

The submission that Cancer Research UK is making today will bring about significant economic and social gains for the UK, and support the Prime Minister's five priorities, by:

- Growing the economy and reducing waiting lists through reducing smoking, through
 increased worker productivity and reducing pressure on the NHS in future years
 through eradicating the biggest cause of avoidable cancers. Reducing the costs to
 the NHS from smoking should also contribute to debt falling through costs avoided
 by public services.
- Reducing waiting lists through investing in a long-term NHS workforce strategy, allowing NHS managers to plan more effectively for patient needs.
- **Growing the economy** through tax measures to support R&D-intensive companies.

Cancer Research UK (CRUK) is the world's largest cancer charity dedicated to saving lives through research. Progress over the last 50 years has transformed the prospects for people diagnosed with cancer in the UK. By 2010, half of people diagnosed with cancer survived for 10 years or more, up from a quarter in the 1970s. We are also the largest source of non-commercial funding for cancer research in the United Kingdom, with estimates suggesting CRUK is responsible for half of public sector and charitable investment in cancer research and 19 per cent of total cancer research investment in the UK.

The financial boost such research provides to the country cannot be ignored. In 2020/21, the £1.8 billion of investment in cancer research generated more than £5 billion of economic impact, from high-skilled jobs to the impact of improved health for working adults - every £1 invested generated £2.80 of economic benefits. The part our work plays in that success story, achieved through the generosity of the public and talented scientists across the country and the globe, is the result of investment that delivers rewards for the health and wealth of the country.

We have come a long way, but there is further to go. The Government's recent commitment to five flagship "promises" recognises the need to secure the future of public services and for people to get the care they need more quickly. This is certainly the case in cancer care where the need for action is clear.

The latest available Cancer Waiting Times performances (November 2022) at the time of writing remain amongst the worst on record. The 62-day target of 85% was missed again with only 61.0% of people starting treatment for cancer within 62 days of an urgent referral, meaning around 6,400 people who started treatment in November waited longer than two months to start cancer treatment. Around 2,000 people - 12.4% of patients – waited more than 104 days to begin treatment for cancer following an urgent referral, the second highest on record. The International Cancer Benchmarking Partnership (ICBP) continues to show the UK's cancer survival outcomes lagging behind comparable countries such as Canada, Denmark, Australia, Norway, New Zealand, Sweden, and Ireland.



Considering the cost-of-living crisis, Cancer Research UK is proposing a series of constructive, costed measures that will help the Treasury and the UK Government begin to tackle these issues without delay, meet its promises, and boost the nation's productivity and economy. This is a key fiscal opportunity, and the Treasury has in its remit the power and potential to make a difference in the fields of research, prevention, diagnosis, and treatment.

A cost-neutral Smokefree Fund that helps start the stop and stop the start: The 6.6 million adults that smoke in the UK cost far more than they generate in tobacco taxation. In 2022, the gross cost of smoking to public finances was £20.6bn compared to £10.3bn collected in taxes in tobacco across the UK. The public support further legislation to reduce smoking, and recent polling for CRUK by YouGov found that 70% of people surveyed in England supported the Government investing more money to help England to become smokefree. Around 4 in 10 cancers are preventable and smoking is the chief cause of those cancers. Achieving the UK Government's 2030 target to reduce smoking rates to 5% of adults in England would significantly reduce the number of cancer cases in this country, but cannot be achieved without funding for the most effective cessation measures. If funding these measures cannot be borne through general taxation, a Smokefree Fund that puts the burden of cost on the Tobacco Industry, not the taxpayer, should be set up to help meet these vital smoking reductions targets – YouGov polling by CRUK showed 58% of those surveyed believe this is the best option. CRUK are working with other health charities to develop more detailed proposals for how such a fund could be established, and are in discussion with HMT officials as this work proceeds.

Investing in the NHS workforce of the future, instead of spending billions on bank and agency staff: Almost 10% of all posts across the NHS in England are currently vacant. In 2020/21 alone, £7.1 billion was spent on agency and bank staff in hospitals in England to cover gaps in the NHS workforce. The UK Government should address this false economy and break the cycle of needing to spend billions every year addressing short-term pressures. Further investment is needed in training and recruitment – we estimate around £200m for the key diagnostic and cancer professions up to 2024 – with diagnostic capacity flagged as a priority. The Chancellor's commitment to publish the NHS Long Term Workforce Plan should be matched with committed funding for it to be delivered successfully.

