62 days of urgent referral
 Reproduction of figure 7 from the NHS England report.¹

diagnosis. As currently only 7% of NHS Trusts in England meet the 62-day cancer treatment target,² any recovery of cancer services to their pre-pandemic waiting times without an increase in treatment capacity or diagnostic capacity seems almost impossible. Furthermore, the current ambition is to return to 2019 levels (eg, the proportion of patients to be treated within 62 days of suspected cancer referral) when the UK was at the bottom of the cancer survival league tables.

The National Audit Office report in Nov 20, 2022,¹² warned that cancer recovery is at serious risk, with substantial workforce and productivity issues, as well as funding not keeping up with inflation. There will be further collateral damage to the cancer diagnosis and treatment pathways with the upcoming winter hospital bed crisis, the threat of industrial action, the 2% annual rise in cancer incidence, and the current economic crisis.

Implications for UK patients with cancer

A European analysis predicted an expected 17% increase in the number of cancer deaths in the UK after delays in cancer diagnosis and treatment.¹³ Increasing numbers of patients are turning to the private sector and the disparity in health-care provision across the UK is worsening. Data from the South East London Cancer Alliance¹⁴ confirmed a 6.8% increase in patients presenting with stage 4 disease; advanced disease means increasingly complex cancer treatments and worse survival. Disruption to all three national screening programmes (ie, breast, cervical, and bowel cancer) had a disproportionate effect on women

and is estimated to result in up to 687 additional breast cancer deaths, although the severity of the effects will depend on the speed of recovery of services. The number of excess cancer deaths since March, 2020, is already 8815, 3327 of which have occurred in the past 6 months,¹⁵ and this trend is likely to continue.

Ongoing delays to cancer diagnosis and treatment cause considerable anxiety and distress to patients, with many worried that their diagnosis has come too late to be cured. Secondary care delays also lead to increased pressure on the primary care provision. Not only are hard-working GPs having to navigate ever longer and increasingly bureaucratic referral pathways to advocate for their patients, but they are also having to manage the psychological and physical consequences arising from such delays including a rising palliative care case load. The toll this inevitably takes on families and carers substantially affects the primary care workload. In a primary care system where the number of GPs and nurses is decreasing and workload rising inexorably, staff are burning out, further compounding the recruitment and retention crisis.¹⁶ There are now 1896 fewer GPs in England than there were in September, 2015, with GPs in 2022 undertaking 12% more patient appointments than in 2018. A continuing culture of targets imposed by NHS England and the punitive financial consequences of not meeting these targets diverts primary care resources away from essential patient care. Although primary care performance targets, such as Quality and Outcomes Framework (QOF) and Care Quality Commission (CQC) inspections, were quite rightly

