Beating cancer for everyone

Cancer Research UK Policy Briefing – Cancer Inequalities in England, June 2022

Introduction

Cancer inequalities impact every stage of the cancer pathway, including prevalence of cancer risk factors, screening uptake, stage of disease at diagnosis, and access to treatment, and these all contribute to stark differences in incidence and outcomes.

Understanding the root causes of these cancer inequalities, who they impact, and how to tackle them, is complex and multi-faceted; there is much more we must do to fully understand cancer inequalities. However, this does not mean we cannot act now. Beating cancer means beating it for everyone – achieving this will require an urgent, concerted effort to reduce these unacceptable inequalities.

Our ability to understand and tackle cancer inequalities is heavily dependent on the quality of data we have. Currently, the strongest available data is on socioeconomic variation.[1] This data clearly shows that more deprived groups face greater barriers to good health at every stage of the cancer pathway, creating unacceptable inequalities in cancer incidence and outcomes. There is also evidence of other types of inequalities, based on surveys and studies, which impact people from ethnic minority backgrounds, people with disabilities, and LGBTQ+ people, amongst other groups. Furthermore, there is significant regional variation in cancer service performance and outcomes, which means where someone lives currently influences their chance of an early and timely diagnosis and experience of treatment. However, we cannot understand the full extent of these inequalities and what drives them based on current data.

Effectively tackling cancer inequalities would have a major impact on reducing cancer incidence and improving outcomes. For example, we estimate that if every Cancer Alliance had the same proportion of lung cancer patients diagnosed early as the Cancer Alliance with the highest proportion, this would improve early diagnosis, with the proportion of lung cancer patients diagnosed at stage I or II rising from 29% currently to 35%.[2] It would also have a wider positive impact. It is estimated that in England in 2011/12, health inequalities cost the NHS an extra £4.8 billion due to differences in rates of hospital admissions alone – and this is likely to have significantly increased since then as we know health inequalities have worsened over the last decade.[3,4]

It is crucial that action is taken to tackle cancer inequalities and ensure no one is left behind in our shared mission to beat cancer. This will require a comprehensive approach across several priority areas. Firstly, we must fund and roll out activity and interventions which tackle the known drivers of inequalities. Secondly, we must build a much stronger understanding of where inequalities exist and what is driving them through strengthening comprehensive data collection across cancer services. CRUK is currently partnering with four other cancer charities to identify cancer data availability and usage, and its gaps, barriers, and enablers – this work will have a vital part to play in improving the data landscape on cancer inequalities. Thirdly, we must ensure that efforts to tackle inequalities are a core element of the framework for measuring system performance, as well as ensuring a focus on national targets does not obscure variation between groups and regions.

This policy statement provides an overview of the key inequalities in cancer risk factors and across the cancer pathway. It set out a series of actions which should be undertaken by Government and the NHS, in partnership with wider stakeholders, to drive meaningful change across the three priority

areas set out above. This work will must take place alongside efforts to tackle the wider determinants of health, which drive wider disparities in ill-health.

What are health and cancer inequalities?

Health and cancer inequalities are unfair, avoidable, and systematic differences in health across the population, and between different groups within society.[5] They impact every part of the cancer pathway and are driven by factors such as socio-economic status, age, sex, disability status, gender identity, sexual orientation, and social and cultural factors, impacting opportunities for good health and health behaviours. It is unacceptable that these factors impact the likelihood of someone being diagnosed with cancer and cancer outcomes.

Understanding cancer inequalities is complex. Firstly, it is highly dependent on the availability of data which can be broken down by population group, so that we can better understand which groups face poorer outcomes and what may be driving this. Rich, accessible data is also key to assessing where variation between groups is unwarranted and therefore a sign of inequality. Currently there are major gaps in data availability which limits our ability to identify and act on inequalities.

Secondly, cancer is a disease of biology. This means that it is necessary to distinguish between where variation is a result of genetics, and where it is due to avoidable inequality and bias in wider society. Connected to this, difference between cancer sites – such as some cancers being closely linked to risk factors, and some where there are effective, evidence-based screening programmes – means inequalities are not uniform across sites and so must be addressed in different ways.