Ensuring the R&D Tax Credit system continues to bolster the UK as a science superpower: SMEs are a key link in the innovation pathway, but the Finance Act 2023's relief rate cut threatens to significantly undermine our world-leading science base, impeding the fostering of dynamic and research-driven young enterprises and weakening the pipeline for the medicines of the future. We urge the Government to ensure any further support for R&D intensive businesses makes up for any shortfall felt by this vital growth sector.

Delivering a Smokefree UK

1. Smoking puts huge pressure on the economy and pushes those that can least afford it further into financial hardship. In the UK, it is estimated that smoking cost public



finances £20.6 billion in 2022. Of this, £2.2 billion fell on our NHS, £1.3 billion fell on the social care system, and £17 billion was lost from a reduction in taxes and increased benefit payments, arising from productivity costs, including from tobacco-related lost earnings, unemployment, and premature death.¹ This is notably more than the £10.3 billion collected in tobacco duty in 2021/2022.²

- 2. People who smoke spend at least £2000 a year on tobacco. When net income and smoking expenditure is taken into account, 1.6 million or 31% of households with someone who smokes fall below the poverty line.³
- 3. Around 6.6 million adults still smoke⁴ and smoking remains the biggest cause of cancer and death in the UK.^{5,6} It is estimated that around 500,000 hospital admissions every year in England are attributable to smoking.⁷ If the UK Government is to achieve its levelling up ambition to extend healthy life expectancy by five years by 2035 (as set out in the 2019 manifesto⁸ and recently announced Major Conditions and Disease Strategy⁹), addressing tobacco inequalities is key. Smoking is responsible for half the difference in life expectancy between the lowest and highest income groups in England¹⁰ and CRUK analysis has shown that ending smoking could more than halve England's deprivation gap in cancer incidence.¹¹
- 4. The UK Government has set out a welcome vision for England to be smokefreeⁱ by 2030.^{12,13} However, new CRUK analysis has found that England is not on track to deliver this ambition.¹⁴ If recent trends continue the target will now not be met until 2039 smoking rates need to drop around 70% faster. This means, without action, the UK Government will fail to meet their target and the negative economic impact of smoking will continue to be felt for longer than intended.
- 5. The forthcoming Tobacco Control Plan for England provides an opportunity to set out a comprehensive plan of action that will help us reduce the social and economic impact of smoking and reach the UK Government's 2030 smokefree target for England. Most people who smoke also want to quit (7 in 10) and regret ever starting (3 in 4). ¹⁵ However, smoking is an addiction and support is needed to help these people to stop. But without additional and sustainable funding, it will not be possible to deliver all the measures needed.
 - People using stop smoking services are around three times more likely to stop smoking successfully than those attempting to quit unaided.^{16,17} But, primarily due to pressure on Local Authority budgets, only 67% of local authorities in England commissioned a specialist service open to all local people who smoke in 2021.¹⁸ Furthermore, Between 2015/16 and 2022/23 total local authority spending on stop smoking services and tobacco control in England fell by 41%.¹⁹
 - Mass media campaigns can be cost-effective²⁰ and highly effective^{21,22,23} in
 motivating people to stop smoking and discouraging uptake, but they must have
 sufficient intensity and be sustained to see continued benefit.²⁴ Yet national

i "Smokefree" is defined in the 2017 Tobacco Control Plan for England as adult smoking prevalence being 5% or lower.



spending in England on public education campaigns has also dropped from a peak of £23.38 million in 2008/9 to just £2.2 million in 2019/20.^{25,26}

