Longer, better lives

A manifesto for cancer research and care

CANCER RESEARCH UK

Together we are beating cancer

We've made huge progress on cancer in the past 50 years.

In the 1970s, only 1 in 4 people in the UK survived their cancer for 10 years or more. Now, twice as many survive[1].

Over a million lives have been saved in the UK thanks to improvements in the prevention, detection, diagnosis and treatment of cancer since the 1980s[2]. In the last decade, cancer mortality rates have fallen by 10%[3], and are projected to fall by a further 6% by 2040[4].

This is all thanks to the power of groundbreaking research, improvements in healthcare and the tireless efforts of NHS staff.

But cancer is still the defining health issue of our time.

Almost 1 in 2 of us will get cancer in our lifetimes, and all of us will be affected by it[5]. More years of healthy life are lost to premature mortality or disability because of cancer than any other disease[6].

For some cancers, we've made huge strides. In 1971, if you were diagnosed with breast cancer, you had around a 40% chance of surviving for 10 years. Now, it's nearly 80%[1].

For other cancers, we haven't seen the same progress. Pancreatic cancer survival has hardly changed since the 1970s[7].

Overall, the UK lags behind other comparable countries when it comes to cancer survival[8].

The challenge is only growing.

The number of new cancer cases each year is increasing as our population grows and ages.

By 2040, the number of new cases is projected to increase by a fifth from today, meaning around half a million new cases diagnosed each year[9]. Behind every one of these numbers is a person, their friends, and families – the impact is immense.

The inequalities in who gets and dies from cancer are stark, with more than 33,000 cases each year across the UK, attributable to deprivation[10].

But so is the opportunity.

We're in a golden age for cancer research.

This progress we've seen in recent years has been driven by decades of research by scientists and clinicians in the UK and across the world.

For example, more than 20 years ago, Cancer Research UK scientists proved the link between cervical cancers and human papillomavirus (HPV). In 2008, this link led to the UK implementing a vaccination programme. We now know that HPV vaccination is highly effective, reducing cervical cancer rates amongst vaccinated populations by around 90%, and vaccine programmes are in use around the world.

The UK is a global leader in cancer research. Our universities and institutions are amongst the best for discovery, oncology and clinical sciences, and our academics produce some of the most highly cited and impactful research studies[11]. The NHS' cancer data is some of the best in the world.

Cancer Research UK has championed research into early detection and diagnosis. The unique role of charities, backed by the generosity of the British public, is to support cutting-edge science and innovation that is essential to developing our understanding of cancer and how we transform its prevention, diagnosis, and treatment.

Now, with advances in digital, genomics, data science and AI thrown into the mix, we're able to reimagine what's possible.

We've never known as much about cancer as we do now. The tools at our disposal mean we can do in hours things that used to take years. This puts us on the brink of making huge leaps in how we understand, prevent, diagnose and treat cancer and save lives.

But the promise we see for people affected by cancer is not guaranteed. Cancer research is not a 'nice to have' – it is vital. We need to back cancer research and vastly strengthen our ability to quickly translate research into improvements for patients and their families, increase productivity and strengthen the economy.

Cancer is a fixable problem.

Three decades ago, England and Denmark were improving cancer outcomes at broadly the same rate. Since then, Denmark has raced ahead, with consistent funding and long-term cancer strategies central to their success[8].

Across the UK, cancer waiting times are being consistently missed, and some have not been met for over a decade. While they wait for diagnosis and treatment, patients and their families face an anxious and worrying time. Some groups are more likely to have a poor experience of cancer care than others[12]. Investment in prevention, NHS staff, equipment and facilities is needed to turn the tide.

Many of the treatments patients receive today are a direct result of research done in the UK over decades. The life sciences sector is a UK success story, and it welcomed the UK Government's decision to rejoin Horizon Europe.

But many in the research and innovation community are sounding the alarm as the UK slips compared to our peers as a place to invest, with a significant fall in the amount of foreign direct investment in 2022 compared to 2021[12]. Some of our most innovative entrepreneurs and companies are looking elsewhere to develop the next generation of cancer tools, as the UK's share of global life sciences initial public offerings (IPOs) slips compared to our peers[12].

These problems are not inevitable. Cancer is a problem. But it's a fixable one.

Fixing it will take leadership, political will, investment and reform. It will take a coalition united by a clear mission. The upsides are without doubt worth the investment and hard work: more years of healthy life, more weddings, more school concerts, more moments with the people we love.