Intersectionality adds further complexity to understanding cancer inequalities. People's identities, and the circumstances that shape their behaviours and experiences, are multi-faceted. For many people, this means they face numerous, multi-layered barriers to good health, resulting in health inequalities. These different inequalities intersect, compound, and reshape one another. At present, data is often presented to compare groups along one demographic axis – such as gender, or ethnicity. Comparing groups is practical and serves to help understand the scale of cancer inequalities. However, it can complicate or obscure the extent and experience of inequality faced by individuals that belong to more than one disadvantaged group. This is particularly important to consider when developing and evaluating policies aimed at reducing inequalities. Developing a policy with the aim of targeting a particular group must consider the way identities intersect within the group, or else it risks exacerbating inequalities for some if it fails to address these differences.

These complexities mean it's essential to be clear on what is in and out of scope when looking at cancer inequalities, particularly recognising the difference between unavoidable variation and inequalities. For example, it is necessary to draw a distinction between sex differences and gender inequalities. There are biological sex-based differences that are unavoidable, and therefore do not come under the broad definition of 'inequalities'. These include the fact that on average, women are far more likely to get breast cancer than men. On the other hand, gender inequalities are unfair, avoidable, and systematic – such as the difference in bowel screening uptake between men and women (51% and 56% respectively)[6], and the fact that transgender groups experience more barriers accessing healthcare.[7] Taking an intersectional approach further illuminates how gender inequalities manifest in cancer care. One review has found that women with disabilities or from ethnic minority backgrounds report experiencing prejudice and insensitivity to their needs from healthcare professionals, indicating that women who are part of marginalised groups can sometimes face further barriers.[8]

Understanding the full complexity of cancer inequalities and how to address them is therefore a major challenge which will take a concerted effort across sectors. But we have enough evidence of inequalities now to make a real difference, discussed further below. Ultimately, CRUK believes it is unacceptable that there are avoidable differences in cancer incidence and outcomes between groups, and we must drive forward comprehensive action to greatly reduce these inequalities.

Scale of the challenge

For the most marginalised in our society, their chances of getting cancer, experience of care, and ultimately their chances of surviving cancer are worse because of circumstances beyond their control. Inequalities impact multiple population groups and impact every part of the cancer pathway. Below, we outline key evidence which demonstrates the scale of these inequalities.

Cancer incidence rates are higher for people from more deprived populations – CRUK estimates that more than 30,000 extra cases of cancer in the UK each year are attributable to socio-economic deprivation.[9] The greatest differences in incidence rates between the most and least deprived areas are generally in smoking-related cancers.[10,11]

When cancer is diagnosed at an early stage, it is more likely to be treated successfully, increasing chances of survival. Inequalities in stage at diagnosis can therefore worsen inequalities in cancer mortality and survival – and these impact multiple different groups. People from more deprived groups[12], people from ethnic minority backgrounds[13], and people with learning disabilities[14] are all more likely to be diagnosed at a later stage for certain cancer sites. There is evidence of variation at many stages of the diagnostic pathway, as discussed further below. This includes regional variation in both stage at diagnosis[15] and diagnostic waiting times[16] – which means where someone lives currently influences their chance of an early and timely diagnosis.

Geographical variation in diagnostic waiting times – proportion waiting 6 weeks or more
Breakdown by NHS CCG: Radiology

Proportion of patients waiting 6 weeks or more for a key radiology test in England, by CCG, July 2021

30–49%   7–10%
18–29%   1–7%
10–18%

Source: NHS Diagnostic Waiting Times and Activity Data, Monthly Diagnostic Data 2021-22, NHS England and NHS Improvement.

Footnote: Indicator shown is the percentage of patients waiting 6 weeks or more for a key radiology test commonly used to diagnose cancer – though not exclusively – (includes Computed Tomography, Magnetic Resonance Imaging, Non-obstetric Ultrasound) at the end of the month, by Clinical Commissioning Group (CCG).
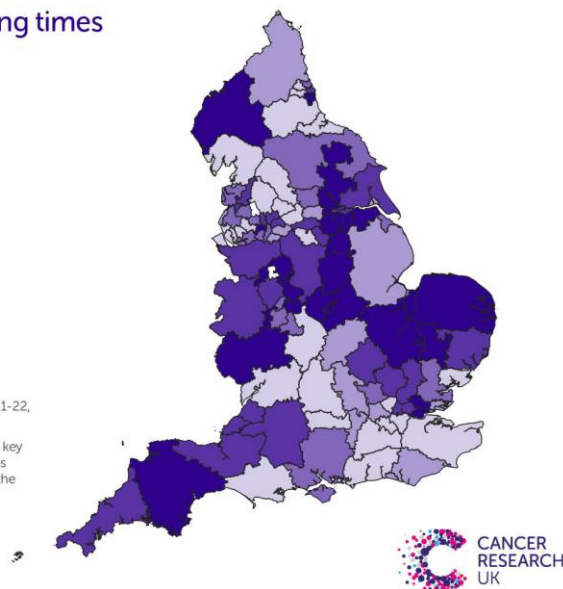
Together we will beat cancer