- 6. As outlined in the 2019 Green Paper 'Advancing our health: prevention in the 2020s',²⁷ the UK Government is exploring options for raising funds from the tobacco industry via a 'polluter pays' principle. When used as recommended by the manufacturer, cigarettes are the one legal consumer product that will kill most users 2 out of 3 people who smoke will die from smoking.^{28,29} Yet the four largest tobacco manufacturers make around £900 million of profits in the UK each year³⁰ and profit margins on cigarette sales are significantly higher than typical consumer products (tobacco industry profit margins can be as much as 71% in the UK).^{31,32,33} Cancer Research UK is calling on the UK Government to introduce a Smokefree Fund, making the tobacco industry pay for the damage their products cause, but without letting them influence how the funds are spent.
- 7. Dr Javed Khan's independent review of tobacco control which set out a roadmap the UK Government should follow to end smoking in England included a critical recommendation to urgently invest a minimum additional £125 million into smokefree 2030 policies. Khan's preferred option to implement this is via a 'polluter pays' industry levy, otherwise known as the Smokefree Fund. ³⁴ While Javed Khan's recommended amount is not the total amount of funding needed, it will get us substantially closer to adequately and sustainably funded tobacco control across the UK. Recent polling for CRUK by YouGov found that 70% of people surveyed in England supported the Government investing more money to help England to become smokefree. ³⁵ Of all those surveyed, 58% preferred that this money come from making the tobacco industry pay.
- 8. We propose two different revenue-raising methods that could be used to achieve a Smokefree Fund:
 - Price-capping and profit control: Alongside economists, Action on Smoking and Health (ASH) have suggested a price capping and profit control mechanism that would redistribute tobacco industry profits to the UK Government. ³⁶ This scheme takes elements from the Voluntary Scheme for branded medicines Pricing and Access (VPAS) and its long-standing predecessor, the Pharmaceutical Price Regulation Scheme (PPRS), which operate within DHSC already. Economist Dr Henry Featherstone calculated up to £700 million per annum could be raised by a 'polluter pays' levy that capped profits at 10%.
 - Price-capping and tax increases: Capping the price of tobacco products and increases in excise taxes would be an alternative way to shift what were industry profits to the government. This method has been proposed by Rob Branston among others and would mean that instead of controlling profits and prices like Dr Featherstone's method, just prices would be controlled.
- 9. Whichever mechanism is chosen our CRUK report, 'Funding the Smokefree Generation', concluded that there is a clear need to urgently establish a dedicated tobacco control fund if smokefree targets are to be met, and this fund should follow some key principles:



- Is introduced as an <u>additional</u> source of funding to the restoration of the public health grant in England to support other vital public health measures and tobacco control measures until the fund is implemented, given the sustained programme of cuts in recent years³⁷
- Does not replace current funding streams allowing the NHS to treat smoking related disease
- Raises a predictable and sufficient amount, allocated yearly
- Funds comprehensive tobacco control strategies which are focused on preventing people from starting to smoke and helping them to stop
- Is run in an independent and transparent way, using the right expertise and without any interference or input from the tobacco industry
- Is distributed in a fair and proportionate way nationally between the UK nations, and regionally between local authorities
- Has a focus on tackling smoking-related inequalities
- 10. The levy would also need to be applied to all products that contain tobacco, not just cigarettes, to ensure that any benefit of regulating tobacco product pricing does not widen health inequalities. This is because price increases on cigarettes have historically caused people in low socio-economic groups to switch to "roll your own tobacco" products that are traditionally cheaper.³⁸

Investing in the NHS workforce

- 11. The earlier a cancer is diagnosed the more likely that treatments will be successful, allowing more people the chance to live beyond cancer. As well as saving lives, early diagnosis delivers significant cost savings. Cancer has a profound effect on productivity, with cancer patients and their families often changing working patterns due to their illness.³⁹ Demos estimate the total economic cost of cancer to the economy in terms of lost wages and benefits to be at least £1.4 billion a year, rising to £7.6bn a year when mortality is also considered.³⁹
- 12. The latest cancer waiting times are some of the worst on record, showing that cancer services are still struggling to recover from the pandemic. Whilst the number of patients seeing a specialist following an urgent suspected cancer referral has been increasing, there are now over one million people waiting for diagnostic tests. 40 Cancer waiting time standards have been missed by wider margins than ever before, resulting in people facing unacceptable delays in being diagnosed with and starting treatment for cancer. 41
- 13. Investment in the NHS workforce is essential to improve cancer diagnoses. Critical staff shortages impact all aspects of cancer care and are the major barrier to improving cancer outcomes and meeting the government's ambitions on cancer but they also come at a significant cost. In 2020-21 alone, £7.1 billion was spent on agency and bank



staff in hospitals in England to cover the gaps in the NHS workforce – a significant hike from £6.2 billion spent the year before.⁴² Agency and bank staff are often used to cover for illness in the workforce or small spikes in demand. However, their increased use year-on-year also reflects increasing number of shortages due to poor planning and retention.