An investment in a healthier, more productive UK with a stronger economy.

Improvements in cancer research, prevention and care would reduce health, social care and 'informal' care costs, contribute to treating other health conditions, and have a positive impact on workforce productivity and quality of life.

It's been estimated that on average people with cancer in England are £570 a month worse off and 1 in 3 stopped working either permanently or temporarily[13]. One study estimates that the UK total productivity cost from premature cancer deaths would be nearly €180bn by 2040[14]. The UK's Office for Budget Responsibility cites the rise in economic inactivity because of ill health as one of the biggest risks to our economy[15].

What's more, in 2020/21, there was £1.8bn of investment in cancer research in the UK. This investment generated more than £5bn of economic impact. This means every £1 invested in cancer research generated £2.80 of economic benefits[16].

The time to act is now.

To reduce cancer deaths, increase survival and improve the lives of those living with cancer, we need action now. We need:

A national commitment to reduce the cancer mortality rate by 15% by 2040 – **preventing 20,000 cancer deaths every year.**

To be on the path to achieve this ambition, we would expect to see:

4% ▼ **reduction in the cancer mortality rate** by the end of the next Parliament (2030).

9% ▼ **reduction in the cancer mortality rate** by 2035[24].

The public expects action. Almost 8 in 10 people in England think the UK Government needs to develop a long-term and fully funded plan specifically for cancer[17].

The projected increase in cases over time will mean that, unless we act now, the impacts of cancer on our society will only grow. Unless we act now, we could lose our advantages as a global life sciences leader – the ability to attract the best researchers, innovative companies and life science investors.

Working together, we can turn the tide on cancer.

Achieving this target to reduce the number of people dying from cancer cannot be achieved by one organisation alone. It will require concerted, long-term action by governments, political leaders, health services, universities, charities, industry and the public.

But it can be done.

We're setting out the following missions to help us achieve this:

- Mission 1: **Rebuild the UK's global position in research.**
- Mission 2: **Prevent thousands more cancer cases.**
- Mission 3: **Diagnose cancers earlier and reduce inequalities.**
- Mission 4: **Bring tests, treatments and innovations to patients more quickly.**
- Mission 5: **Build a national movement to beat cancer, together.**

This manifesto sets out what is needed against each of these.

Help us deliver our vision.

The cancer crisis is urgent and it's real. To overcome it requires strong leadership and political will.

Our manifesto and accompanying programme for UK Government set out both the immediate measures and long-term commitments a post-election government can make to elevate UK cancer survival to amongst the best in the world.

We're calling on politicians, policymakers, health leaders, industry, research funders, Cancer Research UK supporters and the public to support us.

The challenge ahead is significant: it will take two parliamentary terms to be on track to achieve our vision. The prize is a legacy of life-saving cancer research and care that will benefit the UK for decades to come.

Image: Michelle Mitchell OBE. Credit: Steve Welsh.

Mission 1:

Rebuild the UK's global position in biomedical research.

Priority actions

100 days

The UK Government should set an ambition, in its first 100 days, to **lead the G7 in research intensity** and set out a plan to get there through increased investment and making the UK an attractive research destination.

one year

Within a year of a general election, the UK Government should work with industry, research funders and research charities to set out a plan to, at least, **close the more than £1bn funding gap** for cancer research over the next decade[24].

The vision

Cancer research can be the beating heart of the ambition to make the UK a leading science and research power which transforms outcomes for cancer patients in a decade. To achieve this, the UK needs a 'triple helix' of sustainable biomedical research funding, an effective clinical trials environment and incentives for industry to invest and develop new products in the UK. This section addresses all three of these elements.

We want a new, more sustainable approach to funding biomedical research, leveraging the UK's strengths in philanthropic and charitable funding, our universities and growing network of translational institutes, and political ambition for global leadership. This should be achieved by increasing the amount of high-quality basic and applied research being done.

We want the UK to be a top-tier destination for clinical trials, enabled by a proportionate and pragmatic regulatory environment, a health system which encourages research and accelerated patient access to the best treatments and technologies.

We want a life sciences industry in the UK which attracts and develops businesses and innovators, encourages the development of new treatments, underpinned by investment capital, a supportive regulatory environment, and availability of world-class health data.

The challenge

Action is needed across all strands of the 'triple helix'. In March 2023, the Independent Review of the UK's Research, Development and Innovation Organisational Landscape, commissioned by the UK Government, concluded that "Delivering a significant increase in investment [in Research and development (R&D)] is crucial for the future success of the UK," and found that expenditure on all domestic R&D funded by the UK Government is 0.5% of GDP, 27th in the 36 Organisation for Economic Co-operation and Development (OECD) nations[18].