Cancer mortality rates are higher for people from the most deprived areas compared to people from the least.[17] As with cancer incidence, the 'deprivation gap' is greatest for smoking-related cancer sites, which reflects the high prevalence of smoking in these groups.[18]

The National Cancer Patient Experience Survey, run by NHSE, shows inequalities in patient experiences of care, with a poorer average rating of care being reported by people from Asian, Black, Mixed and

Other backgrounds compared to White (survey categories).[19] LGBTQ+ people also have poorer experiences in the healthcare setting than heterosexual groups,[20] with research by Macmillan Cancer Support showing that LGBTQ+ people face poor communication and felt excluded from decision making in their experience of cancer care.[21]

Tackling cancer inequalities is critical to beating cancer. Sustained research, policy and action has the power to reduce the gap in experience, incidence and outcome faced by different groups. Taking a broad approach to improving cancer outcomes without ensuring a focus on those with the poorest outcomes is unlikely to reduce the inequality gap and risks leaving marginalised groups and regions behind.

Addressing the drivers of cancer inequalities

There are numerous drivers of cancer inequalities, connected to disparities in the wider determinants of health, cancer risk factors, and help-seeking and access to health services. Evidence indicates that cancer inequalities for many are worsening.[22] Without immediate action to address the drivers of inequalities, we risk these gaps widening further and ultimately leaving some groups behind in our work to beat cancer.

There is also a great economic cost to delaying action. Cancer Research UK (CRUK) modelling has indicated that improving stop smoking support, and in turn reducing cancer incidence and premature disease, for the most deprived group could save an average of £4.91 billion in avoided health care costs and up to £8.3 billion in wider societal costs over the next twenty years.[23] Taking action to reduce cancer inequalities, and ensuring existing gaps are not exacerbated, therefore offers significant economic benefit as well as being critical to improving patient outcomes equitably.

It is welcome that tackling health inequalities has been identified as a priority by bodies across the health sector. The UK Government's commitment to improving health and reducing health disparities, reflected in the Office for Health Improvement and Disparities and wider levelling up mission, provides a vital opportunity to ensure addressing cancer inequalities are a central focus. The NHSE Health Inequalities and Improvement team have developed the Core20PLUS5 model to support ICSs to reduce health inequalities.[24] Positively, reducing inequalities in the early diagnosis of cancer has been identified as a clinical priority, targeting the most deprived 20% of the population as well as other population groups experiencing poorer health. However, a current gap in the Core20PLUS5 model is addressing the risk factors of cancer inequalities (and health inequalities more widely) – particularly smoking. Differences in smoking rates are one of the leading drivers of health and cancer inequalities, responsible for half the difference in life expectancy between the lowest and highest income groups in England.[25] It is essential that action on cancer risk factors, including improving engagement with people who smoke in primary care, is integrated into work tackling inequalities across health services.

Now is the time to accelerate work addressing cancer inequalities by taking targeted action on multiple fronts. Below we set out further context on the key drivers of cancer inequalities and actions which should be prioritised to address these.

Wider determinants of health

There are a range of social, economic, and environmental factors, known as wider determinants of health, which shape an individual's health, access to care, and a number of behavioural risk factors. Wider determinants of health are a root cause for many drivers of cancer inequalities. There are numerous wider determinants, including money, work, housing, transport, and neighbourhoods.[26] In turn, these impact an individual's risk factors and barriers to accessing health services.