- 14. Whilst there are chronic shortages across the NHS workforce, diagnostic services are particularly affected. Almost 10% of all posts across in the NHS in England are currently vacant⁴³, with shortages particularly acute in professions key to the timely diagnosis and treatment of cancer such as clinical radiology where 200 posts have been vacant for a year or more⁴⁴. The NHS Confederation and NHSE CEO, Amanda Pritchard, have expressed concerns that agency spend means workforce shortages actually cost the Treasury more than recruiting and training the right numbers.⁴⁵
- 15. Alongside improving patient outcomes, the NHS also plays an essential role in local economies through its role as the largest employer in England.⁴⁶ The NHS provides the most economic benefit to more deprived areas, meaning that investing in the health workforce can support the Government's 'levelling up' ambitions in these areas⁴⁷. With an ageing population, and more people diagnosed with cancer year on year, the role of the NHS as an employer is only likely to increase.
- 16. Health Education England's (HEE) 2017 Cancer Workforce Plan set out that the cancer workforce would need to grow by 45% by 2029 to deliver world-class cancer outcomes. 48 CRUK modelling from 2021 estimated that this would require an additional £216 million of investment in medical workforce education and training over the Spending Review period. So whilst the Government's announcement of an additional £50 million for the cancer and diagnostics workforce for 2022/23 and the 270 additional medical speciality training posts in cancer related specialities announced by HEE are welcome, these steps will not be sufficient to plug the current shortfalls in the system. We, alongside more than 100 health and care organisations that backed the #StrengthInNumbers campaign, are clear the forthcoming NHS Long Term Workforce Plan (LTWP) must include an up-to-date projection of workforce supply and demand, and that Government must commit to long-term investment in education and training to ensure the shortfall is addressed.

Ensuring the R&D tax relief rate cut does not harm the UK science base

17. As well as transforming cancer outcomes, cancer research has significant value to the UK's economy. Our recent report *Understanding the economic value of cancer research* found that in 2020/21, £1.8 billion of investment in cancer research generated more than £5 billion of economic impact.^{49,50} These numbers give a benefit cost ratio (BCR) of 2.8 – every £1 invested in cancer research generated £2.80 of economic benefits.⁵¹ CRUK is the largest source of non-commercial funding for cancer research in the United Kingdom, with estimates suggesting CRUK is responsible for half of public sector and



- charitable investment in cancer research and 19 per cent of total cancer research investment in the UK.
- 18. For this immense value to continue, it is vital the UK's science base remains strong through public investment in cancer research and incentives to support research. If we maintain historical growth in cancer research, investment will see funding top £3 billion in 2040, which will support over 80,000 jobs and generate more than £13 billion in total economic benefits.⁵² R&D tax credits have played a major role in incentivising cancer research and should continue to help foster this growth.
- 19. CRUK has also been successful in producing spinout companies that can go on to contribute further to the economy. In 2020, ten of the largest CRUK spinouts together spent £421 million in real terms on cancer R&D in the UK. This generated 10,850 jobs and £824 million of GVA in the private sector. Our *Understanding the economic value of cancer research* report did not include these effects in the GVA impacts of CRUK as these companies exist within the private sector and aren't part of CRUK itself. However, they still provide significant value to our health and the economy.
- 20. To this end, CRUK has recently launched Cancer Research Horizons an innovation engine built to complement Cancer Research UK's network of exceptional researchers. They accelerate the discovery and development of new therapeutics with a novel approach to therapeutic innovation uniting the strengths of our established drug discovery engines, our network of world-class biology, cutting-edge technology platforms and clinical expertise, to bring new treatments to patients faster.⁵⁴ This enables them to take cutting-edge innovations from the lab bench to the bedside, translating them into effective treatments and diagnostics for cancer patients.
- 21. Through Cancer Research Horizons, we have built an incredible production line for startup companies to bring early-stage technologies out of the research lab and translate them into patient benefit. We have played an instrumental role in forming over 60 startup companies and bringing 11 new cancer drugs to market.⁵⁵ Their startup portfolio secures funding from investors around the world who believe in our world-class science and the power of partnership.
- 22. However, the translation of research into impact is difficult, and turning charity-funded medical research into life-saving treatments and diagnostics for patients requires a vibrant ecosystem of medical research charities, universities, the NHS, SMEs and large pharmaceutical companies. In this process, SMEs provide a key link in the innovation pathway from lab bench to patient bedside.
- 23. It is in this context that we are concerned that the SME R&D tax relief rate cut legislated for in the Finance Act 2023 will significantly weaken the ability of the UK's world-leading science base to produce the medicines and technologies of the future. Having made investment decisions on the basis of the current rate of relief, life sciences SMEs are now facing significant funding shortages from April 2023 likely to lead to the scaling back of planned R&D programmes. There is already evidence that this is resulting in life sciences companies moving jobs abroad and fewer clinical trials being done in the UK.⁵⁶