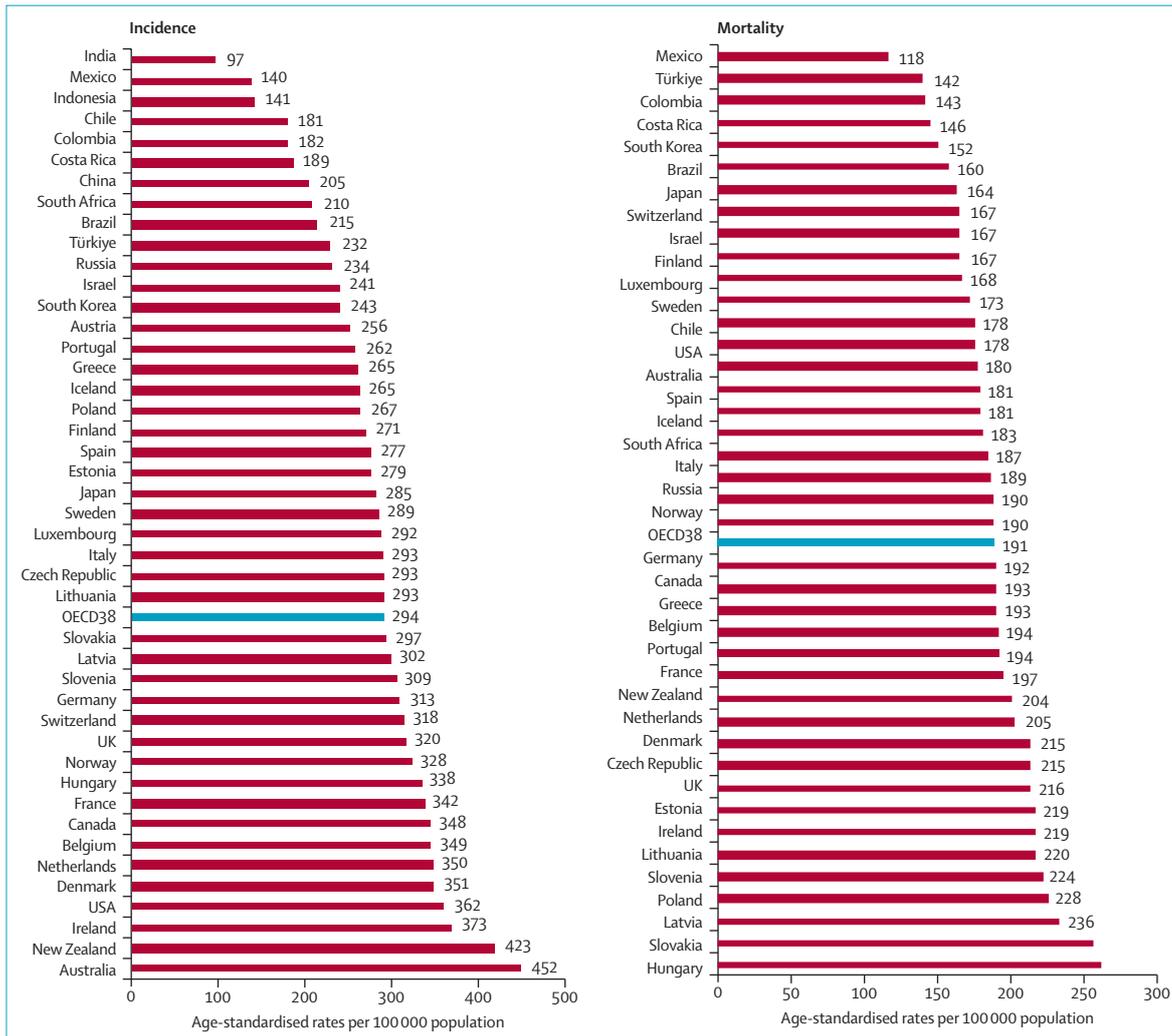


Figure 2: Organisation for Economic Co-operation and Development cancer incidence (2020) and cancer mortality (2019)⁶

relaxed during the COVID-19 pandemic and subsequent vaccination drive, no such provision has yet been made to facilitate a national primary care drive to improve cancer diagnosis and survival.

Although the whole cancer pathway seems overwhelmed, health-care services that had been under-resourced and working at too high a capacity before the COVID-19 pandemic have now become threatened. International analysis reports that radiotherapy is needed by at least 53% of UK patients with cancer¹⁷ and is involved in 40% of cancer cures. The UK National Cancer Registration and Analysis Service reported that radiotherapy was only accessed by 24–27% of patients with cancer in the UK in 2019, even before the pandemic. This proportion was reduced further by 21 957 patients between April, 2020, and July, 2022. A radiotherapy workforce survey published in November, 2022, reported that 92% of respondents believed they did not have the capacity to meet future need

as patients in the cancer backlog began to require treatment and 84% had thought about leaving their job, or knew someone who had.¹⁸ Therapeutic radiographers account for more than 50% of the radiotherapy workforce and vacancy rates are around 30% higher than the number of graduates expected to qualify this year. Health Education England reported that 27% fewer individuals qualified between 2021 and 2022 than the previous academic year. However, in radiotherapy there are low-risk, low-cost digital and equipment solutions that could improve the service and increase capacity to help the current 6000-strong highly specialist workforce who are currently treating more than 100 000 patients with cancer each year and could do so much more, such as treating more patients more efficiently.