Addressing how these factors impact upon health and cancer inequalities is critical and will require a cross-government approach. Along with over 200 members of the Inequalities in Health Alliance (IHA), we are calling for a cross-government strategy to reduce health inequalities by tackling the impact of a range of social factors on health.[27]

- The UK Government should implement a **cross-government strategy to reduce health inequalities,** led by the prime minister, including targets and evaluation metrics that go beyond the government's aim of narrowing the gap in healthy life expectancy by 2030.

Cancer risk factors

Around 4 in 10 cancer cases in the UK are caused by preventable risk factors, but these risk factors are more prevalent in certain groups compared to others, contributing to significant inequalities in cancer incidence. There is a comprehensive evidence-base which clearly demonstrates that deprivation is a major driver of inequalities in cancer incidence – now bold action is required to meaningfully target these inequalities.

Smoking is the biggest cause of cancer in the UK – CRUK modelling estimates that the most deprived fifth of the population in England has nearly double the number of smoking-attributable cancer cases each year, compared with the least deprived.[28] Smoking prevalence is also higher in people with mental health conditions[29] and LGBTQ+ people[30]. Smoking cessation services must be fully resourced to ensure they are available to support everyone who could benefit from them across the country, with more people signposted and referred to them, and receiving high-quality services that are converted into sustained quitting.

- **The Government must commit to reducing disparities in smoking prevalence,** by setting a target of reaching less than 5% smoking prevalence for all socio-economic groups by 2040 at the latest and putting a clear plan in place to reach this target. Based on CRUK modelling, 2040 is a stretching but achievable target date.

Obesity is another major risk factor for cancer, and evidence shows that obesity disproportionally affects people from more deprived areas. Obesity is more than twice as prevalent among the most deprived children in England[31] compared to the least deprived. Children who are obese are around five times more likely to remain so as an adult[32] – so acting early is critical.

- **The Government should explore further measures that would create a healthier food environment**. These include evidence-informed policies outlined in Obesity Health Alliance's Healthy Weight Strategy[33] that further reduce the amount of exposure people face to the marketing of unhealthy food, empower people to make and maintain healthier habits, and provide evidence-based treatment to those who need it.

Cancer services

Disparities in help-seeking and access to healthcare contribute to inequalities in cancer outcomes. Whilst there are challenges with data collection for screening, it currently offers good insight into variation in uptake between some groups, including age and by deprivation. In contrast, it is much more challenging to assess health literacy and access to health services, due to limits to data collection and the difficulties in understanding factors such as healthcare professional bias. Therefore, whilst we know there are issues in this area[34], it is not currently possible to gain a comprehensive understanding of which groups face the greatest challenges.

Screening can save lives by preventing cancers or finding them at an early stage. However, there is evidence of lower participation rates in screening programmes for men,[35] people from more deprived areas,[36] more ethnically diverse areas,[37] and for people with disabilities[38]. The cervical screening system also creates a number of barriers for trans men and non-binary people's access to appointments.[39]

People from more deprived backgrounds report more barriers to seeking help from health services, as well as being more likely to be diagnosed with cancer through emergency routes, which is associated with later stage disease and poorer outcomes.[40,41]

- NHS England and the Department of Health and Social Care must **target activity which aims to encourage help-seeking and reduce barriers to participation in screening programmes** to groups showing lower uptake and engagement.

- In the 10-Year Cancer Plan, Government must commit to an ambition to **reduce the proportion of cancers diagnosed in an emergency** to below 10% by 2032 (compared to 18.5.% in 2018[42]), with transparent breakdowns of emergency presentations by different population groups.

We know that there are disparities in access to treatment, with data indicating this impacts older patients, as well as some evidence of variation by deprivation[43] and region[44,45]. However, current data limitations mean it is difficult to identify the full extent to which variation is either unwarranted or instead due to differing patient needs. This hinders our ability to target action to address inequalities. One known example of treatment variation is that older patients are less likely to receive many different types of treatment. Some of the variation in access to treatment can be accounted for by patients choosing not to pursue active treatment. However, there may also be some who are not being offered curative treatment that could benefit them, because assumptions have been made about their fitness based on their age.[46]

- The NHS must undertake further research, as well as granting access to trusted organisations to undertake research, to **understand and address why certain patient groups are less likely to receive optimal treatment**.