- 24. The change has the potential to impede the ability of Cancer Research Horizons to continue fostering the emergence and growth of dynamic, research-driven, young enterprises that develop much needed new tests, medicines, and healthcare innovations for cancer patients.
- 25. This risk is especially acute given the difficult financial climate limiting the traditional exit routes for investor-backed life science companies. Some companies are destined to fail due to a lack of access to capital during a market downturn, rather than technology failure per se. To deliver both the benefits to the economy that these companies can bring, and the improvements in cancer outcomes that these innovations foster, it is important they have access to sufficient investment.
- 26. We welcome the reassurance provided by the Chancellor in a recent letter to the UK BioIndustry Association (BIA) and the recognition that policy decisions surrounding SME tax relief must consider the impact they will have on specific economically valuable sectors such as life sciences.⁵⁷
- 27. We urge the Government to ensure that there is further support provided to R&D intensive businesses and that this adequately makes up the shortfall life science SMEs, including those originating from Cancer Research UK-funded science, face in light of the relief rate cut.

For any further information on this submission please contact Ian Caleb at ian.caleb@cancer.org.uk

¹ Reed, H. 2023. Guide to the ASH Cost Benefit and Public Finance Model of Smoking, Version 2. Accessed February 2023 via https://ash.org.uk/uploads/CBPF-model-2023.pdf.

² HM Revenue & Customs. 2022. Tobacco statistics commentary July 2022. Accessed January 2023 via https://www.gov.uk/government/statistics/tobacco-bulletin/tobacco-statistics-commentary-april-2022#:~:text=Headline%20statistics,-

 $[\]label{lem:conditions} \begin{tabular}{ll} The \%20 latest \%20 head lines \& text = total \%20 to bacco \%20 receipts \%20 for \%20 the, than \%20 the \%20 previous \%20 financial \%20 year. \end{tabular}$

³ ASH. 2022. A third of smoking households in England are living in poverty with rates highest in the North. Accessed January 2023 via https://ash.org.uk/media-centre/news/press-releases/a-third-of-smoking-households-in-england-are-living-in-poverty-with-rates-highest-in-the-north.

⁴ Office for National Statistics. 2022. Adult smoking habits in the UK: 2021. Accessed January 2023 via https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adults mokinghabitsingreatbritain/2021

⁵ Brown KF, et al. 2018. The fraction of cancer attributable to modifiable risk factors in England, Wales, Scotland, Northern Ireland, and the United Kingdom in 2015. British Journal of Cancer. 1130–1141. https://doi.org/10.1038/s41416-018-0029-6

⁶ Global Health Data Exchange. Global Burden of Disease (GBD) Results Tool. Accessed January 2023 via https://vizhub.healthdata.org/gbd-results/.

⁷ NHS Digital. 2020. Statistics on Smoking, England 2020. Accessed January 2023 via https://digital.nhs.uk/data-and-information/publications/statistics-on-smoking/statistics-on-smoking-england-2020/part-1-smoking-related-ill-health-and-mortality.