Have we mis-stepped?

A lack of priority, accountability, and vision for cancer services during the COVID-19 pandemic meant that key

opportunities to assess the increasing cancer delays and intervene to correct some of the deficit in UK cancer care early were missed. There was no Scientific Advisory Group for Emergencies subgroup for cancer and insufficient data were available for analysis and modeling of the effect of COVID-19 restrictions on cancer pathways. 9 months after the start of the pandemic was when the extent of the cancer backlog was first quantified by NHS England, leaving others, such as cancer charities and academic institutions, to collect data and warn of the rapidly developing crisis. The messaging from NHS England has been of reassurance, but there is a disconnect between those making the decisions, such as NHS England, and the experiences of patients with cancer and the health-care workforce. During a BBC Newsnight piece broadcast on Nov 10, 2022,¹⁹ reporting the worst cancer waiting times on record, the NHS reassured viewers that most patients with cancer were happy with their treatment.

These challenges have left charities, campaigners, the media, and politicians to bring awareness to the issues, analyse data, and suggest solutions. Individual parliamentarians and the All-Party Parliamentary groups related to cancer have used parliamentary mechanisms to advocate for patients, and the Health and Social Care committee inquiry on April 20, 2022,²⁰ highlighted serious concerns about cancer treatment. *The Lancet Oncology* called on the Prime Minister of the UK to publish a UK cancer plan that truly delivers.²¹

Why are we unable to treat patients with cancer on time?

The complex cancer pathways were fragile and failing in the UK before their breakdown during the COVID-19 pandemic. The 2021 Joint All-Party Parliamentary Group Cancer Summit Report highlighted multiple causes for their failure, including a deteriorating workforce crisis, a lack of short-term and long-term planning to address the workforce shortage, insufficient diagnostic (radiology and pathology) and treatment capacity, and an outdated information technology infrastructure.²² Other Organisation for Economic Co-operation and Development countries that have focused on improving capacity and establishing robust cancer pathways, or who have aggressively targeted cancer recovery, are now better placed than the UK. The recovery of UK cancer services is made increasingly difficult by the existing chronic insufficient capacity. So many targets have been missed that targets become a less meaningful tool for change, and introducing more new targets can distort the effort. The current emphasis on cancer diagnostic targets is consuming the majority of extra cancer resources for the more than 90% of patients who will not be diagnosed with cancer, only to result in those diagnosed with cancer joining the back of lengthening treatment queues

while many infrastructure and development plans are temporarily stopped. The delays themselves are causing reductions in productivity and capacity. We have reached a pivotal moment for the UK NHS.

What needs to change now?

In the 2022 Autumn Budget statement, the UK chancellor Jeremy Hunt MP announced plans to review long-term health-care workforce needs. This has been long awaited and much needed. He has committed an additional £6.6 billion of funding for the NHS over the next 2 years and announced a review of how best to reduce bureaucracy and increase efficiency.

The welcome announcement of a long-term health-care workforce plan should lead to major improvements in cancer care. However, short-term action is needed to save lives now. To immediately improve cancer survival, the UK needs to deliver cancer treatment within the recommended timeframe. No research breakthroughs are needed, just an effective, efficient pathway to diagnose and treat patients with cancer. The NHS must urgently address the lack of capacity that has been further reduced by the worsening workforce crisis. Many organisations, including the Institute for Public Policy Research and cancer charities, have suggested solutions. An All-Party Parliamentary Group summit in May, 2021, recommended a radical new cancer plan, with guaranteed funding and government oversight (panel).