As noted above, it is welcome that the NHSE Health Inequalities and Improvement team's Core20PLUS5 model identifies reducing inequalities in the early diagnosis of cancer as a clinical priority. Many Cancer Alliances are already undertaking work to tackle these and other cancer inequalities. Going forward, Cancer Alliances and other stakeholder working with ICSs must be fully resourced to take action at scale. Regions with poorer Cancer Waiting Times performance and outcomes in particular must be supported to implement existing interventions to close this gap, with best practice and learnings shared between Alliances.

- **Government and health services should provide specific funding opportunities for the development and piloting of evidence-based interventions to reduce disparities**, based on open calls for innovation.
    o If proven successful, sustained long-term funding will then be essential for the roll out of these interventions by ICSs and Cancer Alliances to address poorer outcomes within marginalised groups and regional disparities in cancer services. Establishing mechanisms to share examples of best practice between systems will also be critical.

Variation in cancer services across the country impacts how easily and quickly patients can access services critical to cancer care. Whilst the entire country is impacted by workforce shortages, there is regional variation in the distribution of the primary care workforce, particularly GPs, with the most

deprived areas being the worst affected.[47] Given the pivotal role of primary care in the early diagnosis of cancer and the increased incidence of cancer in areas of deprivation, variation in the primary care workforce may have implications for driving cancer inequalities, although understanding the full impact of this variation is still limited. There is also substantial regional variation in how long patients wait for a cancer diagnosis or to begin treatment. The National Audit Office found that in September 2021, patients in the worst performing ICS were almost twice as likely as patients in the best-performing ICS to wait longer than 62 days to start treatment following an urgent referral.[48]

- NHS England must **address regional disparities in the capacity of cancer services, particularly within the diagnostic workforce**, including targeted and funded interventions to encourage healthcare professionals in key specialties to take up roles in understaffed regions.

- Funding for **elective recovery must include targeted resources and support to address the challenges faced by the cancer pathways and NHS providers worst impacted by COVID-19**. This should also include measures to address regional and demographic inequalities.

The experience of some cancer patients indicates that there are a number of barriers patients can face when accessing clinical trials, although further research is required to understand the scale of these inequalities.[49] These barriers disproportionately impact certain groups, including patients from ethnic minority backgrounds, patients in rural or socio-economically deprived communities, patients with disabilities, and older patients, who are subsequently under-represented in cancer research. In turn this may exacerbate health inequalities, and we are progressing work to better understand how to address these challenges.

Gaps in understanding

Ongoing research means our understanding of cancer inequalities includes clear evidence that multiple population groups face worse cancer incidence and outcomes when compared to others.

However, the data available for many population groups on a number of cancer metrics is outdated, limited, or non-existent, with many of the existing high-quality datasets only covering sections of the population. Comprehensive collection of and access to data, including data which better supports an intersectional approach to analysis, is critical to effectively developing policy to reduce inequalities. For example, the NHS Race and Health Observatory has recommended that NHS Digital provides more, linked data on service use by ethnic group, age and gender to improve outcome monitoring for people from ethnic minority backgrounds.[50]

Building the evidence base is essential to developing a comprehensive understanding of cancer inequalities, which will enable health services to develop effective interventions targeted at those who need it most.

- Health services must improve the consistent and sustained collection of data about cancer prevention, cancer patients, and those engaging with cancer services, ensuring the **comprehensive collection of demographic information which supports a better understanding of cancer inequalities**.

About Cancer Research UK

Cancer Research UK is the world's largest cancer charity dedicated to saving lives through research. We support research into over 200 types of cancer, and our vision is to bring forward the day when

all cancers are cured. Our long-term investment in state-of-the-art facilities has helped to create a thriving network of research at 90 laboratories and institutions in more than 40 towns and cities across the UK supporting the work of over 4,000 scientists, doctors and nurses. In 2020/21, Cancer Research UK invested £421 million on new and ongoing research projects into the causes and treatments for cancer.

At Cancer Research UK we have an important role to play in tackling inequalities. Our mission is to beat cancer, and that means beating cancer for everyone. We are tackling inequalities by developing policy and funding research to build evidence on cancer inequalities, and working with communities to raise awareness and provide reliable information.

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It is estimated that there are 27,200 extra cancer cases each year in England attributable to deprivation in those cancer sites where incidence rates are higher in more deprived areas (the corresponding figure for the UK is more than 30,000). These figures exclude cancer types where incidence rates are lower in more deprived areas, e.g. breast, prostate, and melanoma skin cancers.

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