There are concerns over the **sustainability of biomedical research** in the UK, with charities providing nearly as much direct research funding as government[19]. Within this, cancer research is a further outlier.

The proportion of cancer research funded by government (vs charity) is the lowest of any major condition, while having amongst the highest cost of disease burden[20]. Excluding research funded by industry, charities fund 62%, compared to government's 38%[18].

This means a significant proportion of cancer research is only possible because of public donations. Compared to other developed countries, this balance is unusual: the US Government, for example, funds five times more cancer research per capita than the UK Government.

The Lord O'Shaughnessy Review concluded that the UK is "falling behind" its peers in an internationally competitive marketplace for commercial **clinical trials**[21]. The time taken for regulatory approval for trials has been increasing, to the point the UK is now 9th amongst 10 comparator countries by this measure[12].

Across many of the UK Government's life sciences competitiveness indicators, the UK ranks 'mid-table' or has fallen compared to its peers in recent years[12].

The **industry environment** is highly globally competitive, and actions are needed to re-energise the sector, including increasing the availability of patient capital, incentivising entrepreneurship through better training and use of business incubators, improving the attractiveness of the UK as a research destination to global talent, and bringing the UK to the top of the G7 in terms of GDP spent on R&D.

Public support for action

74% of people

agree that the UK Government should **increase its investment into cancer R&D.**

Around **80%** of the public

think the UK Government should be **directly responsible for funding cancer research**, compared to 40% thinking this should be the role for charities. The public sees a vital role for charitable funding, most expect government to be doing more.

Only **43%** of cancer patients in England

had research opportunities discussed with them[22]. This is despite 95% of cancer patients believing that patients should be offered access to treatments through clinical trials[23].

As well as the scientific and patient benefits, **cancer research delivers significant benefits for the economy.**

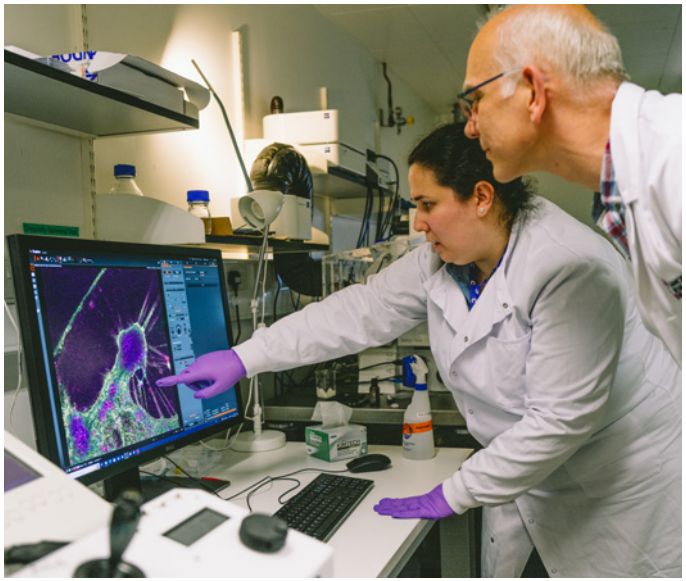
Cost/benefit considerations

We estimate that maintaining an investment equivalent to the 2019 level in real terms and assuming charities cannot contribute more in cash terms than they do today, for example as a result of inflation impacting charitable fundraising, government investment in cancer research needs to increase to around £121m above inflation per year by 2033, totalling £930m over the 10-year period[24].

But this figure is unsustainably low based on the cost of cancer on the UK's population and economy and doesn't account for the increasing number of cancer cases as a result of demographic changes. It means that, despite the number of cancer cases rising, we're not maintaining the amount of research funding per case. **Taking these factors into account, we estimate there is a £2bn funding gap which needs to be filled over this decade** for the UK to remain globally competitive and ensure that research will lead to preventing more cancers, new treatments and longer, healthier and more productive lives.

With approximately 63% of cancer research in the UK funded by industry, it's critical the life sciences sector thrives and is internationally competitive[25]. Yet, industry cite limited access to capital, low levels of Foreign Direct Investment and regulatory challenges as barriers to the UK achieving its life sciences ambitions[26].