The NHS and frontline staff need the same urgency and leadership, combined with the authority to work through obstructive bureaucracy, that was given to the COVID-19 Vaccine Taskforce. The UK has a world-class cancer community of the clinical workforce, scientists, industry, researchers, data modellers, and others, but our cancer services are widely acknowledged to be far from world class. This can change if the government and NHS commit to urgent and radical action and accept the scale of the problem, take ownership of challenges in cancer care, engage the health-care workforce, and listen to frontline solutions. Currently, some frontline staff are exhausted and too afraid to speak out, never mind feel part of the solution. It need not be this way. If NHS Trusts have developed new solutions, these should be rapidly shared and implemented; many involve technological advances, but some are low-cost and simple changes to practices and workflow. Bureaucracy and new cancer targets will not solve the fundamental problems, but freeing up the power and innovation of frontline staff will.

The NHS must retain current staff (eg, immediate changes to the pension rules to retain consultants) and give them the tools and support they need to do their jobs. Inefficient practices have emerged: secretarial support suspended so consultants are less productive than they should be, obsolete IT slowing everyday work, workflow

Panel: Recommendations from the All-Party Parliamentary Group cancer summit in May, 2021²²**Recommendation 1**

Recognise the existence and scale of the COVID-induced cancer backlog, the disruption to the whole of the cancer care pathway, and the exhaustion of staff.

Recommendation 2

Appoint a Minister with responsibility to lead and oversee a national cancer recovery plan and strategy for the future of cancer care. That Minister should:

- be supported by an independent expert advisory group of professionals.
- have the power to deliver investment and sweep away bureaucracy to unlock new capacity.
- have the freedom of action required to develop a new approach to deliver a resilient cancer service which is one of the best of high-income countries, not the worst.

Recommendation 3

Deliver the urgently needed ringfenced investment for cancer infrastructure.

Recommendation 4

Provide urgent parallel investment in diagnostic equipment to complement the investment we are recommending in treatment, including the £325 million investment in diagnostic infrastructure recommended by the Royal College of Radiologists.

Recommendation 5

Provide urgent parallel investment in treatment equipment to complement the investment we are recommending in diagnosis; we recommend adopting the APPG for Radiotherapy 6-point plan to transform radiotherapy as a cost of approximately £850 million over 3 years.

Recommendation 6

Commit to immediate funding for short term solutions to assist the workforce crisis and at least the 20% increase in the professionals needed to run the service.

Recommendation 7

Listen directly to frontline staff and implement so-called oven ready technology solutions and data intelligence, and cast away needless bureaucracy.

tools not being purchased, and antiquated equipment, such as radiotherapy machines so out of date they take twice as long as modern machines to treat patients less well than is possible. All parts of the cancer pathway need to be addressed; suspending the Quality and Outcomes Framework as was done in the first 2 years of the COVID-19 pandemic would free up precious GP time. Innovative use of non-medically trained staff in new support roles would free up clinical staff. A digital transformation strategy will not only help current staff do their job better and quicker but will also be the basis for essential infrastructure for the future. Many digital solutions are now commercially available; artificial intelligence in diagnostic radiology and in radiotherapy planning can help consultants plan up to 13-times faster than they are currently able to. Frontline staff need to be protected and given the chance to innovate in the way they need by management removing obstacles and helping reach out to a wide range of partners with smart solutions. The rapid medical innovation culture in the UK for COVID-19 treatment that that was among the best in the world now needs to be replicated in recovery of cancer services.

NHS cancer services will only recover once there is a cultural change. The true scale of the problem needs to be addressed with honesty, good-quality data, and with a relentless urgency and high ambition. The UK public and the NHS should not tolerate the normalisation of delayed cancer care. Clinical decisions must take priority over bureaucracy. We must move from reactive crisis management to strategic planning. An expert taskforce with independent international oversight should be convened to lead and

implement short-term solutions and develop long-term plans with the authority to work through bureaucracy and act urgently. Frontline staff should lead the changes and there needs to be a complete reversal of engagement, moving from staff fearing speaking out to being responsible for speaking out. Frontline staff are leaving their jobs not because of the work, but the workplace. Lessons should be learnt from other organisational cultures and international cancer benchmarking and value-based endpoints should be prioritised to improve quality of cancer care.

There is urgency. Although all NHS backlogs are important, the cancer backlog is the most time-sensitive and the most deadly. If the UK does not act differently now, cancer services might simply not recover.

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