⁸ The Conservative and Unionist Party. 2019. Get Brexit Done Unleash Britain's Potential: he Conservative and Unionist Party Manifesto. Accessed January 2023 via https://www.conservatives.com/our-plan/conservative-party-manifesto-2019
9 UK Parliament. 2023. Government Action on Major Conditions and Diseases: Statement made on 24 January 2023. Accessed January 2023 via https://questions-statements.parliament.uk/written-statements/detail/2023-01-24/hcws514
10 Marmot M, et al. 2010. Fair Society, Healthy Lives: The Marmot Review: strategic review of health inequalities in England post-2010. Accessed January 2023 via https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-full-report-pdf.



- ¹¹ Payne, N et al. 2022. Socio-economic deprivation and cancer incidence in England: Quantifying the role of smoking. PLoS ONE 17(9): e0272202. https://doi.org/10.1371/journal.pone.0272202
- ¹² Department of Health & Social Care. 2017. Towards a smoke-free generation: a tobacco control plan for England. Accessed January 2023 via https://www.gov.uk/government/publications/towards-a-smoke-free-generation-tobacco-control-plan-for-england.
- ¹³ Cabinet Office and Department of Health & Social Care. 2019. Advancing our health: prevention in the 2020s consultation document. Accessed January 2023 via https://www.gov.uk/government/consultations/advancing-our-health-prevention-in-the-2020s-consultation-document
- ¹⁴ Cancer Intelligence Team, Cancer Research UK. 2022. Smoking prevalence projections for England based on data to 2021. Accessed January 2023 via
- https://www.cancerresearchuk.org/sites/default/files/cancer_research_uk_smoking_prevalence_projections_england.pdf
 ? gl=1*13thbmy* ga*NDY2MTg0MDgxLjE2Njg1MDk4NTM.* ga 58736Z2GNN*MTY3NDIzNzc2Ny45MS4wLjE2NzQyMzc3
 NjcuNjAuMC4w&_ga=2.59156271.368809304.1674229052-466184081.1668509853
- ¹⁵ ASH and Breathe2025. 2019. Response to Advancing our health: prevention in the 2020s. Accessed November 2022.
- ¹⁶ Kotz D, Brown J, West R. 'Real-world' effectiveness of smoking cessation treatments: a population study. Addiction. 2014;109(3):491-9.
- ¹⁷ Kotz D, Brown J, West R. Prospective cohort study of the effectiveness of smoking cessation treatments used in the "Real World". Mayo Clinic Proceedings. 2014;89(10):1360-1367.
- ¹⁸ ASH and CRUK. 2022. Reaching Out: Tobacco control and stop smoking services in local authorities in England, 2021. Accessed January 2023 via https://ash.org.uk/resources/view/reaching-out.
- ¹⁹ The Health Foundation. 2022. Public health grant: what it is and why greater investment is needed. Accessed January 2023 via https://www.health.org.uk/news-and-comment/charts-and-infographics/public-health-grant-what-it-is-and-why-greater-investment-is-needed
- ²⁰ Atusingwize E, et al. Economic evaluations of tobacco control mass media campaigns: a systematic review. Tobacco Control. 2015. 24:320-327.