As well as the scientific and patient benefits, cancer research delivers significant benefits for the economy. If we maintain historic trends in cancer research investment, funding would top £3bn in 2040, supporting over 80,000 jobs and generating more than £13bn in economic benefits[27]. But these benefits will only be realised by maintaining current growth in public and private investment.



Mission 2:

Prevent thousands more cancer cases.

Image: Councillor Sunny Brar and Campaigns Ambassador Phil Drinkwater. Credit: Jody Kingzett.

Priority actions

one year

Within a year of the general election, the UK Government should have raised the age of sale of tobacco products and started to implement a sufficiently funded programme of measures to help people who smoke quit, with the aim of **making England smokefree**[28] and preventing around 18,200 cancer cases in England by 2040[24].

one year

Within a year of the general election, the UK Government should **implement the 2022 legislation** on TV and online advertising restrictions on foods high in fat, salt and sugar (HFSS).

The vision

Around 4 in 10 cancers are preventable[29]. Preventing cancer saves lives, saves money and reduces pressure on the health service. As our population grows and ages, reducing the number of preventable cancers will be essential to avoid the need for ever-growing health budgets.

By acting today against key risk factors – tobacco, alcohol and overweight and obesity – as the centrepiece of a bold new approach to preventing ill health, the UK Government could prevent nearly 37,000 cancers in total in the UK by 2040[30] and make it more likely that the next generation will be healthier.

We need to ensure that today's children do not look back and ask why we did not act sooner when the evidence was so clear.

The challenge

Smoking is the biggest avoidable cause of cancer – over 200,000 cancers have been caused by tobacco in the UK since the last general election and around 125,000 people are killed each year by smoking[6]. Smoking is the single biggest driver of the difference in life expectancy in England between the least and most affluent populations[31].

Most people who smoke want to, and have tried to, quit[32], and people who are successful feel the health benefits soon after. Measures aimed at helping people who smoke to stop – media campaigns on the dangers of smoking, and targeted measures to support people in deciding to and managing to quit – are essential for all socio-economic groups to reach England's 2030 smokefree target[31].

We've funded and championed work over decades to develop solutions, many of which featured within the UK Government-commissioned 2022 Khan Review. Along with other charities, we welcomed the prime minister's announcement in October 2023 to introduce legislation to increase the age of sale and to increase investment in cessation services, mass media campaigns and enforcement. Political parties must now support this and future legislation, as well as a funded programme of measures, to fulfil the main recommendations of the Khan Review, reduce the appeal and availability of tobacco, and ensure equal access to cessation services.

Overweight and obesity is the second biggest cause of cancer in the UK and is linked to 13 types of cancer[29]. A child who is obese is around five times more likely to be obese in adulthood – so acting early is critical[33]. The gap in obesity rates between the least and most disadvantaged groups is currently widening[34]. And being exposed to junk food marketing is clearly linked with high junk food consumption amongst young people[35].

Public support for action

The public sees it is as the UK Government's responsibility to act decisively to improve public health.

Nearly two thirds of the public in Great Britain support increasing the age of sale for tobacco, nearly three quarters support the smokefree targets[36] and 8 out of 10 UK adults support the Government banning advertising unhealthy food on TV and online to kids[37].

The public also supports investing more in tobacco control.

Almost 70% of UK adults support "investing more money in public health campaigns and stop smoking services," and almost 80% support "making the tobacco industry pay for the measures and services needed to help people quit"[19].

Cost/benefit considerations

Every £1 spent on public health interventions leads to £14 in economic benefits through reduced spending on health services, longer-term health gains and wider societal and productivity benefits[38]. Money spent on public health is nearly four times more productive than money spent on healthcare[39].

Around 500,000 hospital admissions every year in England are attributable to smoking – equivalent to one person being admitted every minute[40]. In total across the UK, smoking costs the NHS about £2.2bn a year and the social care system a further £1.3bn. The gross cost of smoking to public finances was £20.6bn in 2022 – double the £10.3bn collected in tobacco duty in 2022[41].

By contrast, implementing the interventions recommended in the Khan Review was costed at an additional £125m a year for England (£151.6m a year for the whole of the UK)[42]. Making the UK smokefree could lead to 23,900 cancer cases being prevented and £1.4bn of economic benefits in the UK between now and 2040.

We project that around 8,000 total cancer cases in England could be avoided by 2040 – around £249m in economic benefits – if adult overweight and obesity rates were reduced by 2030[24].

Mission 3:

Diagnose cancers earlier and reduce inequalities.