- ²¹ Langley TE, et al. The impact of media campaigns on smoking cessation activity: a structural vector autoregression analysis. Addiction. 2012. 107(11):2043-50. doi: 10.1111/j.1360-0443.2012.03958.x.
- ²² Sims M, et al. Effectiveness of tobacco control television advertising in changing tobacco use in England: a population-based cross-sectional study. Addiction. 2014. 109(6):986-94. doi: 10.1111/add.12501.
- ²³ Kuipers MAG, et al. Impact of the "Stoptober" Smoking Cessation Campaign in England From 2012 to 2017: A Quasiexperimental Repeat Cross-Sectional Study. Nicotine & Tobacco Research. 2020. 22(9):1453-1459. doi: 10.1093/ntr/ntz108.
- ²⁴ Durkin S, Wakefield M. Commentary on Sims et al. (2014) and Langley et al. (2014) Mass media campaigns require adequate and sustained funding to change population health behaviours. Addiction. 2014. 109(6): 1003-1004. doi: 10.1111/add.12564.
- House of Commons. 2012. Reply to parliamentary question tabled by Chris Ruane Col. Accessed January 2023 via https://www.theyworkforyou.com/wrans/?id=2012-04-24b.105297.h&s=public+health+speaker%3A10518#g105297.q0.
 Dr Javed Khan. 2022. The Khan review: Making smoking obsolete. Accessed January 2023 via
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1081366/khan-review-making-smoking-obsolete.pdf
- ²⁷ Cabinet Office and Department of Health & Social Care. 2019. Advancing our health: prevention in the 2020s consultation document. Accessed January 2023 via https://www.gov.uk/government/consultations/advancing-our-health-prevention-in-the-2020s-consultation-document
- ²⁸ Banks E, et al. 2015. Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence. BMC medicine, 13, 38.
- ²⁹ Doll R, et al. 2004. Mortality in relation to smoking: 50 years' observations on male British doctors. BMJ (Clinical research ed.), 328(7455), 1519.
- ³⁰ APPG on Smoking and Health. 2021. Delivering a Smokefree 2030: The All Party Parliamentary Group on Smoking and Health recommendations for the Tobacco Control Plan 2021. Accessed January 2023 via https://ash.org.uk/uploads/APPGTCP2021.pdf?v=1652361624.
- ³¹ Branston, JR, Gilmore, A. 2015, The extreme profitability of the UK tobacco market and the rationale for a new tobacco levy. University of Bath. Accessed January 2023 via https://purehost.bath.ac.uk/ws/portalfiles/portal/128455728
- ³² Branston JR, Gilmore A. 2014. The case for Ofsmoke: the potential for price cap regulation of tobacco to raise £500 million per year in the UK. Tobacco Control. 23:45-50.
- ³³ Branston J R. Industry profits continue to drive the tobacco epidemic: A new endgame for tobacco control?. Tobacco Prevention & Cessation. 2021;7(June):45. doi:10.18332/tpc/138232.
- ³⁴ Dr Javed Khan. 2022. The Khan review: Making smoking obsolete. Accessed January 2023 via https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/1081366/khan-review-making-smoking-obsolete.pdf



- ³⁵ An independent review has suggested the government needs to urgently invest a minimum additional £125 million per year, to help England become smokefree (where less than 5% of the adult population smoke). Most of this investment will go to help the services that support people to stop smoking. There are multiple ways of raising this amount of money. Which ONE, if any, of the following do you prefer to raise this additional investment through? (If you don't think more money should be invested to help England become smokefree, please select the 'Not Applicable' option). *All figures are from YouGov Plc. Total sample size was 1780 adults. Fieldwork was undertaken between 13th 14th October 2022. The survey was carried out online. The figures have been weighted and are representative of all adults in England (aged 18+).*³⁶ Featherstone H. 2021. Keep Coughing Up: establishing a Smoke-free 2030 Fund. Accessed January 2023 via https://ash.org.uk/uploads/Featherstone-H.-submission-to-APPG-Smoking-Health_-Establishing-a-Smoke-free-2030-Fund-FINAL.pdf.
- ³⁷ The Health Foundation. 2022. Public health grant: what it is and why greater investment is needed. Accessed January 2023 via https://www.health.org.uk/news-and-comment/charts-and-infographics/public-health-grant-what-it-is-and-why-greater-investment-is-needed.
- ³⁸ Wilkinson, A et al. 2019. Smoking prevalence following tobacco tax increases in Australia between 2001 and 2017: an interrupted time-series analysis. The Lancet Public Health. 4(12):e618-e627.
- ³⁹ Hilhorst, S. & Lockey, A. Cancer Costs: A 'ripple effect' analysis of cancer's wider impact. Demos. November 2019. Accessed January 2023 via https://demos.co.uk/wp-content/uploads/2020/01/Cancer-Costs-FINAL-Jan-2020.pdf
- ⁴⁰ Data source: NHSE Diagnostic Waiting Time and Activity. Accessed January 2023 via:
- $\frac{https://www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/$
- ⁴¹ Data source: NHS-E&I Cancer Waiting Times. Accessed January 2023 via:
- https://www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/
- ⁴² HC UIN 71059 Written Answer accessed via https://questions-statements.parliament.uk/written-questions/detail/2020-07-08/71059 Source 2: HC UIN 18874 Written Answer accessed via https://questions-statements.parliament.uk/written-questions/detail/2020-07-08/71059 Source 2: HC UIN 18874 Written Answer accessed via https://questions-statements.parliament.uk/written-questions/detail/2020-07-08/71059 Source 2: HC UIN 18874 Written Answer accessed via https://questions-statements.parliament.uk/written-questions/detail/2022-06-15/18874
- ⁴³ NHS Vacancy Statistics England April 2015 September 2022 Experimental Statistics. 1 December 2022. Accessed January 2023 via https://digital.nhs.uk/data-and-information/publications/statistical/nhs-vacancies-survey/april-2015---september-2022-experimental-statistics
- ⁴⁴ RCR Clinical radiology census report 2021. Accessed January 2023 via: https://www.rcr.ac.uk/sites/default/files/clinical radiology census report 2021.pdf
- ⁴⁵ A. Pritchard. 2021. House of Commons Health and Social Care Committee. Oral evidence: Department's White Paper on Health and Social Care, HC 1274. Accessed January 2023 via https://committees.parliament.uk/oralevidence/1830/html/
- ⁴⁶ Rolewicz, L., Palmer, B. & Lobont, C. 2022. The NHS Workforce in Numbers. The Nuffield Trust. Accessed January 2023 via: https://www.nuffieldtrust.org.uk/resource/the-nhs-workforce-in-numbers
- ⁴⁷ Reed S, Göpfert A, Wood S, Allwood D, Warburton W, 'Building healthier communities: the role of the NHS as an anchor institution'. Health Foundation; 2019.
- ⁴⁸ Health Education England. Strategic Framework for Cancer Workforce. July 2018. Accessed January 2023 via: https://www.hee.nhs.uk/sites/default/files/documents/Cancer-Workforce-Document_FINAL%20for%20web.pdf
- ⁴⁹ PA Consulting & CRUK. 2022. Understanding the economic value of cancer research. Accessed January 2023 via https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/eco
- ⁵⁰ These are base estimates; you'll find sensitivity tests providing low and high estimates in the annex of the <u>Understanding</u> the economic value of cancer research report.
- ⁵¹ PA Consulting & CRUK. 2022. Understanding the economic value of cancer research. Accessed January 2023 via <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf?gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzA0* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf?gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzA0* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc ONTUyODMSLjYwLjAuMA...& ga=2.257850443.1174281983.1674474227-1095538781.1616496704
- ⁵² The modelling assumed the state of the world in 2040 is otherwise the same as it is in 2021. It did not attempt to project labour market outcomes, inflation, or the future state of cancer.
- ⁵³ PA Consulting & CRUK. 2022. Understanding the economic value of cancer research. Accessed January 2023 via https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUzODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NzAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NZAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NZAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/economic value of cancer research cruk full report 29-06.pdf? gl=1*18d7hsv* ga*MTA5NTUZODc4MS4xNjE2NDk2NZAO* ga 58736Z2GNN*MTY3NDU1MjgzOS40OTluMC4xNjc <a href="https://www.cancerresearchuk.org/sites/default/files/eco
- ⁵⁴ Cancer Research Horizons. 2022. Cancer Research Horizons Annual Review 2021/22. Accessed January 2023 via https://www.cancerresearchhorizons.com/about-us/our-governance/our-annual-reports
- ⁵⁵ Cancer Research Horizons. Our Impact. Accessed January 2023 via https://www.cancerresearchhorizons.com/our-impact
- ⁵⁶ Kate Bingham. 2023. Britain is losing its chance to become a life sciences superpower. Financial Times. Accessed January 2023 via https://www.ft.com/content/70e1733d-ecd9-4c8e-bd6a-54b31377ede3
- ⁵⁷ Bioindustry Association. 2023. Twitter. Accessed January 2023 via https://twitter.com/BIA_UK/status/1611022916426031104