Priority actions

one year

As part of a long-term cancer strategy for England, published within 12 months of a general election, the UK Government should:

- Implement measures that **reduce late-stage diagnosis of cancer**.
- Transform and optimise **cancer screening programmes** through:
  - Full roll-out of the lung cancer screening programme in England by 2028.
  - Creation of a roadmap for the reduction of FIT threshold in the bowel cancer screening programme.
  - Accelerating the implementation of modern IT infrastructure in all cancer screening programmes.
- Direct integrated care boards (ICBs) to accelerate locally tailored approaches to **reducing inequalities** in earlier diagnosis.
- Set out plans to improve our **understanding of treatment variation** with better data, including investment in audits, and address unwarranted variation in access to cancer treatment across England through targeted action plans.

The vision

Our outcomes for cancer patients could be among the best in the world, regardless of who they are or where they live.

We want to diagnose cancers earlier and ensure everyone has the best treatment and the best chance of survival.

The challenge

Almost half of cancers are diagnosed at a late stage[43] and we have unwarranted variation in access to treatment[44]. NHS England is not on track to meet its existing target of diagnosing 75% of cancer patients early (at stage 1 or 2 by 2028). And far too many cancers are still diagnosed at stage 4 when there are limited treatment options and poor survival. Shifts from stage 4 to earlier stages would dramatically improve survival for some cancers.

We know there isn't a silver bullet to achieving earlier diagnosis. We have the tools to diagnose some cancers earlier, such as bowel and lung, but we still need research and innovation for others. That's why we want the UK Government to bring together researchers, industry, policymakers and health leaders to act immediately on what we know works and to address gaps through targeted research and innovation, including further research into how to reduce inequalities.

Evidence-based screening is the best tool we have for diagnosing cancers earlier, but we're not moving fast enough. Lowering the Faecal Immunochemical Test (FIT) threshold for the bowel cancer screening programme is a priority as well as full implementation of lung cancer screening.

Around 1 in 5 cancer patients are diagnosed via emergency routes, which is associated with poorer outcomes and patient experience[45]. But a significant proportion are avoidable, and we're not doing enough to learn from these cases and implement changes to the system.

We also know there are unwarranted and unacceptable inequalities in diagnosis and treatment, with five-year cancer survival gaps of up to 10 percentage points between the least and most deprived in England[46]. The focus brought to this issue by Core20PLUS5 is welcome, but we need NHS England to go further and release the potential of data to direct local/regional action and continue to drive more research.

Public support for action

Across the UK, the overwhelming majority of people affected by cancer, and two thirds of the public overall, think that **the health system should be measured on the outcomes it achieves** as well as how it is operating (such as waiting times)[47].

Cost/benefit considerations

Diagnosing cancer earlier can mean less expensive treatments and better outcomes for patients. For example, the average cost of initial treatment of breast cancer at stage 1 is a third of the cost of treatment of breast cancer at stage 4[48], and more than triples five-year survival from around 30% to more than 95%[49].

Significant improvements in survival would come from reducing stage 4 diagnoses and reducing the variation seen in access to treatment across many different cancer types.

Mission 4:

Bring tests, treatments and innovations to patients more quickly.

Priority actions

The UK Government and NHS England should direct Integrated Care Boards and Health Innovation Networks to **accelerate the translation** of innovation to better detect, diagnose and treat cancer.

one year

As part of a long-term cancer strategy for England published within 12 months of a general election, the UK Government should set out plans for **addressing NHS resource gaps** by developing a 10-year cancer-specific workforce plan, eliminating the wider NHS maintenance backlog by 2030 and committing to rolling ringfenced capital investment for cancer.

2030

The UK Government must commit to consistently **meeting all Cancer Waiting Times targets** for England by the end of the next Parliament, including a higher Faster Diagnosis Standard target of 85%.

The vision

We want investment in equipment and workforce to meet the demands of an ageing population and to enable the transformation of cancer care so that by 2035 the UK ranks amongst the best in the world for cancer survival[24].

We want patients, wherever they live across the country, to know they will have their cancer diagnosed and treated rapidly.

We want health systems to support translation of research and adopt proven innovations quickly so that everyone across the UK has access to the best care.

Waiting time standards are being **consistently missed across the UK.**

The challenge

The current waiting time standards should be seen as a minimum expectation, with some rapidly progressing cancers needing much faster treatment. But the standards are being consistently missed across the UK. In England alone, the 62-day standard has been missed since 2015 meaning over 130,000 patients waited longer to start treatment than if the target had been met consistently[50]. The biggest single barrier to improving waiting time performance is lack of capacity in the health service – particularly diagnostic capacity. This is not just a problem for cancer services, with wait times for other services at or near all-time highs[51].

Securing regulatory approval for innovations can be slow – and it's only part of the challenge in getting an innovation into the hands of clinicians across the country[29]. Properly implementing innovations and ensuring best practice is ultimately the responsibility of individual organisations, but a lack of capacity means adopting innovation is difficult. This can lead to disparities in access – for example, although best practice recommends that 90% of early-stage lung cancer patients in good health should receive a pathological confirmation of their diagnosis, as recently as 2021 some areas were only offering it to 60% of patients whereas others offered it to everyone[52].

Cost/benefit considerations

The UK's capital spending on health has long lagged behind our near neighbours – if the UK had matched EU14[52] levels of total capital over the decade from 2010 it would have invested an additional £33bn[53]. Budgets are not sufficient to cover maintenance costs, leading to a 'maintenance backlog' deficit of £10.2bn (up from £4bn in 2013/14)[54]. The result is that funds are diverted to fixing unsafe buildings and failing equipment, rather than to service improvement or proactively upgrading infrastructure, affecting patients across all aspects of NHS cancer care[55].

Mission 5:

Build a national movement to beat cancer, together.

Priority actions

one year

Within a year of a general election, the UK Government should publish a **10-year cancer strategy** for England, underpinned by rolling three-year action plans.

one year

Within a year of a general election, the UK Government should establish a **broader leadership model** for cancer in the UK, including a National Cancer Council for England accountable to the prime minister for coordinating cross-government action on cancer for the long term, supported by mechanisms for ensuring long-term focus on cancer and independent scrutiny of performance. This approach will bring together discovery, translation, cancer prevention, detection, diagnosis and treatment, health system investment and reform.

The vision

The current challenges facing cancer, and the scale of the solutions, can't be addressed by the current ways of working, or by organisations acting in isolation.

We need a new approach, bringing leadership to coordinate the work of government, NHS England, research funders, industry, charities, and patient groups to deliver the missions of this manifesto.

Image: Campaigns Ambassadors unite for Parliament. Credit: Greg Allen.

For the first time in two decades, **England does not have a long-term strategy for beating cancer.**

The opportunity

For the first time in two decades, England does not have a long-term strategy for beating cancer, and previous strategies did not give enough weight to the need for research, science and innovation. Despite best efforts, existing plans in England are fragmented, lack clear funding and have multiple points of accountability. International evidence has shown that countries that have had a consistent set of cancer strategies over time do best at improving outcomes.

Scotland, Wales and Northern Ireland all have dedicated cancer plans, but the lack of consistent policy and sustained funding has held back progress. England has a recent twenty-year history of long-term cancer strategies which began with the publication of The NHS Cancer Plan in 2000 and ended with the expiry of the most recent strategy in 2020, which provides a pathway that we can return to with the right choices.

Developing a cancer strategy and three-year action plans which improve cancer outcomes for England is an achievable goal. By 2040, around half a million people will be diagnosed with cancer each year across the UK[10]. International evidence has shown that countries like Denmark that have had a consistent set of cancer strategies over multiple parliamentary sessions do best at improving outcomes[56], whilst the World Health Organization has long advocated for countries to develop national cancer control plans[57].

Beyond this, the UK Government needs a new mechanism for joining up its activities on cancer research and care. The current system is fragmented. In England, responsibility for cancer services is spread across NHS England and the Department for Health and Social Care, universities and research across the Department for Education and Department for Science Innovation and Technology, research funding across UK Research and Innovation, the National Institute for Health Research and elsewhere, and fiscal responsibility with the Treasury. The Office for Life Sciences and the Department for Business and Trade share responsibilities for the UK's life sciences business environment.

Measures to prevent cancer require combined efforts across social policy departments. A National Cancer Council, reporting to the prime minister, can coordinate the approach needed to deliver on the missions set out in this manifesto in England. The council must be accountable for delivering the long-term, coordinated approach needed to turn the tide on cancer.

Together we can turn the tide on cancer.

Working together across government, the NHS, research funders, universities, charities, and the public, we can achieve our ambition of reducing cancer mortality by 15% by 2040, saving 20,000 lives every year and making UK cancer survival amongst the best in the world.

Our aim is simple: longer, better lives.

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Further information

If you would like further information on our manifesto, including how you can support our calls, then please email **cancermanifesto@cancer.org.uk** or visit **cruk.org/manifesto**

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